Appendix C: Selected Defence Landscape Data

Appendix C-1: Defence Chronology Table For Port Phillip

Fortifications	Date	Comments
1st troops sent to colony	1836	30 troops sent from NSW - first Vic Defence force under Capt Lonsdale
Victoria Secedes from NSW	1851	Victoria Secedes from NSW
Newspaper suggest 2 fortresses at Heads	1852-53	
Crimean War	1853-56	Calls for fortification at Heads in 1854
HMS Electra	1853	Became headquarters for Hobson's Bay Water Police - corvette
Aust. Imperial Troops responsible for defence	1853	12th & 40th Regiments moved to / based in Melbourne
Road completed to Queenscliff	1853	
French exploration & bases / Russian warships in Pacific	1854	
War scare - Great Britain fires salvo at Heads	1854	Panic in Melbourne - call for defences at Heads
Gold discoveries	1850s	Fear foreign warship could hold port to ransom
Royal Commission into Defence	1854	Recommends warship steamer, guns and additional troops
Pt Gellibrand/ Sandridge Batteries (Melbourne)	1854	
Geelong Volunteer Rifles and Artillery Corps formed	1855	Drilled at nights - ranks swelled as Crimean War progressed
Sandridge Battery (Melbourne)	1855	
HMCS Victoria- new warship	1856	Replaced *Electra* - colonial sloop specifically built for Colony
Volunteer Corps expanded	1858	
Fortifications recommended at Heads	1858	Sir John Burgoyne recommends forts at the heads
Pt Lonsdale Defence Reserve	1858	Declared as Reserve
Royal Commission into Defence	1858	Recommends improved forts at Melbourne and Geelong, not at Heads + militia force of 4000 in addition to regular troops + possible ironclad batteries, Victoria insufficient to repel attack
HMVS Sir Harry Smith	1859	Williamstown Marine Artillery guard ship and gunnery practice - gun hulk
Forts recommended at Heads - after introduction of Armstrong Gun 80pr MLR (New Technology)	1859	Macarthur et al recommend new rifling techniques in the Armstrong Guns increased range making Heads Fortifications tangible. series of forts or Martello Towers at Pt Lonsdale (2 gun), Pt Nepean (2 guns), to the adjacent east of the Quarantine station (2 guns), Shortland's Bluff (3 guns), a fort on the shoals (3 guns), and at Hobson's Bay,
Queenscliff Company of Volunteer Artillery formed	1859	Volunteer Artillery Formed
Rifle range established Fishermen's Flats across bar	1859-1860s?	Disbanded when posed threat to incoming boats
Warrior **launched in England**	1860	Huge advance in armoured sea going vessels
Mail coach service to Queenscliff	1860	
HMCS Victoria	1860-1862	Temp leaves Bay for Maori War, and to Gulf Carpenteria to find Bourke and Wills
Shortlands Bluff Battery	1860-1863	Seawall built 1860, and three 68pr guns eventually in place by 1861

Scratchley's Report on Defences	1860	Recommends 4 batteries at Heads & 2 fortress islands + infantry training for Qcliff corps+ chain ships to block channel, then defend harbours 5 forts at Williamstown/ Sandridge
Qcliff Corps join Royal Victorian Volunteer Artillery Regiment	1860	
Hobson's Bay Batteries Increased	early 1860s	(Call for?) thee batteries between Sandridge and St Kilda, 5 batteries at Williamstown
Threat of war with America	1861	Gov NSW (Barkley) recommends troops withdrawn from NZ and defences upgraded
Queenscliff Company of Volunteer Artillery - compulsory attendance	1861	Infantry training - incorporated into Royal. Vic. Volunteer Artillery Regiment
Forts at Hobson's Bay preferred to those at Heads - Select Committee Report	1861	
Williamstown Batteries Constructed	1861	Central, Lighthouse, Right, Pier Batteries
Lonsdale Bight Rifle Range	1861-1864	Disbanded when Springs farmers under threat from bullets
Victorian Batteries Constructed	1861-1862	Williamstown, Sandridge and Queenscliff (guns but no ammunition until 1862)
Armstrong Gun – 80pr MLR = greater range (New Technology)	early 1860s	
Shortland's Bluff 3 Guns finally installed	1861/62	No Ammunition until at least 1862
Russian Warship *Svetlana* visits colony	1862	Guns armed at Queenscliff in 1863
Merrimac vs Monitor in Civil War	1862	Ironclads now a real threat to colony - revoolution in naval warfare
Victorian Govt is advised the Admiralty will possibly approve Ironclad for colony	1862/63	Childers advises Victorian Govt that Admiralty may support purchase of ironclad due to cost savings on other defences that it represents
Tenders for further 3 x 68lb guns at Shortland's Bluff	1863	
Scratchley Report	1863	**Completed** batteries at Hobson's Bay - -Sandridge: (St Kilda, Emerald Hill [Advanced and Central], Sandridge Lagoon [Emplacement and Battery]). -Williamstown: (Breakwater, Lighthouse, Right, Central) -Queenscliff Battery March Rifled Guns -**Planned** - Tower (west of Right Battery - possibly in the Hatt Reserve), and floating/fixed (Central Battery) in Harbour - two tier battery at Queenscliff + towers at Pt Lonsdale and Nepean - armed block ship - torpedo field for Hobson's Bay - semaphore to link all forts along coast - Rifled guns Armstrong recommended for all batteries (not undertaken) - all planed pending improvements in ironclad technology
Hobson's Bay - east shore declared military reserve	1863	
Queenscliff - Pt Lonsdale declared Defence Reserve	1863	
Volunteer Corps replaced with Enrolled (paid volunteer) Corps	1863	Detachment Geelong Corps based at Queenscliff
Enrolled Corps replaced by South Grant Corps	1863	Formed by Queenscliff and Drysdale sectors of Geelong Corps
Camouflage adopted - recommend trees planted to disguise forts + willow plantations for faggots and gabions (new technology)	1863/64	
Queenscliff - Size guns recommended increased from 150 to 300pr + tower size increased	1864	
Geelong Tower recommended Pt Henry	1864	

Hobson's Bay - Block ship recommended	1864	Scratchley
Armed barges recommended for Hobson's Bay/ Heads Channels after smaller Armstrong guns proposed (New technology)	1864	
Swan Bay Rifle Butts	1864+ - 1907	Disbanded when new range on Swan Island created 1907. Posed hazard to traffic across submerged causeway
Permanent Geelong Rifle Club formed	1865	
Confederate Raider *Shenandoah* enters Port Phillip	1865	Highlights need for improved defences and importance of Albert Graving Dock as a strategic asset
Demands for Victoria to be replaced	1865	
Hobsons Bay - Fort Gellibrand recommended to repel land attack	1865	Palsey and Scratchley
New Technology - sand parapets recommended for Sandridge	1865	
Delays in obtaining MLR Armstrong Guns/ Problems BL Armstrong Guns & Paliser Guns	1865	Delay in introduction to the colony
Naval Defence Act (Britain)	1865	Colonies permitted to maintain and run their own armed vessels
Delays in funds from Britain	1865	
***Cerberus* Commissioned**	1865	Cerberus Commissioned in UK
***HMS Nelson* granted to Victoria**	1866	Vessel (steam frigate) given to Victoria on permanent loan
Paliser (rebored) Guns approved for Colony	1867	
Submarine mine technology proposed for Hobson's Bay (New Technology)	1867	
HMS Nelson	1868	Arrives in Port Phillip, replaces *Sir Harry Smith*
Imperial Troops withdrawn from Victoria	1870	Period of uncertainty for colonies all through decade
France and Russia at War	1870	Australia's defences limited to 5 cruisers - attack expected from small fleet fast armoured vessels that hold ports to ransom and destroy coal stations
***HMVS Cerberus* arrives Port Philip (New Technology)**	1871	Arrives Port Phillip Bay -monitor ironclad
Mud Islands declared Defence Reserve	1872	Excludes guano mining
Geelong Corps of Royal Vic Artillery formed - man Fort Queenscliff	1873	Amalgamated two Geelong Corps
Royal Commission	1875	Recommends militia numbers maintained at 3400 men
Scratchley Report on Defences	1877	Planned - block the channels with mines and artillery fire, searchlights
Scratchley/ Jervois Survey Defence at Heads	1877	Recommend extra forts at Heads, including construction of Popes Eye and South Channel Forts (artificial Islands), and mines across channels
Two island forts planned for Bay + torpedo field + searchlights (New Technology)	1877	Planned but not funded
Permanent Artillery planned for coastal batteries	1877	Planned but not funded
Whitehead Torpedo Introduced/ Torpedo boats invented (New Technology)	1877	1st propelled torpedo worldwide, deployed by torpedo boats
Pt Lonsdale still Defence Reserve	1878	
Fort Queenscliff - 68 pr guns replaced with 4 x 80pr MLR guns	1878	
Russian Scare - *HMS Nelson* fitted with 28 guns	1878	Converted to single deck steam Frigate
Pt Nepean Battery - temp	1878	Temp battery made of sandbags installed - 4 x 80 pr guns
***Deborah* and *Sacramento* used as Torpedo stores and mine assembly for Torpedo Corps in Williamstown**	1878	

***Cereberus* torpedo explosion**	1878	Trailing wire from boat detonates mine and kills four seamen
Britain and Russia close to war in Constantinople - Russian War scare	1879	
Queenscliff - Geelong Railway line opens	1879	Military line to provide troops/ supplies in emergency or invasion from Melbourne - enables large scale expansion of forts
Armstrong Guns now give greater firing range (New Technology)	1879	
Torpedoes (Mines) introduced to defences	1879	
Scratchley Report - planned Armstrong guns installed at new fort at Swan Island to replace Popes Eye Fort + torpedo training depot + work to begin on South Channel Fort	1879	Suggests Armstrong Guns be installed, Popes Eye Fort be substituted with fort at Swan Island + torpedo training depot
Stewart recommends both island forts go ahead	1879	
Work Begins Sth Channel Fort, Fort Queenscliff (remodeled) and Swan Island Fort	1879	
Fort Gellibrand upgraded	late 1870s	
Submarine mines used at Heads (New Technology)	1879	
South Channel Fort	1879	Work begun on annulus
South Channel Fort - annulus completed	1880	
2 batteries installed at Fort Queenscliff	1880	
Swan Island Fort - contract let	1880	
Easter War Games	early 1880s	
Pt Nepean Pier	1881	Cattle jetty used prior to this time
South Channel Fort - Low profile fort with disappearing guns ongoing work (new technology)	1882	Low profile fort with disappearing guns
Scratchley complains of lack of funds for Qcliff, Pt Nepean, Swan Island and South Channel Forts (where work was underway) - urgency to get work completed	1882	
First permanent garrison at Heads	1882	Victorian Artillery Corps - still undermanned
Fort Gellibrand upgraded	1880s	
Disappearing Guns Introduced	1883	
Minefields - West and South Channel	1880s	
Fort Queenscliff - defence wall, keep and ditch underway	1882	
***HMVS Miner* obtained for Torpedo Corps at Swan Island/ Jetty Built**	1882	
Dept of Defence established	1883	Scratchley chief adviser
Queenscliff Fort earthworks completed	1883	
Queenscliff Fort enclosed and completed	1884	Work completed
Post Office removed to outside fort	1884	
Swan Island Torpedo Depot established	1884	Closer to potential war theatre
Work ongoing at Swan Island, South Channel and Pt Nepean	1884	
3 x torpedo boats (*HMVS Lonsdale, Nepean & Childers)* + torpedo launch *(Gordon)* + 2 x gunboats *(Victoria, Albert)* + Nordenfeldt Machine guns purchased for colony (new technology)	1884	Fast 2nd class torpedo boats - 12 tons + 1st class 60 ton torpedo boat + turnabout torpedo launch = 2 x gunboats 44m long + Nordenfeldt machine guns on boats as countermeasure to torpedoes against vessels
Pt Nepean - 1st permanent gun emplacement finished	1884	
Britain and Russia close to war in Afghanistan - Russian war scare	1885	Britain heavily reliant on colonies for food supplies - potential target, feared Russians will use new guerre de force tactics - international arms race
Forts upgraded at Heads - guns now placed in position	1885	
Fort Franklin - work ongoing	1885	25cm BL gun covers examination anchorage

Eagles Nest – 9" gun installed	1885	Gun installed - greater range across Bay and ocean
Pt Nepean Batteries - work ongoing	1885	
Fort Queenscliff now an enclosed battery - moat and gunfire banks	1885	Own water supply installed - windmill
Swan Island Fort enclosed battery - 9 entanglements to deter land assault	1885	
West/ South Channel Torpedo fields being installed + blockships prepared to be sunk in South Channel if necessary	1885	
Victorian Artillery - 50 extra men	1885	
South Channel Fort - work still underway	1885/86	
Swan Island Torpedo Laying Accident	1886	
Crows Nest Fort/ Pillbox	1886	8" disappearing gun installed
Popes Eye Shoal surveyed for fort	1886	
Plan for succession of forts from fort to the narrows	1886	
Defence System Finished - includes minefield	1886	(Excludes Eagles and Crows Nest)
Searchlights - 2 constructed at Queenscliff	1886	
Fort Queenscliff - moat criticised as waste of money	1886	
Pt Nepean Batteries completed	1886/7	
Swan Island Jetty completed	1887	
South Channel Fort fully operational - electric minefield, searchlights, low profile sand parapets, disappearing guns, Nordenfeldt machine guns (New Technology)	1888	
Fort Queenscliff - 2 batteries - Armstrong guns and other modern guns slowly replace old guns, wall raised to 12ft	1888	
Swan Island Fort - 8 guns and torpedo field across the West Channel	1888	
War Scare - Telegraph Cable Melbourne to London Accidentally Cut	1888	Defences mobilised
Fort Franklin & Pt Nepean Forts unprepared for war - in dismantled state	1888	Either dismantled due to long range of Eagles Nest Gun, or in process of upgrade
Fort Franklin/ Eagles Nest complete	1889	10" HP Disappearing guns replace old ordinance
Popes Eye Fort Annulus constructed	1889	
South Grant Battery (Corps) moved to Queenscliff and renamed Port Philip Battery	1889	
South Channel Fort - 4.7 " quick fire gun installed - world first (New Technology)	1889	
Hobson's Bay - Lighthouse Pier and Right Batteries removed	late 1880s/ early 1890s	
Melbourne best defended city in the Empire	1890	
Maytone - purchased by defence Dept	1890	
Swan Island Fort - tenders for gun emplacements	1890	
Fort gunfire practice - monthly	1890-1908	
Coles Channel to West Channel Minefield/ Practice area	1890-1907	
HMVS Nelson withdrawn	1891	Converted to coal hulk in Sydney
New torpedo boat *HMVS Countess of Hopetoun*	1891	1st class torpedo boat - 75 tons
Vessel Mars introduced	1901	Ferries supplies to South Channel Fort and Pt Nepean, used for laying and testing minefields
Breech block accident Queenscliff Fort (6" BLCP) (New Technology)	1891	
Drysdale Veterans Home	1891	

Fort Franklin Barracks completed	1892	
Searchlights (fixed and wandering) installed Swan Island, Queenscliff (2x), South Channel, Pt Nepean Forts	1892/3	Used to simulate war games
Victoria Rangers proposed station at Heads to operate machine guns	1892	
Port Phillip Battery (Corps) disbanded - permanent soldiers only	1892	End of part-time artillery garrison service
Fort Franklin - quick firing 4.7" gun installed	1893	
Popes Eye Fort abandoned	by 1894	Long range guns on Swan Island make fort obsolete
Compulsory attendance of militia proposed by newspaper	1894	
Soft Drink factory in fort	1896-1930	Makes Bombardier Victorian Artillery bottles
***HMVS Victoria, Albert* retired**	1896	
Western District Artillery Brigade formed	1897	
Submarine cable Swan Island - Popes Eye - Observatory Point	1897	
Victorian Permament Artillery become Victorian Regiment, Royal Australian Artillery	1899	In preparation for Federation
Federation of Australia	1901	Defence no longer handled by states
State defence forces unified with Commonwealth Military Force under Federal Government	1901	
Anglo-Japanese Alliance - potential hostilities with America	1902 - 1922	
Focus defence moves to Heads from Pt King, Pt Lonsdale and Queenscliff - South Channel Fort redundant	1906	
War Scare - Tensions Japan and America	1907	American War Fleet conducts tour of Pacific
Swan Island Rifle Butts	1907-1920s +	Disbanded when posed a hazard to golf on the island
Swan Island Diving Classes	1907	Victorian Army Engineers
Mark VII Guns Installed Queenscliff	1908	
Great White American Fleet visits Port Phillip	1908	
Australian Navy - calls to establish own Navy	1908	Result of Great White Fleet visit/ American, German, Japanese and French war fleet expand into Pacific and
Fort Queenscliff - obsolete guns replaced	1908	6 & 9 C. P. guns installed
Crows Nest - Engine room and gun emplacements installed	1908	
Crows Nest - electric searchlights installed	1908-1910	
Swan Island/ South Channel Fort demanned - Navy take over	1909	
***Maytone* - Officers Mess for Crows Nest**	1910-1947	also short period as commanding officer's Quarters 1916-1919
Submarines recommended to replace mines	1911	
Australian Navy Formed	1911	shift away from coastal batteries to armed seaborne fleets
Fort Pearce (Pt Nepean) Battery established	1911	
Searchlights used for shipwreck rescue (*Edward* - Corsair Rock)	1912	
Swan Island Torpedo depot placed under navy control	1912	
***HMVS Lonsdale and Nepean* used as destroyer targets**	1912	
***HMVS Childers* used as breakwater Swan Island**	1912	
South Channel Fort Abandoned	1914	
South Channel Fort -used to store explosives for Rip blasting operations	1914 - 1979	

First Shot WWI	1914	shot fired across bow German freighter *Pfalz*
Examination Battery and Port War Signal Station (Cheviot Hill) established	1914	vessels entering port required to undergo examination by pilots
Infantry forces guard narrow neck, lighthorse regiments guard surrounding countryside	1914	
***HMVS Cerberus* used to protect Victoria**	1914-1918	Also acted as magazine for auxiliary services
South Channel Fort reduced to skeleton force	1914-1918	
Crows Nest Fort - used in WWI	1914-1918	Swaggies camp in fort after war
Barbed wire entanglements in front of Queenscliff guns	1914-1918	
Fort Pearce Barracks established	1917	
***HMVS Albert* sold as hulk ashore at Swan Island**	1918	
***HMVS Childers* hulked as breakwater at Swan Island**	1918	
***J Class Submarines* given to Australia**	1919	in poor condition upon arrival - considered useless
Submarine mines given to Australia Navy by Admiralty	1919	
Searchlights - Fighting Lights - Pt Nepean (x 2 pairs), Pt Lonsdale (1) and Queenscliff (2 x 2 pairs)	1920s	One set at beach level, range 9000 yards. Unsure when installed
South Channel Fort - 5 men stationed here week at a time	1920s+	Fort serviced by Mars and Reay, men penalised for heavy drinking sent here
***Cerberus* used as submarine depot ship**	1921	
Navy takes over Swan Island Mine Depot	1922	
***J 3 Submarine* scuttled as breakwater at Swan Island**	1923	
***J Class Submarines f*leet decommissioned**	1923-1924	
***HMVS Countess of Hopetoun* used as pier at Swan Island**	1924+	
Cerberus scrapped as a breakwater at Sandringham	1926	
J Class Submarines (J 1, 2, 4, 5) scuttled in Ships Graveyard	1926-27	
Fort Queenscliff - 2 x searchlights, Pt Nepean and Pt Lonsdale	1929-45	Illuminated shipping during WWII when no radar available. Located at base of fort at water level.
J7 Submarine scuttled as breakwater at Sandringham	1930	
Review recommends mines/ boom gates not needed in Bay	1938	submarines unlikely to enter bay due to currents
First Shot WWII	1939	shot fired across bow German freighter *Stassfurt*
Cottage by Sea used for military	1939-1945	
Narrow Neck / Pt Lonsdale Tank Traps	1939-1945	
Crows Nest Fort Gun and other Fort guns removed for scrap metal - replaced by wooden mockups	1939-1945	
Pt Lonsdale Internment camp	1939-1945	Used fro prisoners off Stassfurt
Review - air and naval defences inadequate - sinking ships proposed to block channels in emergency	1941	7 guns only at heads - spurred by Pearl Harbour attack
Fort Pearce guns vulnerable to aerial attack - moved to Cheviot Hill - dual gun emplacements built	1941	
German Minelayer *Passat* Mines Bass Strait	1941	
New Battery observation post and new Nordenfelt gun at Fort Pearce	1941	covers examination anchorage
Magic Eye, Station M or Chinamans Hat	1942	Magic Eye, Indicator Loop Station
2 Fort Queenscliff guns removed to Pt Lonsdale	1942	had rear protection shields
All Fort Pearce guns relocated to Cheviot Hill	1942	
Sentry killed at Crows Nest	1942	

Enemy planes and submarines sighted in area	1942	
Anti-aircraft guns at Football ground	1942-1945	Nighttime air-raid practice - planes from Melbourne towed targets for practice
Shortlands Bluff to Crows Nest Fort restricted area	1942-1945	
Crows Nest - 4" gun battery built opposite *Maytone*	1943	
Burnt Point Causeway surveyed for barbed wire entanglements	1944	
Crib Battery withdrawn/ Pt Lonsdale Battery placed into maintenance/ gate removed	1944	
Pt Nepean Forts redundant/ Other Forts scaled down	1945	
Maytone - converted to married quarters for Aust. Staff College	1946	
***Mars* sold**	1946	
Fort Queenscliff guns removed/ converted to Australian Staff College	1946	
Pt Lonsdale Searchlight emplacements - beams removed	1948	
Quarantine Station used acquired by military for Officer Cadet Training	1951	
Crows Nest - cannon still here until moved by army to Fort Queenscliff	1950/60s	
Swan Island Mine Depot taken over by army	1960	all access to island prohibited
Quarantine Station used by Army School of Health	1988	

Appendix C-2: Expanded Defence History of Port Phillip Bay

Ever since the first colony in Victoria was established at Sullivans Bay in 1803 (near modern day Sorrento), defence considerations have shaped the use and non-use of the Bay. The period around the initial settlement of the colony was one of great upheaval and paranoia amongst the British communities worldwide. England was often at war with other countries, and her colonies often felt themselves as potential targets for aggressors. By 1836, the colony's first defence force was formed when 30 troops arrived from NSW on the *HMS Rattlesnake* (Noble 1979:86; Coutts 1981: 2-5).

The discovery of gold in the 1850s prompted major concern that a hostile vessel could enter the bay and hold the colony to ransom (Macarthur et al. 1858:949). The Argus newspaper (31/12/1853, as cited in O'Neill 1988:39) printed the following ominous warning:

> …In the event of war we are in a very defenceless state and that the fact of it being known all over the world that we have a few millions worth of solid gold within cannon shot of the Bay is a circumstance which renders us peculiarly liable to attack.

With the secession of Victoria from NSW in 1851, it became clear that a series of defence networks were required for the colony. Initial fortresses were suggested for the heads in 1852-53, especially due to the proliferation of maritime activities and essential government services based there (GA 12/11/1852; Tate 1982:4). With the onset of the Crimean War between Britain and Russia from 1853-56, calls were made to fortify the Heads region to deter any potential Russian attack after rumours circulated of Russian warships patrolling the Pacific, and concerns were expressed that a hostile ship could easily hold Geelong or Melbourne to ransom (Sutherland, 1888a: 461; Brownhill 1990:634-6; Noble 1979:46, 47; 83; Pearsall, and Trumble 1996:338). The Colonies' association with Britain also exposed them to attack by the Empire's enemies, which potentially included France, Russia, America and China (O'Neill 1988:39). Additional concern was raised in 1854 regarding the proximity of new French settlements in the Pacific and exploration attempts along the Australian coastline, which further highlighted the inadequacy of the Victorian Colonial defences (Tate 1982: 4). An alarming situation occurred after Australian Imperial troops became responsible for defence in 1853 (Noble 1979:86), and when the *Great Britain* fired a saluting salvo upon entering the harbour the next year, it caused great panic amongst the community at Melbourne (Noble 1979:46, 47), leading to calls for the fortification of Queenscliff and its recognition as the key to Port Phillip (GA 12/9/1854).

This began the series of many war scares throughout the nineteenth century that led to a constant state of military preparedness. Many alerts were instigated by international tensions between the Mother country and potential aggressors, visitation of foreign warships, or cut communication cables. Hyslop (1976) recorded that there had been 200 war scares in the nineteenth century, which gives some idea of the contemporary state of mind of the colonists. The Australian colonies not only represented rich targets to potential aggressors, but also supplied vital agricultural produce to England, and provided essential strategic coaling depots required for the steamships of the British Navy. Furthermore, the Alfred Graving Dock (Melbourne) represented the largest facility of its time in the Southern Hemisphere, and was a vital facility for international vessel maintenance, a consideration which was further reinforced when the American Confederate Raider *Shenandoah* arrived to use the facility in 1865 (Noble 1979:84; Kitson 1987:6.9).

With the onset of the gold rush, Victoria had become a very prosperous state, and many vessels now left the port laden with fortunes in gold for return to England. Looting and piracy of vessels was rife, even within the Metropolis' harbour itself (Sutherland 1888a:136, 333; Draper 1900:1-6). The isolation experienced by the colonists often added to their

concerns, as it often took months to communicate between Britain and the colony. Many local militia forces were formed in the early 1850s as a countermeasure against foreign invasion. A commission investigating harbour defences in 1854 suggested the Victorian Government should deploy eight guns and howitzers (six 9pr and two 24pr howitzers), a warship steamer and that the colony's army could be supplemented with troops from India. Although these recommendations were not adopted, they were probably instrumental in the formation of several volunteer defence forces Corps under the *Defence Act 1854*, whose volunteer members drilled at nights and weekends at Geelong and Melbourne. As the Allied war campaign in the Crimea proved victorious, the ranks of the Corps swelled, and by 1863 the volunteer forces had swelled to 31 corps with 4000 men including a large detachment at Geelong (Sutherland 1888a:461; Noble 1979:83; Brownhill 1990:634-41).

In the period between 1854 and 1880s, several Royal Commissions and advisory committees considered the problem of how best to defend the colony (Macarthur et al. 1858, 1859a, 1859b; Scratchley 1860, 1863, 1864, 1882; Barkley 1861; Select Committee 1861, 1865a, 1865b; Palsey 1864a, 1864b, 1865a, 1865b; Wiseman et al. 1864; Anderson 1865; Palsey and Scratchley 1865; Verdon 1865; O'Shannesy et al. 1876; Jervois 1877, 1879; Scratchley 1882; Cook 1887). Their recommendations varied between the establishment of fortifications at the heads or closer to the metropolis at Hobson's Bay (Melbourne) led to the reservation of many coastal areas as restricted defence reserves in anticipation of the installation of later facilities. The colony at this time was still heavily reliant on England for the provision of funding to achieve these aims, which was not always forthcoming with the money. Britain favoured the provision of obsolete warships as a stopgap measure, which placated the appeals for colonial defence countermeasures with minimal cost outlay. Several defence vessels including the sailing sloop *Electra*, blockship *Sir Harry Smith*, and steam warship *Victoria* were granted to the colony between 1851 and 1856, predominantly to act as floating artillery platforms to protect Hobson's Bay (Noble 1979:83, 86). The first fortifications in Port Phillip were installed at the entrance to Hobson's Bay (Melbourne) at Pt Gellibrand and Sandridge in 1854, which were earthworks structures with associated guns (Duncan 2003a:276, 280, 440), which in conjunction with the *HMS Electra* provided rudimentary protection.

The placement of the forts was heavily determined by the limitations of the technology available at that time. The restricted range of contemporary weaponry curtailed the proposed shore-based batteries at the Heads as they would not have the necessary firing time to prevent a foe entering the Bay and sailing up to Melbourne. A Royal Commission in 1858 (Macarthur et al. 1858) advised in favour that further batteries should be installed at Melbourne (Hobson's Bay) and Geelong instead of the former location, due to the possible disruption to lighthouse services and the sheer number of men required to run the guns and the problems of troop distributions associated with the isolation of the Heads locality from Melbourne. They further recommended increased militia numbers and the replacement of the *Victoria* with a new armoured gunship (Macarthur et al. 1858:949, 1859a; Noble 1979:86- 9). However, many defence reserves were declared around the bay in anticipation of future military use, including at Pt Lonsdale (McWilliams 1865[plan] - see Figure C-2.1)- where a fortress had been planned between 1858 and 1876 (Macarthur et al. 1858:949, 1859a; Select Committee 1861; Scratchley 1863:7; O'Shannessy 1876:781); Swan Island, and Pt Nepean, and at various locations around Hobson's Bay, particularly along the eastern shore (Scratchley 1863:9, 26). The Mud Islands were declared reserved Crown Land in 1872 (VGG 19/1/1872, cited in Yugovic 1998:233) in anticipation of a fortification.

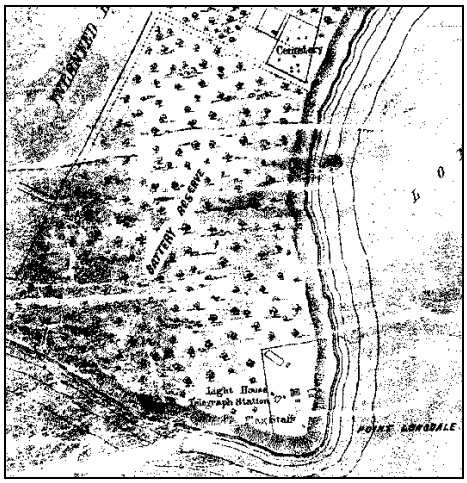

Figure C-2.1: Battery Reserve at Point Lonsdale (McWilliams 1865 [plan], QMM Collection)

The invention of the rifled Armstrong Gun and improved projectiles led to renewed debate as to the best location for fortifications, as its trajectory was up to four times that of previous guns of a similar calibre and thus gave sufficient range to adequately fortify the entrance to the Bay (Macarthur et al. 1859a; Nicholls 1988:180). New fortifications were recommended at the Heads in 1859 at Pt Lonsdale, Queenscliff and Pt Nepean, which led to the establishment of the Queenscliff Company of Volunteer Artillery (Macarthur et al. 1859b; VGG 11/10/1859). Work was begun on constructing three gun emplacements at Shortlands Bluff and, by early July 1860, a seawall formed the foundations for the future fort (VPRS 2143:1; Perry 1973:38).

In 1860, Captain Peter Scratchley of the Royal Engineers was sent from Bombay with a detachment of Royal Engineers to report on the state of the colonial defences, and to supervise any defence construction (Perry 1973:40). He recommended Port Phillip Bay fort defences be constructed in three stages beginning with the Heads, then the channels and finally the harbours (Select Committee 1861:301). Four heavy batteries were to be built at the Heads (Swan Island, Pt Lonsdale, Shortlands Bluff and Pt Nepean), along with two fortress islands (at Popes Eye and the South Channel), and a chain of ships which could be sunk to block access to the West and South Channels (Scratchley 1860; 1861 [plan]; Select Committee 1861:338). Scratchley (1860:22) further suggested that the Queenscliff Volunteer Artillery Corps should also be infantry trained to repel a land-based force that might try to capture the fort, which led to the local Corps joining the Royal Victorian Volunteer Artillery Regiment later that year (Perry 1973:39). He also called for the construction of five batteries each at Williamstown and Sandridge, to be reinforced by a central floating or fixed battery in the middle of Hobson's Bay (Select Committee 1861:337).

By 1861, members of the Queenscliff Volunteer Artillery and Rifle Company were required by law upon joining to attend monthly drills, and financial penalties were imposed on those who failed to attend. Volunteers were drawn largely from the town's population of fishermen and government workers, who included the Health and Customs Officers and their boat crews, the Lighthouse Superintendent and six assistants, the postmaster, the Telegraph Master, the Signalman and the West Channel Lightship crew (Perry 1873:38, 39). The lack of guns at Fort Queenscliff at this time (1860-1861) is notable, as the colony was relying on the presence of the (empty) batteries and garrison soldiers to deter an attack (see Perry 1973:39; Tate, 1982:47). The visit of the Russian screw frigate *Svetlana* to the colony in 1862 may have added impetus to completing the defences, and led to the tender for installation of the first three guns at Shortlands Bluff the next year (Scratchley 1863:29; Tate 1982:50).

The threat of war with America in 1861, led to renewed calls for increased defences in all the colonies (Barkley 1861). Four new shore batteries were constructed at Williamstown that year, along with three batteries at Port Melbourne, Sandridge and Pt Ormond (Scratchley 1863:7; Sutherland 1888a:462; Duncan 2003a:276, 280, 392, 440). Scratchley (1863:5) further recommended the installation of the newly designed Armstrong guns to replace the obsolete 68 pr guns at the Hobson's Bay fortifications until an armed blockship could be purchased. Armstrong guns were available in either muzzle (RML) or breach (RBL) loading, but the latter proved to be problematic and susceptible to accidental discharge (Pasley 1864a:54). Although approved for purchase in 1865 (Anderson 1865:61), difficulties in obtaining the RML guns (Pasley 1865a:62) led to delays in their introduction into the colony. Other types of Armstrong guns (Palliser), where older guns were rebored and fitted with rifled barrels, were initially successful but were later withdrawn after several accidents overseas (Pasley 1965a:62). Later improvements to this design led to their recommendation (Select Committee 1865b:v) and they were introduced to several guns in the colony around 1867 (Billett 1994:5). However, it was not until the late 1870s when the Armstrong rifled gun ranges were again increased that they were successfully applied to use at Victorian coastal batteries (Jervois 1879; Nicholls 1988: 181). Victoria commissioned several 80 pr RML guns during this period together with studless palliser shot (Hawkins, 1888:251).

These limitations in gun ranges and availability led to the development of Hobson's Bay as the preferred location for fortifications, with a token three gun battery at Queenscliff, until such time that further funds and guns became available (Select Committee 1861:301). By 1863, 70 guns were planned for Port Phillip, including 13 at the Heads, 51 for Hobson's Bay and six for Geelong (Scratchley 1863: 28). Hobson's Bay defences then consisted of four batteries or emplacements at Williamstown, and five along the Sandridge eastern shore, with further works planned at Williamstown (a tower west of the Right Battery), the Central Defence (Pile) Battery to be replaced with an Imperial 12 gun block-ship (armed with six 68 pr guns and six rifled guns) until ironclad gunship technology had been perfected and could replace it, and torpedoes (mines) and other obstructions be placed in Hobson's Bay to defend against enemy shipping (Scratchley 1863:11, 12). A small (two gun) battery was also constructed to defend Geelong in 1863 (Brownhill 1990: 639).

The invention of ironclad technology during the Crimean War, and the testing of this new technology in several vessels including the first iron hulled warship *Warrior* (1860), and the ironclad *Monitor* (1862) during the American Civil War led to a revolution in naval warfare. When news of the innovative technology reached Victoria, the government was favourably disposed to the purchase of an ironclad, as its existence not only provided an alternative defensive strategy, but also threatened the colony if used against it. The British Parliament was lobbied for funding to build an ironclad vessel for the colony on the grounds that it presented a cheaper alternative to shore based defences, and although the designs for two vessels were undertaken they were not commissioned (Noble 1979:90-92).

An open battery of three guns to defend the anchorage off the jetty was finally installed at Shortlands Bluff by 1864 (Scratchley 1863:26; Wiseman et al. 1864:36). It is notable that around this time (1863) more than three times as much ordinance was allocated for each gun at Queenscliff (100 rounds) as compared to 30 rounds at Sandridge and 60 rounds at Williamstown (Scratchley 1863:25), suggesting that it was realised that Queenscliff was at more risk from attack than the other batteries, and also took into account that it was isolated and operated without the support of other batteries.

The volunteer corps continued until 1863, when (following Scratchley's (1863:15) recommendation), all volunteer regiments (except cavalry) were replaced with 23 enrolled corps (paid reserve volunteers), including a Queenscliff detachment of the 2nd Geelong

Artillery Corps, which was later incorporated into Geelong Corps of the Royal Victorian Volunteer Artillery in 1873. Later that year, this unit was dissolved into a new unit - the South Grant Volunteer Artillery Corps based at Queenscliff (Perry 1973:40).

Plans were also made for the expansion of the Queenscliff Battery, the construction of two gun towers at Pts Nepean and Lonsdale in 1864 (possibly on Corsair and Lonsdale Reef or Rock, respectively- though these were never constructed (Wiseman 1864:37)), all to be linked via semaphore stations. These were to operate in conjunction with planned defence reserves declared at St Kilda, Sandridge, the Yarra River mouth, Williamstown (from the Right Battery to the firing range), Queenscliff (from the jetty to Pt Lonsdale), Pt Nepean, and Geelong (Scratchley 1863:7, 8, 10, 12, 13), and an island tower fort to be later installed at Popes Eye as part of a Heads defence plan (Wiseman et al. 1864:37). By 1864, the size of the guns recommended for the Heads defences had been revised up to 300 pr, and further recommendations were made for a gun tower fort at Pt Henry, Geelong, and Hobson's Bay respectively (Scratchley 1864:32; Wiseman et al. 1864:37), although the latter was dismissed by Scratchley (1864:31) in favour of a new armed block-ship.

Further concern was raised at this time regarding the lack of suitable landward defences, and Pasley (1864a:54) suggested the construction of at least one fort (later to become Fort Gellibrand) to defend the other batteries against a terrestrial assault. Sand parapet batteries were recommended for the north shore at Sandridge, after their efficiency had been proved in the attack on Charleston, America (Pasley and Scratchley, 1965:2).

In 1864, with the proposed adoption of smaller lightweight Armstrong guns, Pasley (1864a:58) recommended the arming of small auxiliary launches or barges, which could be used to reinforce the Hobson's Bay defences, or be moored in the shoals to defend the Heads channels. New attitudes to the visual imposition of fortifications were introduced around this time that reflected a trend away from the previous strategy of ominous presence towards one of camouflage. Instructions were given to encourage weeds, shrubs, trees and other vegetation to grow around fortresses, and gun emplacements, and a willow plantation for gabions and fascines was planned for Williamstown, (Scratchley 1863:14, 30, 1864:32).

Work on the defences was delayed for many years, while funds were constantly requested from Britain for their completion (Select Committee 1865a:807, 1865b:887). The estimated cost of creating two artificial island fortresses was enormous, around £350 000 alone for the South Channel Fort, and work on them was delayed at least a decade due to funding hold-ups (Jervois 1879:4).

The arrival of the American Confederate raider *Shenandoah* in 1865, heightened concern amongst the population that Victorian defences were inadequate, and the public demanded that the warship *Victoria* be replaced (Noble 1979:84; Kitson 1987:6.9). The *Shenandoah* had until this time been engaged in a guerre de course (war on commerce) amongst the American Whaling Industry, sinking whaling vessels which formed the financial backbone of that country. When Melbourne's populace awoke to find the vessel already moored in Hobson's Bay, it highlighted the needs for more adequate defences. Given the abundance of gold in the colony at this time, along with the strategic importance of the Alfred Graving Dock for ships' maintenance (which the *Shenandoah* used during her stay), Melbourne represented a prime target for invasion or to be held to ransom (Kitson 1987:8.9). In 1865, a gun raft, the *Elder*, was introduced to supplement to defence in Hobson's Bay. A 68 pr gun was mounted on the 46 by 26ft platform supported by two flat bottomed punts which was moored at the entrance to the bay (Nicholls 1988:49).

In 1865, the *British Naval Defence Act* was passed, which allowed colonial governments to procure and maintain their own naval vessels. Appeals were made to the imperial government for an interim armed block-ship to defend Hobson's Bay, and the construction

of an armour plated *monitor* turret ship armed with 22 ton guns (Verdon 1865:41-2), which led to the permanent loan of an obsolete line of battle ship *HMS Nelson* which had been converted into a two decked auxiliary steamer, and the construction of an ironclad warship (*HMVS Cerberus*). The *Nelson* replaced the *Victoria* upon its arrival in 1868 (Sutherland 1888a:462; Noble 1979:94-5).

The 1870s were a period of great uncertainty for the Australian colonies, with the declaration of war between France and Prussia in 1870, the departure of Imperial British Troops from the colony (Sutherland 1888a:461; Perry 1973:40; Brownhill 1990:640). With the Royal Navy's defence of Australia limited to four or five unarmed policing cruisers, the colonies were relatively unprepared for conflict, and it was speculated that if war broke out a group of small fast armoured vessels could disrupt shipping, hold harbours to ransom and destroy coaling stations (which were essential for Royal Navy fuel supplies) before the colony was informed.

The ironclad monitor class ship *HMVS Cerberus* entered service in the colony in 1871, and visited many of the Bay ports that year, allaying many fears about defence of the Port Phillip Colonies (Brownhill 1990:640). The *Cerberus* never saw active service, but undertook regular training runs from Hobson's Bay to Queenscliff and Sorrento, and provided a tangible reassurance for the paranoid colony (Noble 1979:99).

In 1873 Geelong Corps and Drysdale Artillery helped man the Queenscliff Fort. Four 80 pr and two 40 pr guns were set in place, and were fired at a red flagged barrel moored 1800 yards offshore from the battery (Brownhill 1990: 641-2).

With rapid changes taking place in military technology worldwide, Scratchley was again consulted in 1877 regarding the defences at Port Phillip Heads. His recommendations included a proposal to block the entrances to the channels with mines and artillery fire from fortresses, to be supplemented with searchlights for night raids (Kitson 1987:2.2). Additional proposals were made in conjunction with another advisor, Lt General Jervois - the Director of Works and Fortifications in Britain - later that year, and included extra fortifications at the Port Phillip (Perry 1973:41; Noble 1979:100) and other west coast towns (Jervois 1877; GA 3/7/1877:4). Jervois (1879:4) suggested radical changes to the fortification systems of Port Phillip in 1877. Guns were to be mounted on two new artificial islands similar to those at Spithead, UK (Kitson 1987:6.1), to be at the entrances to the two main fairways (West and South Channels), as these gave greater gun coverage for the South, West, Symonds and Coles Channels. These defences were to be supplemented with remotely operated electrical torpedoes (mines), floating obstructions and piles across the West and Symonds Channels, and mechanically operated torpedoes in the channels (Loelia and Pinnace) not used for navigation (Jervois 1879:4). The minefields were laid out with two outer lines of electro-contact mines in advance of the fort, with four inner lines of observation mines to the east, which could be remotely exploded in lines when a ship passed above, or on contact as required. As the technology for illumination was still being developed at this time (magneto-electric light), picket guard boats patrolled the area of a night or during fog.

By 1878, the *Nelson* was cut down to a single deck steam frigate, and two 68 pr and 24 64 pr guns were mounted in response to further fears of a Russian attack on Port Phillip (Noble 1979:95). Shifting political alliances led to increased paranoia of a Russian invasion mounted from New Caledonia, when Russia and Britain came close to war in 1879 (Constantinople) and 1885 (Afghanistan). Although conflict was avoided, later historical research revealed that Russia had developed plans to lay siege to Sydney, Melbourne and Newcastle with four warships (Kitson 1987:2.1).
This period of the next ten years saw increased activity in response to the threat of war. Work began on the Queenscliff, Swan Island and South Channel defence facilities in 1879

(Kitson 1987:6.2) and necessitated the relocation of the lighthouse keepers quarters to inside the fort's enclosure. A military railway from Geelong to Queenscliff was approved in 1877 (GA 13/9/1877:2) and completed by 1879 to facilitate the rapid deployment of troops to the forts in the event of an invasion. Prior to this time the principle mode of transport to the area was by sea and the town was even considered remote from Geelong (Perry 1973:41). The Swan Island and Queenscliff Forts a complementary networked enclosure of fire that could be operated by a relatively small number of men, and walled enclosures were constructed around these facilities to prevent landward attacks in the early 1880s (Jervois 1879:6; Noble 1979:105). The works were "rushed along as if the enemy were expected any minute" (Dod 1931:94). The completion of Fort Queenscliff in 1884 eventually led to removal of the Queenscliff Post Office from inside the fort's walls to a building in Pilots Row, as public access was restricted by the Forts walls to the permanent garrison members. The postmaster at the time also complained that the ceiling had to be reinforced with pine slats, as it tended to collapse during gunfire practice (Dod 1931:94-5).

The Russian scare of the 1885 reached its height when tensions arose between Russia and England over the Afghanistan border dispute, and led to speculation in the colony about imminent warfare between the two nations. Britain was heavily reliant on her colonies for basic foodstuffs at this time, and the implementation of new strategies of guerre de course by the Russian that had been adopted from the Confederate Navy threatened British supply lines (Kitson 1987:8.9). The government reacted by improving fortifications around Port Phillip Bay, especially at the Heads, to provide defence against the increasing international arms race (Brownhill 1990:642). Existing defence facilities were improved, guns were now placed in their positions, and new forts erected. Shrapnel mounds and moat defences were constructed both around and inside Fort Queenscliff, which had been hitherto exposed to long range gunfire and a rear landward assault, and a windmill was installed to ensure their own water supply (VPRS 2143). Fifty extra men were assigned to the Victorian Permanent Artillery, and work proceeded on the defence works at Queenscliff, Pt Nepean and Pt Franklin Batteries, Swan Island and South Channel Forts, and the West and South Channel torpedo fields (Perry 1973:44). A 9" gun was also placed for the first time at Eagles Nest Fort on higher ground 1 km east of Pt Nepean. Many government vessels were seconded during this time as emergency defence vessels, and a number of barges were readied to be sunk to block the South Channel if necessary (Jones 1986:78-9).

Similar defences to those at Swan Island and Queenscliff were also mounted at Point Nepean, and a 10" BL gun was mounted at Pt Franklin to cover the examination anchorage. By 1886, the defence system was finished, complete with electrical mines operated from South Channel Fort. It was an improved and more powerful battery, and by 1887 the whole Pt Nepean peninsula was riddled with tunnels that connected garrisons with batteries and magazines (Noble 1979:106; Kitson 1987:2.2; O'Neill 1988:44).

By 1888, there were two batteries at Shortlands Bluff, and the older guns were gradually being replaced with new Armstrong and other more modern guns. A 12 ft high brick wall now surrounded the fort, with loopholes to repel a landward attack. The fortifications at Swan Island consisted of several RML guns, which were to be supplemented by torpedoes laid across the West Channel (Sutherland 1888b:158).

Another scare occurred in 1888, when the telegraph cable to London was accidentally severed, which prompted all the defence garrisons to be mobilised. The defence networks were highly criticized at the time, as the forts at Pts Nepean and Franklin had been almost completely dismantled, presumably having either been replaced by the longer range of the gun at Eagles Nest, or were in the process of upgrading their guns (O'Neill 1988:45). By 1889, the works at Fort Franklin was complete, as was the newest fort Eagles Nest (Tate 1982:73). By 1890, Melbourne was considered the best defended commercial city in the Empire (O' Neill 1988:46).

This period saw many rapid changes in technology that influenced defence policy. Several new defence vessels were commissioned as defensive technology evolved. With the introduction of the propelled Whitehead torpedo in 1877, torpedo boats were developed to deploy these devices. In 1884, two second class 12 ton torpedo boats, *HMVS Lonsdale* and *Nepean* were purchased for the Victorian Navy, along with a first class torpedo boat of 75 tons in 1891 (*HMVS Countess of Hopetoun*), and turnabout torpedo launch named *Gordon*. Two heavy gunboats (*Albert* and *Victoria*) and another 60 ton torpedo boat (*HMVS Childers*) were also arrived from England in 1884 (Noble 1979:99). The launch *SS Miner* had also been obtained for the Permanent
Section Torpedo Corps based at Swan Island (Tate 1982:61). Nordenfeldt Machine guns and quick firing cannons were later introduced to the Victorian Fleet as a countermeasure to the enemy using torpedoes against them (Nicholls 1988:189). The vessels all played active parts in the annual Easter War Games held at Port Phillip Heads, where mock battles were staged to test the colony's defences, and were all strategically anchored around the entrances to the channels, to prevent the entrance of any warship (A11 c.1889 [plan]; Anon. 1889; HCW c.1939 [plan]; Noble, 1979:100). Many of these vessels were later used for target practice, broken up, or used as piers or breakwaters around the Bay ((Noble, 1979:100; Jones 1986; Anon 1993b: 25-30). Further plans were made to block the West Channel with scuttled vessels in case of an imminent invasion (Reid 1885; Thomas 1885).

As gun technology led to increased firing trajectories, new breach loading Armstrong guns were recommended for a new fortress at Swan Island that would make the planned fort at Popes Eye redundant and was cheaper to install when used when used in conjunction with electrically operated mines across the West and Loelia Channels. The new battery was to include a garrison and keep, five heavy guns (including three Armstrong BL guns), a torpedo depot (completed in 1884) and training facility and dedicated naval torpedo staff (Jervois 1879:5-6). However, despite extensive delays due to bureaucratic indecision work at both island forts proceeded (Noble 1979:104). Bluestone granite for their construction was ferried from quarries near Geelong. The South Channel Fort was built on a shoal on the northern side of the South Channel near its eastern extremity (Brownhill 1990:642).

The South Channel Fort incorporated cutting edge technology, and its design was constantly altered during its decade of construction. Work began on the oval-shaped island in 1879, when a perimeter of closely spaced timber piles were used to contain a seawall of shaped bluestone blocks to form an annulus 9 ft high above the sea bed in 1880. Concrete caissons were sunk into the sand to bedrock, and the buildings were constructed on a four feet thick concrete pad (Kitson 1987:1.1, 6.1). Two innovative new types of warfare technology were incorporated into the fort's design in the 1880s. Sand parapets, a significant new development in military architecture, were installed to provide increased protection from artillery and camouflage. The stronghold was one of the first of the low profile forts in the world, and the only shoal fort of this type in the world.

Magazines, galleries, a keep and gun emplacements were installed within the reclamation to construct the fort (Noble 1979:104). The fort housed two parapets rows, with the lower line armed with seven breach loading guns fed by a subterranean powder magazine, and new machine gun mounts in the upper ramparts to fend off landings or torpedo boats. A keep and barracks were supported by monolithic timbers of Australian jarrah hardwood. A dock was constructed on the north western side, which provided shelter for shallow drafted torpedo boats, and a jetty was constructed at the eastern extremity. New electric searchlights were installed for night defences, and mines in the South Channel could be detonated from an observation post (Kitson 1987:2).

A new armament mounting, the disappearing gun, was also introduced to the fort. These guns were shielded behind a steel cover shield, and popped up momentarily above the shield

to fire before recoiling into its casemate. The combination of these two new technologies along with the use of Australian hardwood as a substitute for concrete decreased the cost of building the fort, and therefore led to its speedier construction. The final design for the South Channel Fort was developed by 1885 during the Russian Scare and became fully operational by 1888 (Kitson 1987:1.1, 6.4, 6.5, 6.6).

A similar structure was also commenced at Popes Eye Shoal in 1886, at the junction of the West and Symonds Channels. Works proceeded to an extent where an annulus for the base of the fort had been established above water on the Popes Eye Bank by 1889 (Tate 1982:73; Kitson 1987:2.2, 6.5), but changes in defence policy and technological advances in gunnery led to the redundancy of the fort when long distance guns were to be installed at Swan Island (Noble 1979:104).

Despite the urgency prompted by several war threats, and the technological innovations in military hardware, the developments of the batteries were often delayed by bureaucratic delays in funding allocation and defence strategies in the early 1880s. Although two batteries had been installed at Queenscliff by 1880, and the contract let for the Swan Island facility (VPRS 2143; Tate 1982:55), a lack of funds delayed works at all the forts in 1882 (Perry 1973:43; Noble 1979:105).

Proposals for permanent garrison artillery to be stationed at the forts were adopted by the government in 1882. This provided the first wholly military battery, whereas previous batteries had been used as a reserve from which policemen and gaolers could be recruited. The garrison was organised into detachments, one of which was permanently stationed at Queenscliff to maintain and occupy the forts at the Heads was commanded by Colonel Lemarchand, a retired officer from the Royal Bengal Artillery (Perry 1973:43). Despite the introduction of the new permanent garrison battery, the limited number of troops meant there were still insufficient soldiers to man the guns, and therefore there was still a heavy reliance on militia (volunteer civilians) during training, annual camps and the event of hostilities (O'Neill 1988:49). Monthly live fire gunnery practice was undertaken from at least the 1880s-1908, which restricted the use of large tracts of sea in front of the fortresses (QS 29/3/1890, 16/5/1891, 10/12/1892, 3/2/1894, 22/8/1908).

The defence of Hobson's Bay was of prime concern since the inception of the colony to control shipping access into Melbourne. Pt Gellibrand and Sandridge proved to be key defensive locations, with several other batteries planned as part of major defensive strategies were suggested by Scratchley in the 1860s. Until the late 1870s, when Jervois' new defensive plans led to the redundancy of most of these batteries, Melbourne was the hub of defences for Port Phillip Bay, which included a naval torpedo depot (and supply hulks) and a naval battery and torpedo test firing facility in the Maribyrnong River. The Lighthouse, Pier and Right Batteries were removed by the late 1880s/ early 1890s. Fort Gellibrand was upgraded in the 1870s and again during the 1880s as part of the Heads defence network (Duncan 2003a:276, 280, 440).

Two electric searchlights were installed at Queenscliff in 1886, and in 1893, another contract had been tended to construct a fixed searchlight on the foreshore at the Queenscliff Battery (Tate 1982:63, 69, 77). By 1892, fixed (search) lights had been installed at Swan Island, Queenscliff, South Channel and Pt Nepean Forts, and were supplemented by wandering searchlights that could illuminate any vessel that wandered through the fixed beam (QS 26/11/1892; Kitson 2001:23).

The moral well being of the military forces also became a point of concern. A soft drink factory began operating inside the fort from c.1896 to the early 1930s. Lemonade and soda water were bottled in distinctive in marble topped bottles embossed with an exploding hand

grenade (known as a Bombardier bottle) and ginger beer in stoneware bottles, which were sold at the Fort Grocery store. The factory was established in an attempt to provide alternative beverages to alcohol and to encourage a more sober lifestyle. The drinks were manufactured for the exclusive use of the military, and hence were relatively unknown amongst the local Queenscliff population (Tate 1982:119,143; Arnold 1990:168).

In 1889, the South Grant Battery moved to Queenscliff (from Drydsale), and was renamed the Port Phillip Battery, but the corps was disbanded in 1892 when the non-commissioned officers and men were made redundant, and Queenscliff no longer maintained any part-time artillery garrison. The garrison artillery was again reorganized in 1897, when the Western District Artillery Brigade was formed from the Victorian Permanent Artillery and the artillery garrisons of Geelong, Portland, Warrnambool and Port Fairy, with the new headquarters based at Fort Queenscliff. The Victorian Permanent Artillery changed to the Victorian Regiment, Royal Australian Artillery in 1899 in anticipation of Federation (Perry 1973:45-6). After the Federation of Australia in 1900, defence ceased to be the responsibility of the state. By 1901, state defence forces had been reorganised within a unified Commonwealth military force, and the administration of all military establishments was assumed by the Federal Government (O'Neill 1988:52).

With the American, German, Japanese and French fleets' expansion into the Pacific Ocean, and a visit by the American battleship fleet in 1908 (QS 22/8/1908) Australia faced the threats on many fronts, leading to suggestions for the formation of an Australian Navy, which was finally implemented in 1911 (Overlack 2001; Reckner 2001: 175-8, 181). This period heralded a significant shift away from a sole reliance on coastal batteries to seaborne naval fleets.

The outdated guns at the Heads forts (Pt Nepean and Queenscliff) were replaced by new weapons by 1908 (QS 13/6/1908; Kitson 1987:7.2), and were to remain in use until the end of WWII (O'Neill 1988:52). Their longer firing range led to the de-manning of Swan Island and South Channel Fort. The torpedo depot at Swan Island was then placed under Navy control (QS 11/5/1912; Noble 1979:107). A new battery and barracks were built at Fort Pearce (Pt Nepean) in 1911 and 1917, respectively (O'Neill 1988:52). By 1909, a new bill was introduced into Parliament to establish a larger defence force, and to introduce compulsory military training for all those over 18 years of age (QS 25/9/1909).

The first shot of WWI was fired from Pt Nepean when war was declared just as the German freighter *SS Pfalz* was proceeding to sea, and the vessel was commandeered as a war prize. During WWI, the garrison at the South Channel Fort was reduced to a skeleton force (Kitson, 1987: 6.5). The artillery men and engineers were often criticized for their failure to serve overseas, even though the Heads Forts often were training grounds for subsequent overseas postings (O'Neill, 1988: 54).

The outbreak of war led to the introduction of several new defence facilities. In 1914, an Examination Battery was established (possibly Fort Pearce) and a Port War Signal Station was established at Cheviot Hill (Pt Nepean) under naval control (Veale n.d.:5). The Pilot ships *Alvina* and *Victoria* were seconded as Examination Steamers, as the pilots had been recruited for examination duties during this period. All vessels entering the Bay were required to submit to examination before proceeding. At this same time the infantry forces guarded the narrows at Queenscliff, and light horse regiments patrolled the countryside further beyond (Tate 1982: 90). A large howitzer was also installed near the junction of the Geelong and Portarlington Road, and was used for firing practice at Duck Island [CS]. At Pt Lonsdale, two new electric searchlights (numbers 6 & 7), an engine room, and E.L.D (Electric Light Direction Station) were installed in November 1914, with an underground tank added in 1916, and 7ft high barbed wire fence in 1919 (NAA 569/4/276:B1535–13/2/1924).

In 1919, Britain presented Australia with a fleet of six destroyers and six J-Class Submarines. The submarines were in such poor condition on their arrival in Australia that they had to be refitted, before they were stationed alongside the *Cerberus* at Osborne House in Geelong. The fleet undertook training exercises in The Bay and Bass Strait, and was eventually decommissioned successively by 1924, due to their obsolescence and defence budget cuts. The J3 was used as a breakwater at Swan Island in 1923, and the other vessels were sold for scrap between 1923-24, and four (J1, 2, 4 and 5) were scuttled in the ships graveyard outside Port Phillip Heads in 1926-27, with the J7 used as a breakwater at Sandringham in 1930 (Smith 1990).

The Nepean defences were reduced considerably between the World Wars, and in the 1930s meals were transported from Queenscliff to the six men living there by a small daily boat (*Mars*) from Queenscliff; on rough days the men were forced to get supplies from Portsea or the Quarantine Station (O'Neill 1988:54). The searchlights at Pt Nepean were still manned into the 1930s (QHS Photo: 1891/2572)

Prior to WWII in 1938, a review of defences decided that mining and boom gates were not required, as submarines were unlikely to enter Port Phillip Bay due to strong currents, and that attacks were likely to be limited to coastal bombardments and motor torpedo boat raids in Bass Strait. With the onset of war in 1939, the first allied shot fired worldwide again came from Pt Nepean, this time to stop a small coastal trader (*Woniora*) which ignored orders to halt for examination. A port war signal station was established at Pt Lonsdale to communicate with offshore naval craft (Veale nd:5). In 1941, the German Raider *Pinguin* captured the Melbourne bound merchant ship *Storstadt*, and after converting her to a mine layer she was renamed her *Passat*. The two ships proceeded to lay minefields around NSW and Bass Strait (Perry 1973:49; Hunt 1999:24).

Although the use of searchlights enabled the detection of any vessel entering the Heads, their illumination also provided a stark signal of the Port Phillips location for any enemy traffic (Brown 1999:1). These circumstances led to the development of a number of experimental installations for detecting vessels entering the Rip. In March 1942, a facility called the "Magic Eye" was installed which shone a photo-electric (infra-red) beam from two transmitting units at Pt Lonsdale across the Rip to two receiving stations at Pt Nepean. The transmitter produced a light source that was projected through an infra-red filtering screen and passed through a series of holes in a rapidly revolving disk, which broke the beam into a series of pulses as it was projected. At the receiving side it was focused to a pinpoint beam (via a paraboloidal mirror) onto a photo-electric receiver cell tuned to a specific frequency (M.E.E, n.d.:2). The amplified signal triggered an alarm in the Nepean Battery Observation Post (via a cable that went ashore at the Quarantine Station) and automatically switched on the searchlights whenever shipping broke the beam. This cutting edge facility was used in conjunction with the batteries and searchlights at the Heads (which were operated by the army), and although it operated for a few years, the system often failed when it was activated by birds, waves and rain, despite the installation of a higher beam which allowed the lower beam to be switched off in heavy weather. An indicator loop was installed across the Rip underneath the beam (in August that year), but had been removed by 1944 (DON 1942; Army Reports 10/3/1942, 23/4/1944, as cited in Honoury Editor 1989:9; Nelsen 2002). Despite these failures, the potential of this new technology led to the installation of another facility at Sydney, and also other indicator loops around Australia.

A second piezo-electric light beam station known locally as the "Chinaman's Hat" (and officially known as "Station M") was installed on a dolphin near Popes Eye before 1942, which transmitted two electronic beams across the Rip that was reflected off a large mirror to two reflectors located at either Fort Franklin, Fort Nepean or Portsea known as "Station P" (its exact location was not determined) and to Swan Island ("Station S") that sounded an

alarm when broken, although this too proved unsuccessful. The mechanism was removed in 1944, only after the army gave priority to the development of radio direction finder equipment which made the system redundant. An indicator loop was installed on this structure to detect the magnetic presence of submarines in 1942, but was abandoned in 1943 (Honoury Editor 1989:10; Nelsen 2002; [JB]).

Furthermore, the attack on Pearl Harbour in 1941 led to another review of defences that identified weaknesses in air and naval defences at the Heads, which were open to aerial bombardment as there were only seven active guns, and no aerial defences. Emergency defences were planned, and these included sinking ships to block the fairways (as mines were in short supply), and mounting torpedoes tubes on two Portsea Piers (which proved unsuitable; Noble 1979:108). As the gun emplacements at Fort Pearce were considered vulnerable to aircraft attack, they were moved to Cheviot, where a dual gun emplacement was built. Additional protective concrete shields were also installed over several guns, and a new battery observation post was built at Pt Nepean, along with a new 14 pr Nordenfeldt gun at Fort Pearce to cover the examination anchorage (O'Neill 1988: 55).

In 1942, two 6" Breech loading Mark 7 guns were removed from Fort Queenscliff to be remounted at Pt Lonsdale Battery, and two 4.7 quick firing guns were mounted at Crows Nest Battery. Both sets of guns had rear protection shields. The guns at Fort Pearce were also relocated to Cheviot Hill. In that same year, a sentry at Crows Nest was killed by an unknown person, who later fired on other soldiers. The threat of war appeared closer to home around this time, when enemy submarine and aircraft were sighed in the area (Tate 1982: 97-9, 114, 121). In 1943, the port war signal station was moved to Eagles Nest, a hill at Pt Nepean (Veale nd:5). The existence of the Burnt Point Causeway road during WWII was obviously perceived by the military as a possible defence threat, and in 1944 the area was surveyed for barbed wire entanglements (Tate 1982: 104). By mid 1944, it was proposed that the Crib Battery be withdrawn, and that the Lonsdale Battery be placed into maintenance (Tate 1982: 104).

With the threat of war so close to home, proposals were made towards the end of the war for dual purpose lightweight guns for anti-aircraft and small vessel deterrence, which were installed at the football ground and near Crows Nest. The operations at the Heads were scaled down by the end of the war, and Pt Nepean defences were declared redundant. In 1946 the guns were removed from Fort Queenscliff and it was converted to the Australian Staff College (Noble, 1979:109; Perry 1973:49; Hunt 1999:24), as were the guns at Pt Lonsdale batteries (NAA A82/2/84: MT/1131/1-1/9/1961). In 1951, the Commonwealth Government acquired temporary use of part of the Quarantine Station from the Health Department for use as officer cadet training, but this was closed in 1985 pending the opening of the Australian Defence Forces Academy opened in Canberra (O'Neill, 1988: 56). In 1988, the site was occupied by the School of Army Health.

Appendix C-3: Significant Vessels in the Victorian and the (Post Federation) Victorian Based Australian Navy

Defence Vessel	Date Start	Event	Date End	Type	Size tons	Armament	Comments
HMS Electra	1851		1856	sailing sloop			Became headquarters for Hobsons Bay Water Police
Sir Harry Smith	1855		1868	blockship			
HMCSS Victoria	1856	1860-1862	1878	screw sloop	880	8 x 32 pr	Replaced *Electra* - Specifically built for Colony. Temp leaves Bay for Maori War, and to Gulf of Carpentaria to find Bourke and Wills
Pharos	1864		1881	gunboat	156	2x 18pr	Former lighthouse tender
HMCS Elder		1865		Gun raft		1 x 68pr	Catamaran hull built in Williamstown
HMVS Nelson	1868		1891	Two Decked Frigate		between 16 & 46 smooth bore (62 & 64 pr) guns and howitzers (less over time)	
HMVS Cerberus	1871		1921	Monitor Class Iron Clad	3480	4 x 10" MLR, 2 x 6pr, 4 x Gatling, 4 x 1"	Hulk used as a breakwater at Black Rock, Melbourne
HMVS Miner	1882		1904	Mine-laying launch		submarine mines	Owned Defence Dept, complement of Vic Engineers
HMVS Albert	1884		1897	Steel Gunboat	370	1 x 8' RBL, 1 x 6" BL, 2 x 9pr, 2 x 3lb, speed 10 knots	
HMVS Victoria	1884		1896	Gunboat	370	1 x 10inch RBL, 2x 13 lb, 2 x Nordenfelt 3 pr	
HMVS Childers	1884		1918	1st Class Torpedo Boat	60	2 x 15" torpedo tubes for Fiume torpedoes (4 carried), 2 x 1pr Hotchkiss guns, speed 19 kts	Possibly hulked at Swan Island
HMVS Lonsdale	1884		1914	2nd class torpedo boat	12	Dropping Gear for 2 x 14" Whitehead torpedoes, speed 17kts	Used as Breakwater in Queenscliff Bight to protect foreshore houses.
HMVS Nepean	1884		1914	2nd class torpedo boat	12	Dropping Gear for 2 x 14" Whitehead torpedoes, speed 17kts	
HMVS Gordon	1884		1914	timber turnabout torpedo boat	56	dropping gear for 2 x 14" torpedoes, 3 x 1" double/four barreled Nordenfeldt guns	

Batman	1885-1886 1914			hopper barge/ auxiliary gunboat/ minesweeper	387	1 x 64 pr	Owned by Harbour Trust, served 1914 as non-commissioned minesweeping flotilla. Scuttled in Ships Graveyard, Barwon Heads
Fawker	1885-1886 1914			hopper barge/ auxiliary gunboat	387	1 x 64 pr RML,	Carried compressing engine for Sth Channel Torpedo Division, owned by Harbour Trust, served 1914 as non-commissioned minesweeping flotilla. Scuttled in Ships Graveyard, Barwon Heads
Gannet	1884			paddle tug/ auxiliary gunboat	246	1 x 64pr RML	Owned by Harbour Trust
Commissioner	1885			launch/ auxiliary spar torpedo boat/ torpedo launch		torpedo spar, later two sets of dropping gear	Harbour Trust Launch
Vulcan	1889		1918	coastal minelayer	75	submarine mines	Two laying out parties of 9 men could work simultaneously. Owned Defence Dept by Vic Engineers
Mars	1891		1946	tender	45	assisted with mine laying	tender for Vic Artillery
Spray	1885		1885	launch/ auxiliary submarine minelayer/ spar torpedo boat	40	submarine mines/torpedoes	Owned Defence Dept, used by Vic Engineers to service fort Franklin
Customs No 1	1885			spar torpedo boat/ torpedo Launch	30	two sets torpedo dropping gear	Owned by Customs Dept
Lion	1885			launch/ spar torpedo boat	35	torpedo spar, later torpedo dropping gear	
HMVS Countess of Hopetoun	1891		1924	1st class steel torpedo boat	75/120	3 x 14" torpedo tubes, 4 sets dropping gear, 2 x twin barreled 1" Nordenfeldt guns	Hulk used as a jetty at Swan Island

J Class Submarines	1919		1923/ 1924	J Class Submarine . Obsolete vessels presented to Australia at end of WWI			*J3* used as jetty at Swan Island.1923. *J1*, *2*, *4* and *5* scuttled in Ships Graveyard, Barwon Heads 1926/1927. *J7* used as Breakwater at St Kilda Marina 1930,
SS Reay		1930s	1946	launch		used in conjunction with the Mars to transport troops and supplies between the Heads Forts	
Mynah		1920s				used to transport supplies from Melbourne	
Sacramento/ Deborah		1878	1882	mine magazine ship			Originally used as prison ship (1850s), then as store-ship/ mine assembly ship for torpedo corps in 1878, replaced by storehouses at Williamstown in 1882
Ragle				tug/ auxiliary gunboat			

(After Noble 1979; Tate 1982; Jones 1986; Kitson 1987).

Appendix C-4: Rifle Ranges of Queenscliff and Swan Island

1) Chinamans Point Rifle Range

The first rifle range in Queenscliff was located on the spit between Plank Road and Swan Island (Chinamans Point), but had to be abandoned after it presented dangers to boats entering Swan Bay (Cuzens 1912:7). The volunteer military corps was formed not long after 1859, when men drilled twice a day at Queenscliff. Every anniversary, a shooting match for prizes was held where the fishermen's flats now stand, but had to be discontinued in this area as it presented a danger to incoming boats crossing the bar (Fanning 1893). The rifle range was moved from here for this reason, and the area was required for fishermen's allotments. The range had target plates to mark the accuracy of the shots, with a pit dug in which to shelter during firing practice (Simpkin n.d.:6).

2) Shortlands Bluff Rifle Range

By 1861, a new rifle range had been established behind the Botanical Gardens facing Lonsdale Bight (Dod 1931:59). A line of trees were cleared from the Crows Nest in the direction of the Springs, but was later abandoned when the gunfire was found to be dangerous to farmers working at the springs (Cuzens 1912:7). It was still in existence in 1864 (GA 27/5/1864). A rifle match was got up at the Baths in 1864 [presumably near the site of the old baths at Shortlands Bluff] (GA 27/5/1864). The Queenscliff Volunteer Artillery unit set up its own shooting competition at this location, where targets were placed on the sand dunes of Lonsdale Bight and firing parties stood on land behind the botanic gardens (Dod 1931:59).

3) Swan Bay Rifle Butts

The new rifle Butts at Swan Bay The rifle range was established in 1884 to the east of the High School at the Narrows near the railway line (near W. Werry's cottage stood), and was used by the Queenscliff Rifle Club for many years (Cuzens 1912:7; QS 19/7/1884; 13/6/1908). They were abandoned in 1907 (QS 2/11/1907) after construction had begun at a new range at Swan Island that same year (QS, 19/10/1907). Calls were made to remove a shed associated with this facility as early as 1907 when it was inhabited by 'undesirables (QS 2/11/1907), and by 1908 it had been dismantled (QS 13/9/1908). It was located near railway lines close to the Swan Bay Yacht Club in 1912 (QS 2/11/1907, 5/10/1912). Locals described the remains of the facility:

> Alongside the yacht club building on the west corner, you'll find the remains of the Rifle Butts… take a line across to McDonalds Jetty...It was the 3rd rifle range in the area and was 860 yards long. The butts were in the water and they fired out over the water at the targets towards McDonalds Jetty. Jack Golightly found dummy lead shots out there. On a very low tide you'll find some of the butts if you are lucky. The butts were the posts on which the targets were mounted. I found one of them once, and marked it with a white marker pole, but someone must have knocked it over. All I found was stakes 4ft or so high of 3x 2 timber. [CA]

> There was once a small rifle range at the junction of the King and Flinders St. Queenscliff had a rifle range called "the butts" near the junction of the Geelong Road at the former Queenscliff High School site. A tree there was used to support the rifles when firing out over Swan Bay. This site retarded the use of the causeway across Swan Bay, as it was in the firing line. I used to collect 303 shells from the banks and shoreline here. [LID]

4) St Georges Hall

A shooting competition was also conducted at St Georges Hall in 1907 between the A.N.A. and A.O.F lodges in Queenscliff. The range was 40ft long and contestants used B. B. Gun ammunition (QS 31/8/1907). This meeting was arranged as an adjunct to the service firing at the ranges, and as such was more a sporting occasion than a permanent range.

5) Swan Island Rifle Butts

A new firing range was built at Swan Island around 1907 (QS 19/10/1907), and was located just above the golf course, which was granted land for that purpose at Swan Island in that year. A track was constructed from the second bridge at Swan Island to the Rifle Range, which could serve as an extension of the Swan Island tramway line, and an underground telephone cable was also installed between each rifle mound and the target butts (QS 30/11/1907). Work at the rifle range was delayed after an initial work began, and was still not completed by 1908. The rifle range was constructed by Royal Australian Artillery, and was to be used by the Queenscliff Rifle Club, whose numbers were dwindling due to wont of a practice range (QS 29/2/1908). The construction of the Queenscliff Golf Club at Swan Island around the same time, led to notices that golfers used the course during rifle practice at their own risk (QS 14/3/1908). It was finally opened in June 1908, and provided range firing from 200 to 1000yards distance, telephone communication between all the butts and Fort Queenscliff (QS 13/6/1908; 21/11/1908). The range was a popular location for shooting practice for troop sports days from Fort Queenscliff in the late 1920s (Tate, 1982:144). The range was being used by the Royal Australian Engineers by 1909 (QS 22/5/1909), but it appears that the range was not open to the public until 1910, when it was first used by the Queenscliff Rifle Club (17/9/1910). Concern was expressed about cadets using the range in 1912, when they obtained live ammunition and riddled a shed with bullets in the area (QS 25/5/1912). A local resident described the site:

> A small rifle range was once located along the NW edge of Swan Island. There are numerous small steel plates located here that were used as by the range marker personnel for cover (to hide behind) when livefire activities were undertaken – these plates are often buckled and bent where they have been hit by bullets. [LID]

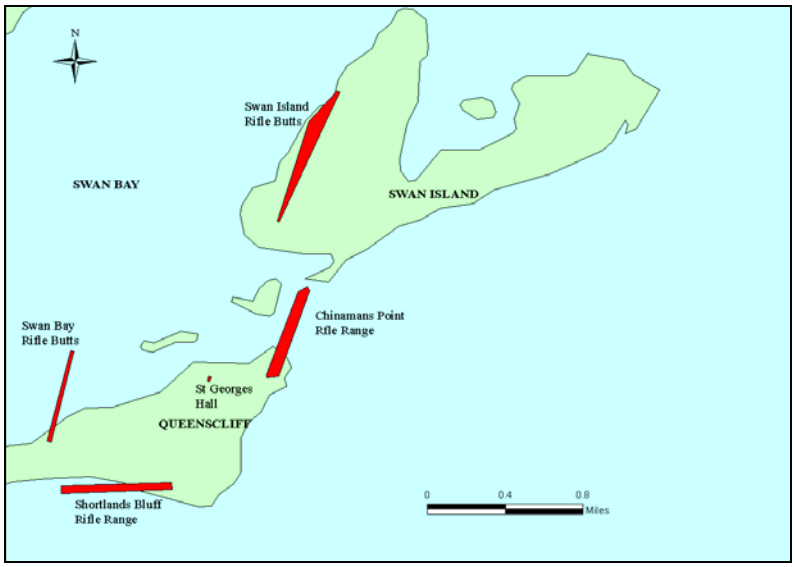

Figure C-4. 1: Rifle Ranges of Queenscliff and Swan Island.

Appendix C-5: Military and Volunteer Corps Organisation Used for the Defence of Queenscliff

Year	Event	Force	Effect
1859	Formed	Victorian Volunteer Forces	Volunteers -serve in voluntary capacity as soldiers. Drawn from Towns Population
1860	Scratchley recommends infantry training for Volunteer Corps	Queenscliff Volunteer Artillery Corps	Corps join Victorian Volunteer Artillery Regiment to avoid being trained as infantry
1861		Queenscliff Volunteer Artillery Corps	Required by regulations to attend drills and practice - fines applicable for non-compliance (but not enforceable due to voluntary unpaid nature of Force)
1863	Poor discipline leads to reformation of Volunteer Forces	2nd Geelong Artillery Corps	Queenscliff Corps transferred to Geelong Corps
1873		Geelong Corps Royal Victorian Volunteers Artillery	
1873		South Grant Volunteer Artillery Corps	
1883		Militia Forces Formed	Soldiers now subject to military discipline and law
1884	New Militia Garrison Battery begun at Drysdale in preparation of disbandment of Volunteer Forces	South Grant Battery Militia Garrison Artillery	
1889	South Grant Battery Moved to Queenscliff and taken over by Victorian Permanent Artillery	South Grant Battery , Queenscliff	
1892	All non-commissioned officers	Port Phillip Battery	
1897		Victorian Permanent Artillery	

Appendix C-6: Archaeological Signatures of Defence Landscapes

1) Fortresses and Batteries

As made clear from the discussion above, defence has played a large role in the shaping of the Port Phillip landscapes, both physically and cognitively. Fortress sites and gun emplacements were the most obvious archaeological signatures of defence activities, and were spread along the southern shores of Port Phillip at Swan Island, Queenscliff, Crows Nest, Pt Lonsdale, Pt Nepean, Eagles Nest, Pt Franklin and on artificial islands in the south and west channels. Many are still extant (including Swan Island and South Channel Forts, Forts Queenscliff, Nepean, and Franklin, and Eagles Nest), and some were still used by the military. In particular, the Queenscliff and Swan Island Forts were monolithic structures resembling a medieval castle in stature [BMn] (see Figures C-6.1 and C-6.2). The extant Fort Queenscliff is surrounded by defensive walls on the landward side, along with traces of the former ditch (known locally as the moat), and tunnels leading to the foreshore and the searchlights. The extant South Channel Fort (Figures C-6.3 and C-6.4) as is the partially completed annulus at Popes Eye (Figures C-6.5 and C-6.6). The former demonstrated the change in defence strategies to low profile camouflaged structures with sand parapets, and it notable that most new fortresses after this time incorporated this principle (eg Fort Franklin and Crows Nest Fort).

Introduced or re-introduced vegetation was an important component of camouflage for fortresses from the 1860s onwards (Scratchley 1863:14, 30, 1864:32; Tate 1982: 62) and included pine, prickly acacia, wattles trees, ti-tree, samphire scrub, pigface, grasses and boxthorn. It appears that several of the thorned plant species were also intended as a natural version of barbed wire (eg boxthorn), and were discovered at several fort locations around The Bay including South Channel Fort, Fort Queenscliff and Crows Nest Fort. A willow plantation was planned to make gabions and fascines (baskets and faggots for constructing fortification earthworks) at Williamstown (Scratchley 1864:32), but it is unclear if this ever eventuated, and it is possible that other material such as native ti-tree may have been exploited for this purpose.

The introduction of the threat of aerial warfare to the area in 1942, led to new approaches to camouflage of battery sites, whereby tonnes of leather off-cuts from shoe factories were spread around pathways on the dunes of the Crows Nest Battery to disguise their location from aerial surveillance [LB], and were still evident in great densities around that site.

Barbed wire entanglements were also present at most military installations. Often the entanglement line would only be visible by a line of steel star pickets which were used to secure them in place. Numerous other types of sites were associated with batteries, but were not recorded in this study (due to their vast numbers, divergence from the maritime theme, and previous recording elsewhere). These included sentry boxes, tank traps, civilian air raid shelters, accommodation quarters, messes, barracks etc).

Batteries were usually located on the highest elevated site in most areas (which had usually been retained as a military reserve from a very early date) as this gave the optimum field of fire (Figure C-6.7). Gun emplacements in these structures originally began as earthen embankments with timber carriages in the 1860s, of which little or no evidence usually remained. However, batteries from the 1880s period were usually evidenced by massive casemates set below ground level (up to 8m wide), with circular iron gun supports beds and complex underground tunnel networks for supporting magazines (Figure C-6.8). Batteries from this period were also low

profile, with buried external aprons and recessed casemates which were either circular or semicircular in shape (e.g. Crows Nest Fort– Figure C-6.9). Casemate size and gun supports reduced in size over time, and were eventually replaced with central pillar mounts, which were evident from either recessed square shafts (South Channel Fort, Pt Lonsdale Battery - Figure C-6.10), or by a circular ring of bolts set in a concrete pad which was reinforced with a cylindrical concrete base that extended at least 1.5m underground below the gun (eg Crows Nest Battery – Figure C-6.11).

Figure C-6. 1: Fort Queenscliff.

Figure C-6. 2: Fort Queenscliff Keep.

Figure C-6. 3: South Channel Fort (Photo: Lighthouse Designs, Pt Lonsdale).

Figure C-6. 4: South Channel Fort.

Figure C-6. 5: Popes Eye (Fort) annulus (Photo: Lighthouse Designs, Pt Lonsdale).

Figure C-6. 6: Popes Eye annulus (Fort).

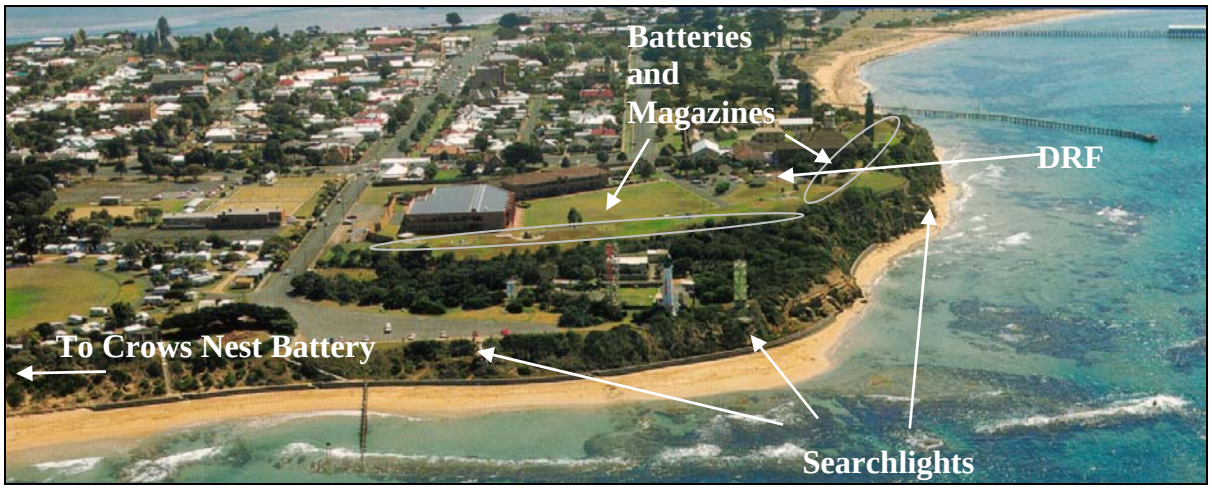

Figure C-6. 7: Fort Queenscliff from south (Photo Postcard: Neil Cutts, Rose Stereograph Co., Mt Waverly).

Figure C-6. 8: Fort Queenscliff 9" HP disappearing gun casemate, Fort Queenscliff.

Figure C-6. 9: Exterior (formerly buried) apron of the 8" HP gun casemate, Crows Nest Fort (1886).

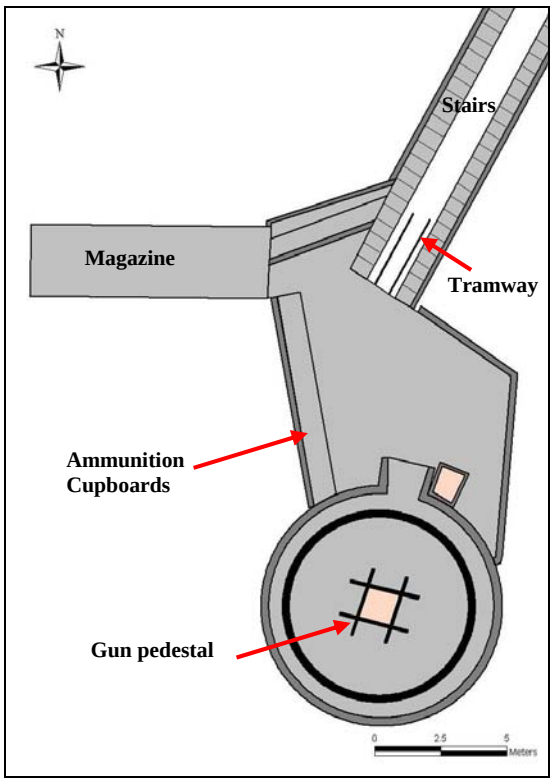

Figure C-6. 10: Survey plan of Pt Lonsdale Battery #1 c. 1942.

Figure C-6. 11: Crows Nest Battery WWII 4.7" gun emplacement.

Figure C-6. 12: Laurie Barras with leather off-cuts used as camouflage at Crows Nest Battery in WWII.

A) Magazines, Tunnels and Other Infrastructure

Many other features were associated with the gun installations. Each battery demonstrated associated underground magazines where ammunition was stored. In the nineteenth century, magazines were located directly adjacent to the battery as the shells were too heavy to transport over lengthy distances. Magazines were therefore often installed underground (to efficiently utilize space and for protection from bombardment). Magazines usually evidenced a series of lifting hoists (either earlier pulley operated or later mechanical) to lift ammunition to the surface (Figures C-6.13 and C-6.14), along with ventilation pipes, and isolated passages where naked lamp flames were lit. The introduction of electric lights led to the cessation of these passages in later periods. These magazines were evident from either tunnels leading from the surface (Fort Franklin, Fort Queenscliff - see Figure C-6.15), or by a raised squared mound alongside the battery position (Crows Nest Fort).

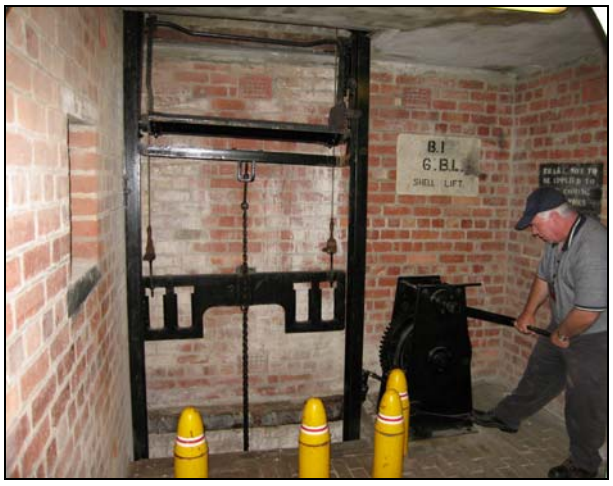

Figure C-6. 13: Bob Marmion operating the mechanical shell hoist in underground magazine, Fort Queenscliff.

Figure C-6. 14: Scott Allen near the block and tackle shell hoist, Fort Queenscliff.

Figure C-6. 15: Magazine, store and lamp passage tunnel entrances, Fort Queenscliff.

The two Pt Lonsdale Mark 6" VII batteries from WWII also had attached magazines, but these were located behind sand dunes to afford some protection from incoming enemy fire (as opposed to underground), and were supplied via individual tramways connecting to the service road below (Figure C-6.16). However, the smaller Crows Nest Battery (of two 4.7" guns) had a common reinforced rectangular magazine located a maximum of 20m away (Figure C-6.17). The reduction of the size of ordinance (and subsequently ammunition) over time enabled the magazine (in this case) to be situated further away from the batteries as it was light enough to be carried between these facilities [LB].

Figure C-6. 16: Ammunition magazine (left), Pt Lonsdale Mark VII Battery #2.

Figure C-6. 17: Crows Nest Battery WWII Magazine.

B) Direction Range Finder (DRF) Stations /Battery Operations Posts (BOP)

Wherever gun emplacements were located, range finding observation posts (known as Direction Range Finders - DRF) were located close by (within 400m), along with searchlight installations (see below). Each DRF was set on a prominent elevated position with a clear view of the surrounding terrain, and usually had an elevated pedestal which housed an alidade for taking angular measurements of incoming shipping (Figure C-6.18). The earliest design encountered was located 400m to the west of Crows Nest Fort (Figures C-6.19 and C-6.20). This two story concrete bunker was built in 1886 with a bombproof steel plate roof above a very narrow observation port, with internal access stairs to an underground work/barracks area. The alidade in this case had been previously set into a raised slate sill. Later DRF stations (postdating 1886) were cube shaped reinforced bunkers with a narrow observation window on three sides (Pt Lonsdale, Forts Nepean and Queenscliff, South Channel Fort – Figures C-6.21 and C-6.22), and it is probable that the earliest versions (South Channel Fort), once housed an iron plate roof instead of the later reinforced concrete structure. Another type of DRF (known as a Battery Observation Post – BOP) station dating to 1905, was a smaller narrow structure (approx 10ft x 9ft 4") mounted atop the remains of the redundant Crows Nest Fort, but only the concrete pad was still evident (Figure C-6.23 and C-6.24). A similar example of this type was seen in Auckland NZ (Figure C-6.25). The Fort Queenscliff DRF evidenced two alidade pedestals which faced in opposite directions, suggesting that it had been extended to also service the Crows Nest Battery in WWII (which did not evidence its own local DRF) (Figure C-6.26).

Figure C-6. 18: Pt Lonsdale DRF station interior, showing alidade pedestal mounting.

Figure C-6. 19:Lonsdale Bight DRF Station (c.1880s. Photo: John Patrick Collection).

Figure C-6. 20: Seaward view of Crows Nest Fort DRF station (Photo: John Patrick Collection).

Figure C-6. 21: South Channel Fort DRF station (c. 1886).

Figure C-6. 22: Pt Lonsdale WWII DRF Station. Note that the top structure (on right) was formerly an electric (search) light detector (E.L.D.).

Figure C-6. 23: Crows Nest Fort BOP 1905.

Figure C-6. 24: Crows Nest Fort BOP 1905.

Figure C-6. 25: Extant example of the same type of BOP encountered at Crows Nest Fort. Located at North Head Battery, Auckland, New Zealand.

Figure C-6. 26: Fort Queenscliff dual DRF station, built 1915.

C) Enemy Detection: Searchlights, Engine Houses and Sensor Beams

Several extant and partially demolished searchlight bunkers were located at Queenscliff, Pt Lonsdale, Pt Nepean and South Channel Fort. The earliest searchlight types constructed in 1886 (Shortlands Bluff - Figure C-6.27) were concrete circular keep like structures which were based at the foot of cliffs and stood approximately 3m above the waterline. The searchlight enclosures were semicircular in shape to facilitate maximum arcs of visibility. The emplacements at South Channel Fort (Figure C-6.28) were an exception to this rule as they were built within the confines of the artificial island, and their shape was tailored to suit. In that case, the searchlights were accessed via a narrow tunnel, were mounted on a light rail (so they could rolled back if under fire) and were covered by a concrete cube shaped bunker with a smaller rectangular concrete surround viewing port at the seaward end. Searchlight design was modified by 1908 to become cube shaped structures fronted by a semicircular enclosure (Figure C-6.29) with a small internally accessed room (probably used for wire connections and range finding calculations). The design was slightly modified again by 1914, when the semi-circular frontage became more angled (probably to facilitate easier construction -Figure C-6.30). Later models dating from WWI onwards were box like structures which exhibited a 1.5m high opening on the seaward and (partially on the) side walls (Figure C-6.31). Searchlights were always used in conjunction with batteries, were close to the waters edge and were increasingly elevated in later models. As batteries were dismantled or became obsolete, the searchlight emplacements were also made redundant. Archaeological remnants of the carbon rods used inside the light arcs of the searchlights emplacements were still evident at Fort Nepean in 1988 (Honoury Editor 1989:8), and in collections at Fort Queenscliff (Figure C-6.32).

The searchlights emplacements were either butted against the cliff face (Shortlands Bluff, Pt Lonsdale), or mounted atop sand dunes (Crows Nest, Pt Lonsdale), and usually had an associated engine room located nearby to the rear, which were often underground (Fort Queenscliff, Pt Nepean, South Channel Fort - Figure C-6.33) or behind elevated sand dunes (eg Crows Nest Camp, Pt Lonsdale - Figure C-6.34). The size of engine rooms reduced considerably over time, especially given the introduction of gasoline driven generators in the twentieth century. The latter type exhibited a raised concrete bed for the generator; an external storage area for flammable liquids; a recessed vehicle access ramp; and exhaust pipe vent holes in the roof (Figure C-6.35and C-6.36).

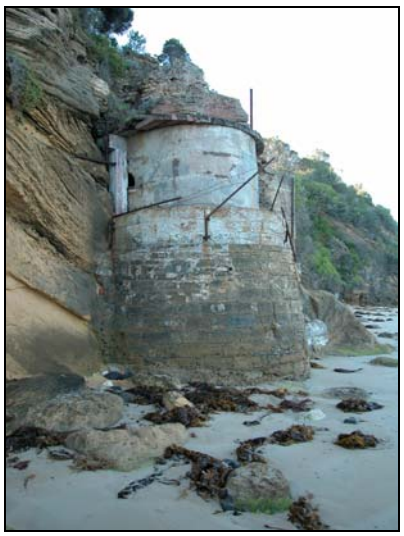

Figure C-6. 27: Shortland's Bluff searchlight #2, (c. 1886 – 1892).

Figure C-6. 28: Searchlight emplacement, South Channel Fort (c. 1888).

Figure C-6. 29: Crows Nest searchlight #1 (c. 1908).

Figure C-6. 30: Pt Lonsdale searchlight #1 (1914).

Figure C-6. 31: Shortland's Bluff searchlight #1, c. 1940s?

Figure C-6. 32: Unused searchlight carbon arc rods (FQ Collection).

Figure C-6. 33: Engine house entrance, South Channel Fort (c1888).

Figure C-6. 34: Pt Lonsdale engine house.

Figure C-6. 35: Pt Lonsdale WWII generator shed bunker (c. 1942).

Figure C-6. 36: Pt Lonsdale generator bunker interior.

Remains of the Magic Eye mechanism were still evident at Pts Lonsdale and Nepean (Figures C-6.37 – C-6.40). The device consisted of a large (ex searchlight bunker) (Victoria Police 1942 [plan]) and a small concrete hut (which resembled a sentry box) at Pt Lonsdale, with a similar hut and split level receiver housing bunker at Pt Nepean. Both facilities were located low near the waterline. The Chinaman's Hat was a circular concrete caisson structure that was built on Queenscliff Pier, and floated out to its site, and the bottom knocked out to allow it to settle onto the seafloor [JB]. The beam mechanism was removed not long after it was installed, and the structure was temporarily used for an indicator loop network, until being abandoned for use by seals (Figure C-6.41). The Chinaman's Hat was removed from the area after it was deemed a hazard to navigation in 2004 (Figure C-6.42). A section of the concrete caisson structure still lies below the seabed, where it was left behind when the upper section was sawn off during its removal. No other archaeological relics were found under the structure during inspections by the Victoria Archaeological Survey in the 1980s, suggesting that either the structure was unmanned or sporadically occupied [MS]. The transceiver locations for this device at Portsea and Swan Island were positively identified, but a concrete structure known locally as the Swan Island Beacon (which lies approximately 20m offshore on Swan Spit), and another concrete structure located at the base of the Fort Franklin cliffs are possibly contenders based on their locations and very similar appearances to each other and the structure at Pt Nepean (Figures C-6.43 and C-6.44) A WWII copper communications cable is still extant between the Swan Island Fort to Popes Eye which crosses through the *Gambier* wreck (1940), and another cable is known between Pt Nepean and Queenscliff which is often caught by boats [PF; TA] is probably part of an indicator loop cable (see Walding n.d.) which was installed in conjunction with Chinaman's

Hat and the earliest Infra-red beam. The concrete bunkers at Pt Nepean, Swan Island and Pt Franklin all have similar appearances to other indicator loop stations overseas (see Walding n.d:1) and may also have acted as indicator loops receptor stations.

Figure C-6. 37: Pt Lonsdale Searchlight #1/ Magic Eye transmitter.

Figure C-6. 38: Magic Eye transmitter, Pt Lonsdale.

Figure C-6. 39: Magic Eye receptors #1 and 2, Pt Nepean, (John Patrick Collection).

Figure C-6. 40: Magic Eye receptor #1, Pt Nepean, (John Patrick Collection).

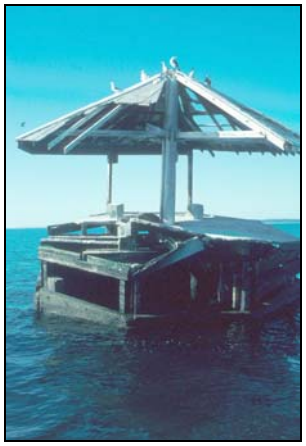

Figure C-6. 41: Chinaman's Hat (Station M) in situ, 1995.

Figure C-6. 42: Chinaman's Hat after removal to Melbourne 2005 (Photo: HV Collection).

Figure C-6. 43: The Swan Island bunker, which was possibly the former transceiver Station S used in conjunction with the Chinaman's Hat.

Figure C-6. 44: Possible Station P transceiver, Pt Franklin.

D) Shipwrecks

Several shipwrecks/hulks associated with defence were known in the area. Several former Victorian Navy and Royal Australian Navy vessels and hulks used for breakwaters or piers at Queenscliff (*HMVS Lonsdale* Figure C-6.45) and Swan Island (*HMVS Countess of Hopetoun* (Figure C-6.46) and *Childers*, *J3* Submarine (Figure C-6.47), and an unknown vessel under *J3*). The timber ketch *Mystery* was also used as a breakwater at Swan Point in 1922 (Foster 1987:13, 97). Several wrecked military vessels included the *Isa* (gunpowder hulk in Swan Bay), *HMAS Goorangi*, an unidentified wreck associated with the construction of Popes Eye, and also scuttled vessels in the ships graveyard (eg *Courier*). The hulk of the *S.F. Hersey* was purchased by the navy in 1923 for use as a pier, and lies alongside the J3 Submarine (Foster 1987:39). Outside the study area, the hulk of the *Cerberus* (Figure C-6.48 and C-6.49) has been used as a breakwater near Melbourne, along with the hulk of the *J5* Submarine. Furthermore, substantial brick deposits are still evident at the *Trusty* stranding site in Nepean Bay, which were destined for the Pt Nepean Batteries (Figure C-6.50).

Figure C-6. 45: Excavated conning tower of *HMVS Lonsdale* in 1995 (Photo: John Hargraves, HV Collection).

Figure C-6. 46: Aerial view of the *Countess of Hopetoun* hulk, Swan Island, 2001, with the remains of the jetty to access the wreck when used as a landing, and Swan Island bunker on right (Photo: Photo Mapping Services, DSE).

Figure C-6. 47: Swan Island submarine (J3) with mine assembly sheds at rear (Martin Gibbs Collection).

Figure C-6. 48: *HMVS Cerberus* at Black Rock (Melbourne) in 1990 (Heritage Australia Collection).

Figure C-6. 49: The hulk of the *HMVS Cerberus* in 1995.

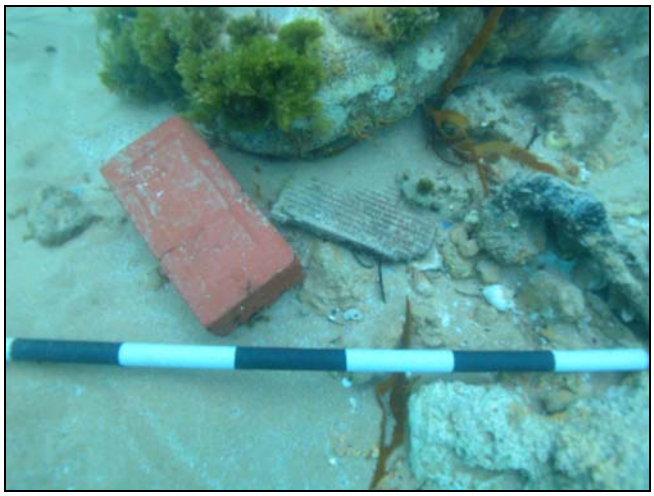

Figure C-6. 50: Bricks from the *Trusty* stranding at Pt Nepean (Photo: HV Collection).

E) Mines and minefields

Two extant sheds at Swan Point were identified as former mine manufacturing sheds that dated at least to WWII (Figure C-6.51). These sheds were used to install the explosives charges in the mine bodies which were manufactured by the Ford Motor Car Company in Geelong. The mine shells were transported by truck to Swan Island, where they were fitted with detonators [GW; JP; LID].

Extensive mine deposits were located close to the end of Swan Island, which at first consideration would indicate a minefield close by, but also were probably associated with the mine assembly sheds contiguous to this area. Contact and limpet mines have been identified inside Swan Bay near Swan Island [PF] and round mines (Figures C-6.52 - C-6.54) and electrically detonated mines have been found attached to cables at Pt Nepean [CP; MS]. When submarine mining was discontinued, the explosives from the mines were removed and used for blasting for channel deepening (Topp 1930), and the mine shells used as incinerators throughout the district, with evidence of this practice found at Portarlington, Lake Connewarre (15km west of Queenscliff) and Drysdale. Hence the mines in this region are more likely to be empty shells used to stop coastal erosion in this area or those discarded into the water (Anon. 1993b:4, 5, 20). Mine detonation mechanisms have been found at Swan Island Spit and and Pt Lonsdale [DL; PF], although the latter may be associated with blasting operations in The Rip in the 1960s [PF] (Figures C-6.55 - C-6.57).

Figure C-6. 51: Swan Pt mine assembly sheds.

Figure C-6. 52: Swan Island mines.

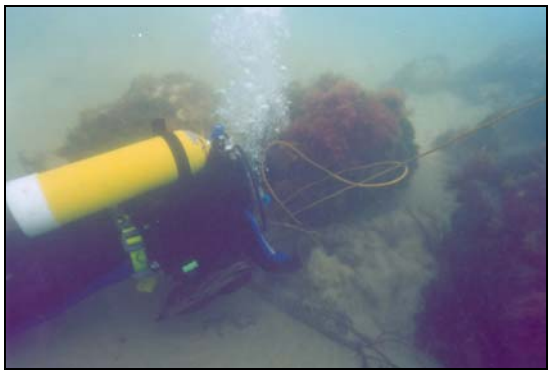

Figure C-6. 53: Swan Island mines.

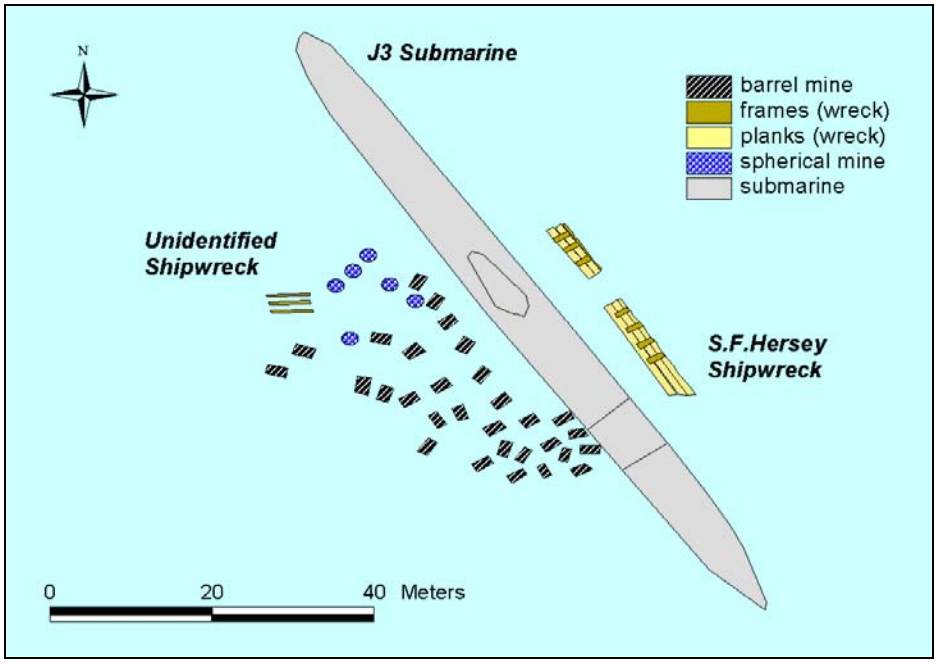

Figure C-6. 54: Survey sketch of underwater mines, and shipwrecks at Swan Point

Figure C-6. 55: Electrical contact mine (FQ Collection).

Figure C-6. 56: Electrical contact mine detonation mechanism (Peter Ferrier Collection).

Figure C-6. 57: Mine Used as an incinerator (Lake Connewarre).

No further direct evidence of underwater mines was discovered, although a cable associated with mine detonation and communications between Swan Island and Observatory Point (via Popes Eye) has been seen by many divers [MS; PF]. Local divers [DL; PF] have suggested that isolated stranding sites found on either side of the South Channel from the 1880s onwards suggested that shipping may have been trying to avoid mined areas by navigating close to the edges of the channels (particularly on the northern side which was seeded with remotely detonated mines as opposed to contact mines on the south side), but this observation could not be adequately tested during this study.

F) Firing Ranges, Gas Check Plates and Ammunition Dumps

Several divers [CP; DL; PF] reported the discovery of an arc of scattered bronze expansion cups around the Swan Island and Queenscliff Forts, and at Popes Eye. Gas check plates/plugs (also known as plates expansion cups/ disks) were seated between the explosives charge and the projectile to maximise the explosive force with a more effective seal by retarding the loss of gas that escaped past the shell in the bore. They also retarded erosion of the gun bore, facilitated greater range and accuracy, and later aided rotating shells in rifled guns (Patterson 1985:7; Hawkins 1888: 152, 155).

Ferrier's collection includes over 24 gas-check plates, of which two types (Figures C-6.58-C6.61) were apparent tentatively dated to the period 1860-1880 [ME]. The larger type was embossed with "9 in GUN, I" (30 cm diam.), with the more predominant smaller size marked "80 Pr, I, R↑L" (20 cm diam.). These gas- check plates are from 9" Palliser Shot RML dating from 1866/67 - 1888 (Cundill 1877: 185, 209, 219; Hawkins, 1888:152, 418, 424), and the latter was an automatic gas- check from an 80 pr (possibly Palliser) RML guns dating sometime from 1872 onwards (Cundill 1877: 234, 238; Hawkins 1888:156, 418, 424), and specifically 1878-1888 for this area. It is notable that the recessed grooves in the latter type may be used for diagnostic dating (they originated in the period from 1877-1888), and were introduced to automatically attach to the shell upon firing (Hawkins 1888:155 - see differences between Figures C-6.62 and C-6.66). Many of these robust bronze artefacts showed obvious signs of distortion, and some were missing their centres as a result of the force of the explosion (Figure C-6.64). Similar finds have also been discovered in front of forts at Warrnambool in Western Victoria [PR], and at Fort Gellibrand, Williamstown ([PT] as cited in Duncan 2003a: 279).

Other evidence of artillery practice included fuse detonation devices used to explode artillery shells [LM; PF]. Several types of fuses were evident in both the study region and adjacent areas. These fuses included a possible Petman percussion Fuse (Figure C-6.67 and C-6.68) for a shrapnel round which postdates 1877 (Cundhill 1877:47; Hawkins 1888:234) and a later model timed percussion fuse from WWII (Figures C-6.69 and C-6.70), both of which screw into the nose of the projectile. The former is marked "V" "A" "11/03", which could either signify it type and batch number (Mark II and batch 03) or its date of production (November 1903), and that it was manufactured by the Victorian Artillery (Hawkins 1888:115).

The gas checks and fuses themselves represent not only tangible evidence of the gun batteries and the size of the guns, but also the gun types and size of charges used. Cannon balls have also been discovered in this region and in Lonsdale Bight [DL; PF]. The range of the guns located in some of these areas was known from trajectory diagrams (Barrett n.d. [plan] – Figure C-6.71), and these were compared favourably with the artefact scatter range. However, it should be noted that the explosives charges for the later guns were halved, as full charges often threatened communities on the other side of The Bay, and many of these later explosives shells were originally filled with sand or salt to simulate the normal weight of the projectile (Covill 1989:7).

Figure C-6. 58: 9" gun gas check plate. Scale = 20cm (Peter Ferrier Collection).

Figure C-6. 59: Markings on 9" gun gas check plate (Peter Ferrier Collection).

Figure C-6. 60: 80 pr RML (possibly Palliser) automatic gun gas check plate (Peter Ferrier Collection).

Figure C-6. 61: Underside view of 80 pr RML (possibly Palliser) automatic gun gas check plate. Scale = 20cm (Peter Ferrier Collection).

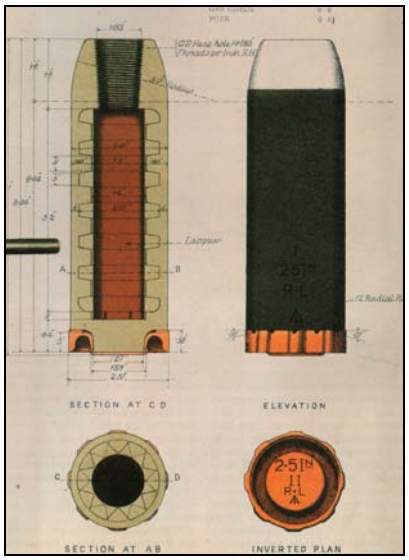

Figure C-6. 62: Gas check plate from a (non-automatic) 2.5" RML shell (In Hawkins 1888: 39).

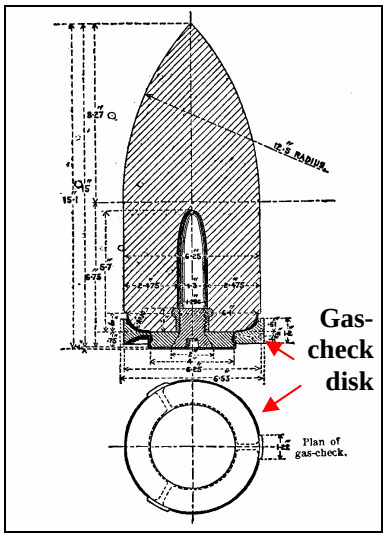

Figure C-6. 63: Automatic gas check plate from 80 pr studless Palliser shell (After Hawkins, 1888:252).

Figure C-6. 64: Ferrier collection of gas check plates (Peter Ferrier Collection).

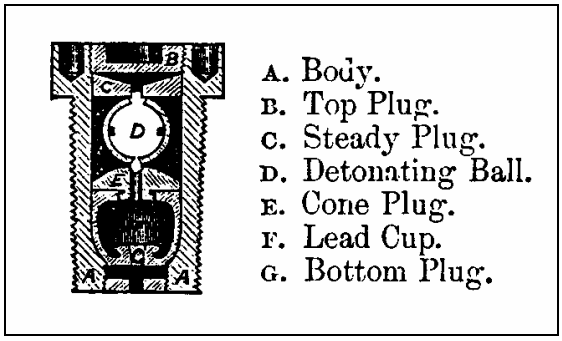

Figure C-6. 65: Basic pattern of a Petman Percussion artillery shell fuse c. 1880s (In Hawkins 1888:129).

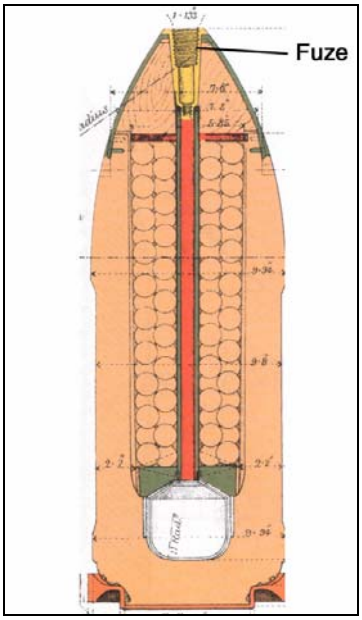

Figure C-6. 66: 10" RML Shrapnel shell Mark I shell showing percussion fuse (After Hawkins 1888: 23).

Figure C-6. 67: Shrapnel round percussion fuse (Peter Ferrier Collection) .

Figure C-6. 68: Shrapnel round percussion fuse (Peter Ferrier Collection).

Figure C-6. 69: Artillery shell fuse from WWII Torquay Firing Range (Lyall Mills Collection).

Figure C-6. 70: Unused Artillery shell fuse (QMM Collection).

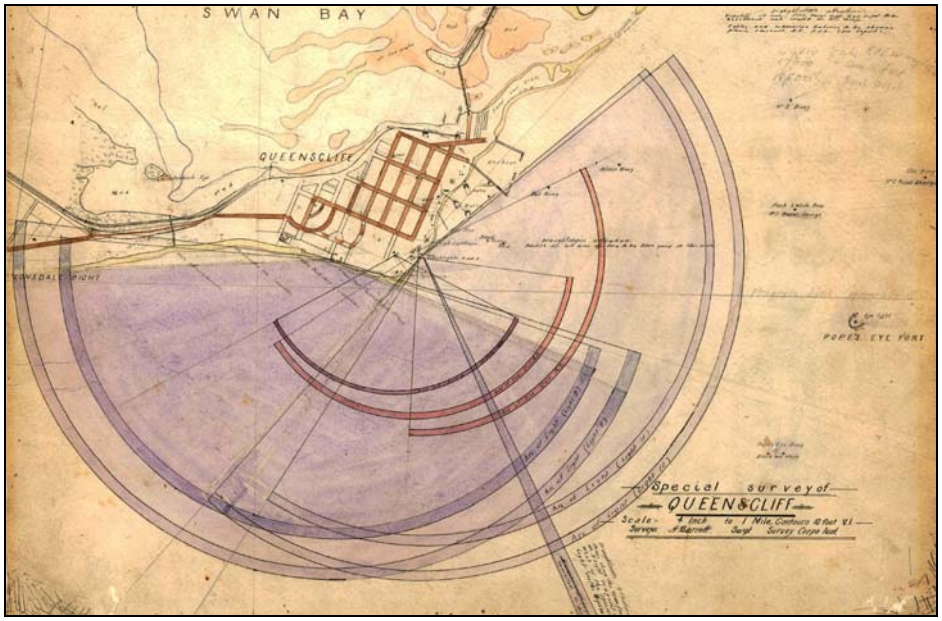

Figure C-6. 71: Plan showing searchlight and gunfire trajectories (red) and searchlight ranges (blue) ranges of defence facilities at Queenscliff (Barret n.d. [plan], FQ Collection).

Artillery practice firing at Duck and Swan Islands was evident in numerous large craters around the island up to 1.5 m deep and 2 m diameter. Dod (1931:84) recorded that barrels were used as targets in the West Channel, and could be the source of anchors and piles of chain discovered there [CP; DL; PF], and targets were also towed behind military vessels in the 1930-40s [GW]. More subtle evidence of artillery might be found in the neighbouring house construction, where gaps were built into windows to stop them shattering during gunfire practice [GW].

Many ammunition dumps were identified in The Bay, and included large artillery shell (45 cm long x 20 cm diam.) sites at Pt Nepean and the South Channel (Figure C-6.72), smaller shells (10 cm long x 2 cm diam.) at Drapers Reef, cases of WWII bullets and paper cartridges off Swan Island Bight and the West Channel, and mortar shells (approx 45 cm long) in the same area [CP; DL; HG; LM; MS; PF; SA; TA]. Mortar scatters have also been observed offshore from similar military sites at Melbourne [PT].

Other spent ammunition was found in association with former rifle ranges at in Swan Bay and Swan Island [CA; GW; LID], and similar observations have been made at Geelong and Williamstown [JA; PT]. Remains of the former rifle range targets known as butts (timber posts) have been located in the shallow waters of Swan Bay [CA], and extant earthworks, communications poles/wires and rifle butts are still extant on Swan Island ([CA; LID] – Figure C-6.73). See Appendix C-4 for further consideration of firing ranges in this area. Furthermore, ammunition shells and heads from WWII strafing runs have also been observed outside the study area where reefs (appropriately named AkAk reef) and wrecks (*Orungal*) were used for firing practice [JA] (Figures C-6.74 and C-6.75).

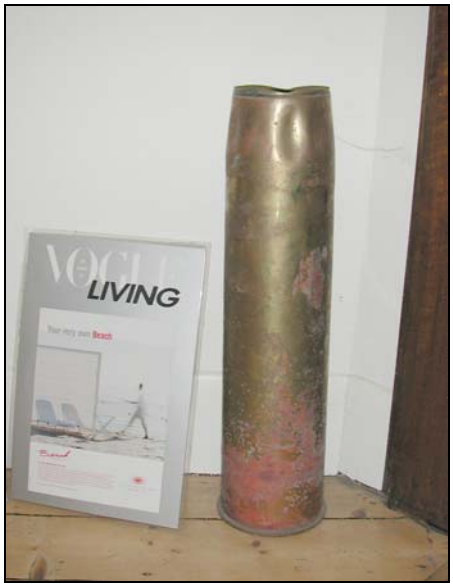

Figure C-6. 72: Artillery shell from South Channel (Carl Paolini Collection).

Figure C-6. 73: Swan Island rifle range butts and earthworks.

Figure C-6. 74: Ammunition casing from strafing runs on Ingoldsby/Charlemont Reef (Jim Anderson Collection).

Figure C-6. 75: Ammunition casing from strafing runs on Ingoldsby/Charlemont Reef (Jim Anderson Collection).

G) Bottle scatters

Other evidence of defence occupation was less obvious and relied on observations gleaned from a number of divers. The presence of the characteristic "Bombardier" Victorian Artillery soda water bottles (Figure C-6.76) were noted offshore at many fortification sites, especially at the South Channel, Swan Island and Pt Nepean Forts [CP; DL; LID; PF; SA]. Arnold (1990:168) observed that these bottles were only manufactured for use at the forts, and it therefore appears that these bottle types may indicate the presence of military sites in this area.

Figure C-6. 76: Victorian Artillery "Bombardier" soda water bottle. Scale = 20cm (Peter Ferrier Collection).

There were often many other non-alcoholic bottles (glass and stoneware) and some bottles known as "blacks" (which were generally alcoholic) were found in these areas, and near the Swan Island Submarine, and the southern end of the West Channel (near a naval anchorage). Their concentrations suggest that these were official rubbish dumping areas [CP; DL; PF; SA]. Most of the soda water glassware originates from Melbourne and Geelong [PF; SA], particularly in the area in front of the Swan Island Fort to the submarine Another dump over the reef ledge at Bell Rock (Shortlands Bluff) appears to be discard from the Fort, and varies slightly from the other sites due to its inclusion of ceramics and brass.

Although the military provided their forces with aerated water, it appears that alcohol was still consumed in many areas. Interviews with many divers [CP; DL; PF; SA] indicated that there are a number of isolated finds of alcoholic bottles on the periphery of military establishments. These finds are within throwing distance of the shore or jetty extremities (Pt Nepean, South Channel, Crows Nest and Swan Island Forts), and may indicate surreptitious drinking by military personnel in fringe areas where the evidence is easily disguised. Similar deposits have been located in isolated areas of the Fort Queenscliff moat:

> …When the gardeners used to clean the moats out from time to time, I would follow behind them on the tractor, and we would sometimes find alcohol bottles and other artefacts from Queen Victoria's time, you know before Federation. [SH]

H) Transport Systems: Roadways and Island Access

Transport systems were an integral component of the military landscape, and existed in several forms in the area. The remains of the original timber Swan Island Bridge are located to the west of the current bridge (Figure C-6.76). Army Engineers and Naval personnel were transported to and from the island base across the bridge originally via a horse and cart to the island (Ferrier 1991:5), and later by an electric trolley across the island. Local residents have reported remains of the tramway are still evident within the current road surface at Swan Island [GW; LID], and extensive sections of the former tramway line is evident along the eastern foreshore where it has been used to control foreshore erosion [CC].

Figure C-6. 77: Old Swan Island Bridge.

The Queenscliff Railway Station, workshops and line were still extant and demonstrate the scale to which military transport systems affect the landscape (Figure C-6.78).

Figure C-6. 78: Queenscliff Railway Station (Photo: HV Collection).

I) Piers

A number of purpose built piers were erected for the immediate use of the military. These piers were generally short as the vessels using them were of shallow draught to enable their rapid and unlimited use of the sea terrain of the bay. The military also made extensive use of former defence vessel hulks as piers, especially around Swan Island. All these piers, including the hulks (Anonymous, 1993b: 13-16), were serviced by narrow gauge tramways. A military pier (which was evidenced by two extant piles and an iron ringbolt and chain) and extant loading dock at the South Channel Fort (Figures C-6.79 and C-6.80) were inspected by the author above

water, both of which were surveyed by a small gauge tramway. An underwater inspection of this area was undertaken by Anderson and Caldow (2000) they did not specify the type of bottles present in this area. Substantial underwater evidence was found of the Pt Nepean supply pier (Figure C-6.81 and C-6.82), which was used extensively by the steamer *Mars* to deliver supplies from Queenscliff. Of note there were was an abundance of broken earthenware ceramics, Queenscliff aerated water bottles, bluestone rubble, bricks (from the *Trusty* stranding) and electrical insulators; tramway remains, no alcoholic bottles were observed. Battery remains from former jetty lights were present, but the ammunition shells previously reported at the end of the pier [PF] had been removed. No sign of any archaeological remains were found of the former dolphin pier that once stood between the two main piers at Queenscliff, which was used to store coal for the *Mars*. Coroneos (2006) observed a concentration of tramway tracks on the foreshore close to the *Countess of Hopetoun* Jetty, which are probably the remains of the former access tramway.

Although the Swan Island Dock was not inspected, from historical documentary records it demonstrated similar characteristics to the South Channel Fort Dock/ Nepean Bay Pier in that it's geographical location was situated to provide relative shelter from both the elements/ incoming fire and protective coverage from each forts guns. Figure C-6.83 shows the location of military piers in the study area.

Figure C-6. 79: South Channel Fort Dock for torpedo boats.

Figure C-6. 80: Remains of the South Channel Fort Pier.

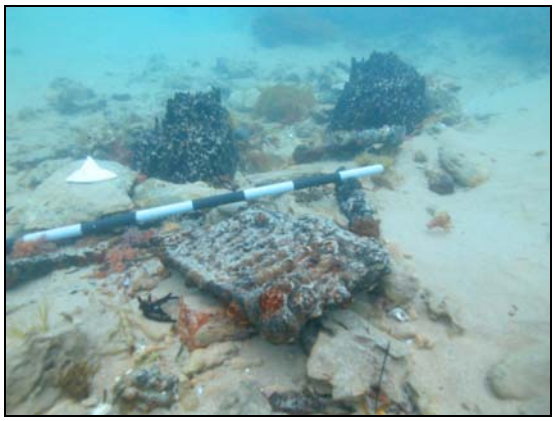

Figure C-6. 81: Pt Nepean pier piles and Battery Plates (Photo: Heritage Victoria).

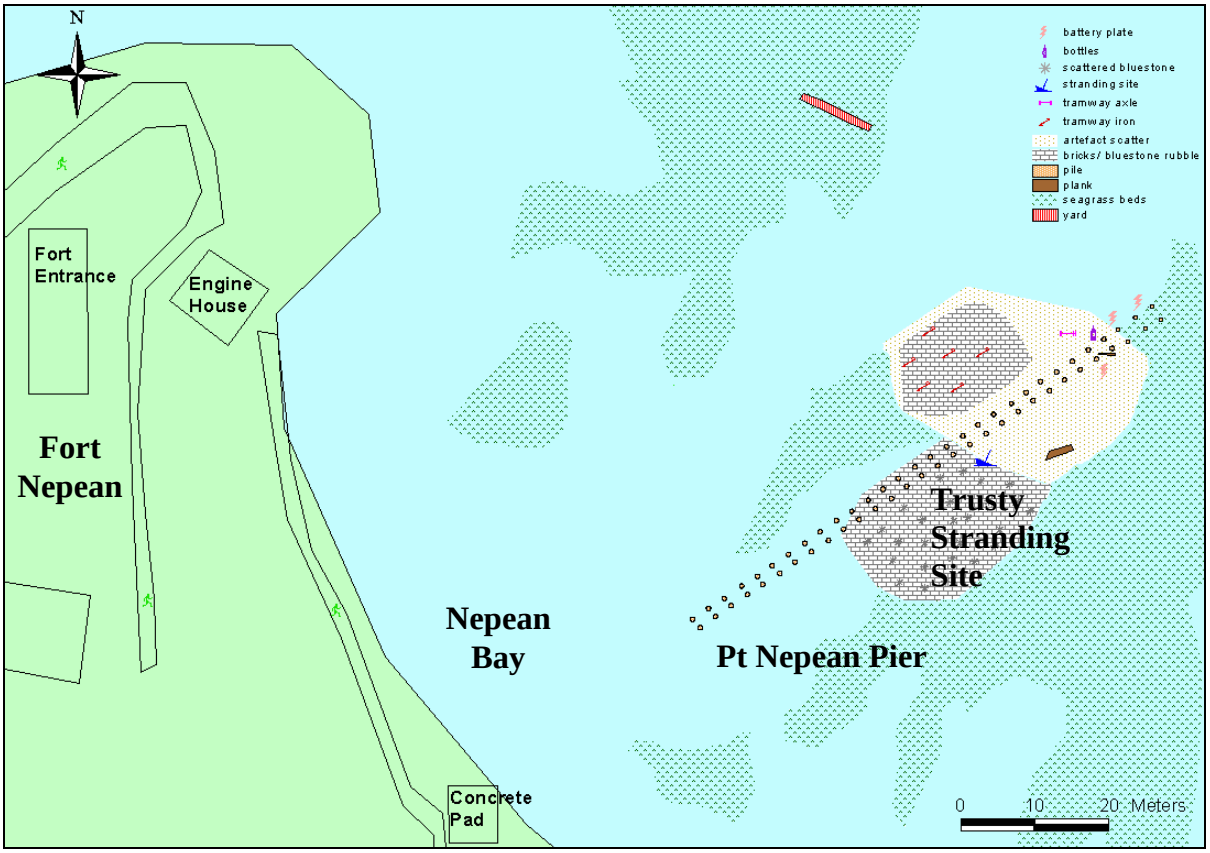

Figure C-6. 82: Survey plan of Pt Nepean ammunition pier, *Trusty* stranding site, and yard arm remains.

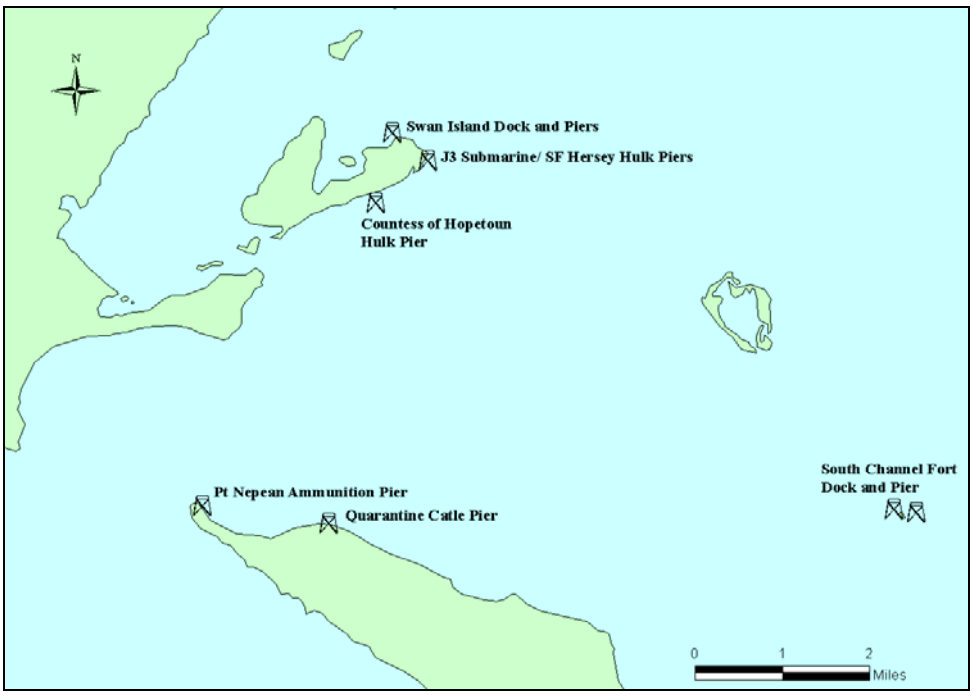

Figure C-6. 83: Plan of military piers and jetties.

J) Naval Anchorages

Two naval anchorage areas were located close to Swan Island. A large anchorage for the *Gannet*, *Commissioner* and *Victoria* was located approximately 1 km offshore from Swan Point (A11, c.1889; Anon. 1889; HCW 1889 [updated 1938] [plans]). Many bottles (predominantly aerated water, torpedo and lemonade bottles from Melbourne and Geelong) were found in this naval anchorage area by local divers. The deposits were concentrated in a 360º circle around a mooring anchor and chain which formerly served as a special mooring buoy [DL; PF]. The absence of any form of ceramic, particularly plates of Naval or other origins, in this area may indicate that although naval personnel were stationed aboard vessels in this area, their meals were served ashore. The torpedo boat mooring area used by the *Childers*, *Lonsdale* and *Nepean* was marked by a post which is still evident underwater, with black alcoholic and beer bottles dating to the 1850s-90s of predominantly English manufacturers [PF]. The concentration of alcoholic bottles in this area would suggest that these vessels were out of sight of the commanders ashore, and that these moorings were more permanent and not used only during war maneuvers when discipline would have been closely monitored.

Given the abundance of many other naval moorings which were repeatedly used as part of the Easter War Games and for the planned Heads defence networks (Figure C-6.84), substantial deposits are also expected in those areas, but were not examined as part of this study.

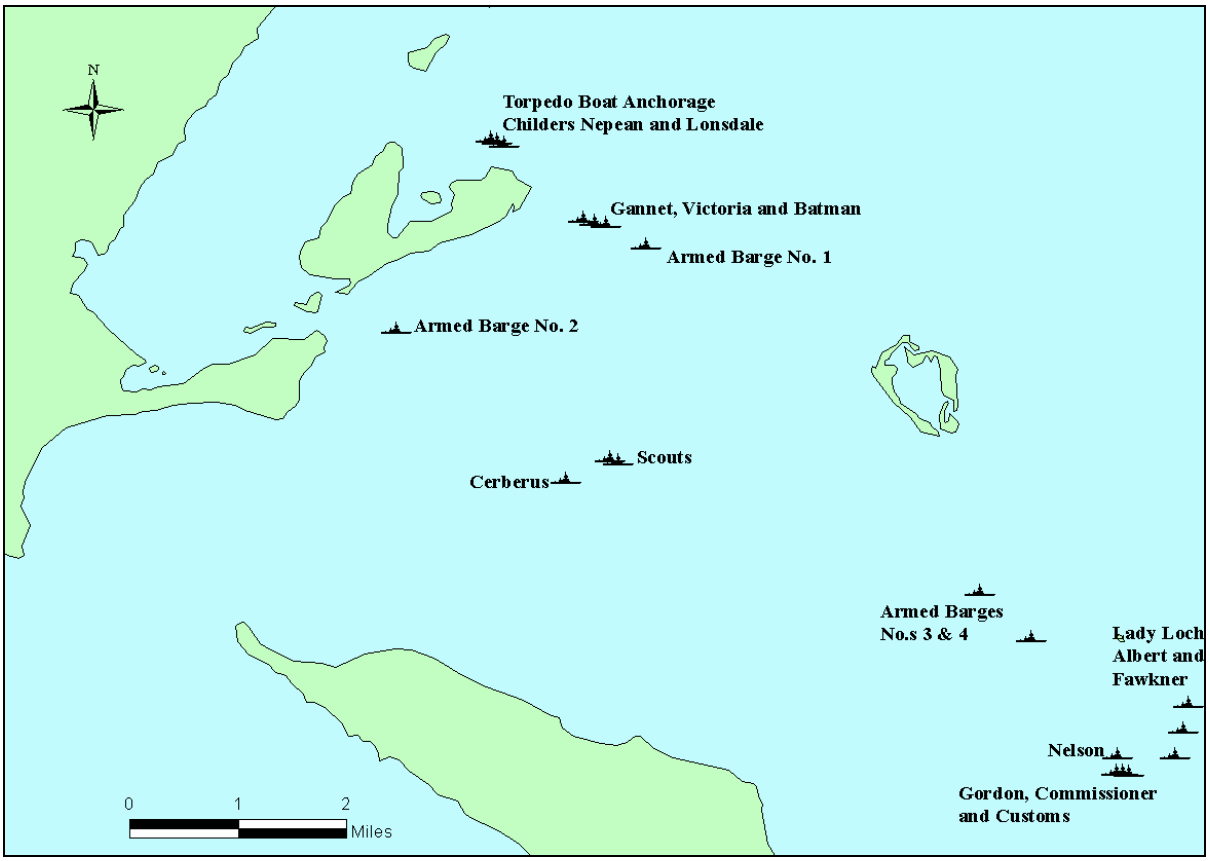

Figure C-6. 84: Plan of known military anchorages. Note: Artefacts have been located at the anchorages near Swan Island.

K) Communications Cables

With the introduction of electrically powered telegraph technology and electrical circuitry, communications cables became a part of the defence landscape. Communications cables were used to link Pt Nepean, Queenscliff, Swan Island and South Channel Forts (Figures C-6.85 and C-6.86). A WWII copper communications cable is still extant between the Swan Island Fort to Popes Eye which crosses through the *Gambier* wreck, and another cable is known between Pt Nepean and Queenscliff which is often caught by boats [PF; TA]. This cable could either be a telegraph cable, but is more likely to be an indicator loop cable (see above). Other armoured communications cables are also evident in the foothills at the WWII defence facilities at Pt Lonsdale.

Other items including a pile of knuckledusters found off Swan Island are possibly attributed to the military (all had a broad arrow stamp), but could also be cargo confiscated by customs as all the grips had been crimped shut [SA; MS; TA].

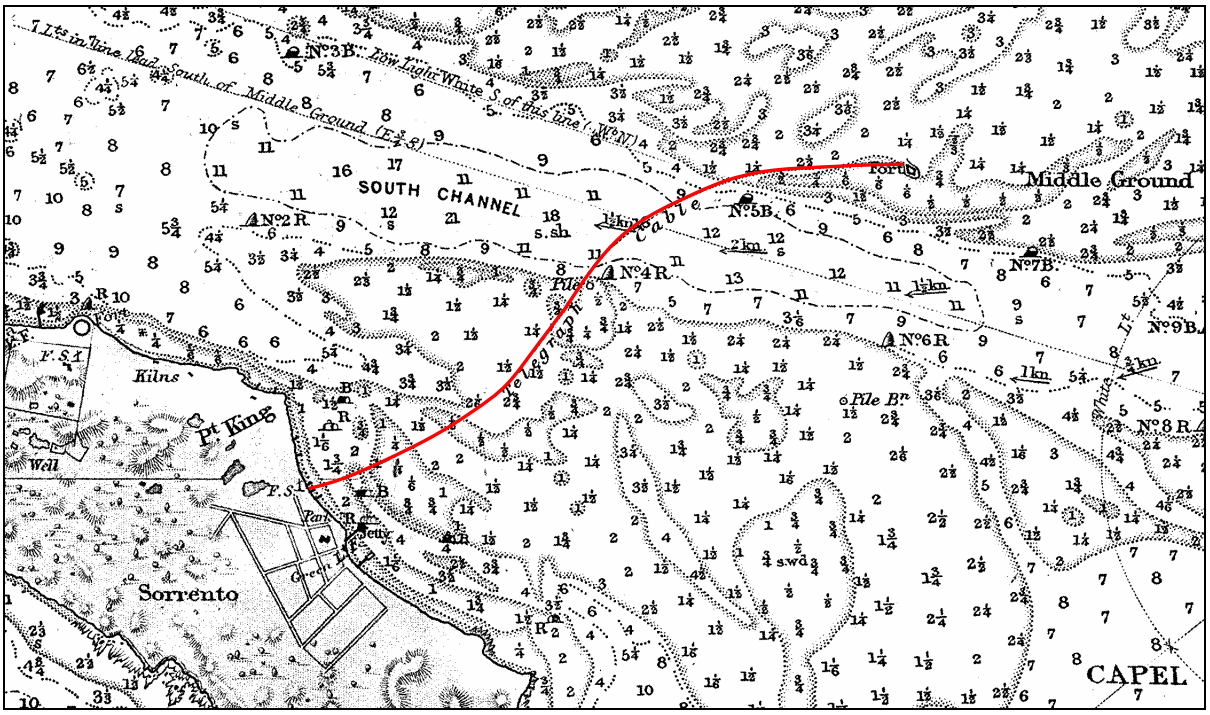

Figure C-6. 85: Telegraph cable from Sorrento to South Channel Fort in 1895 (Chart 1171A:3062, [updated 1897]).

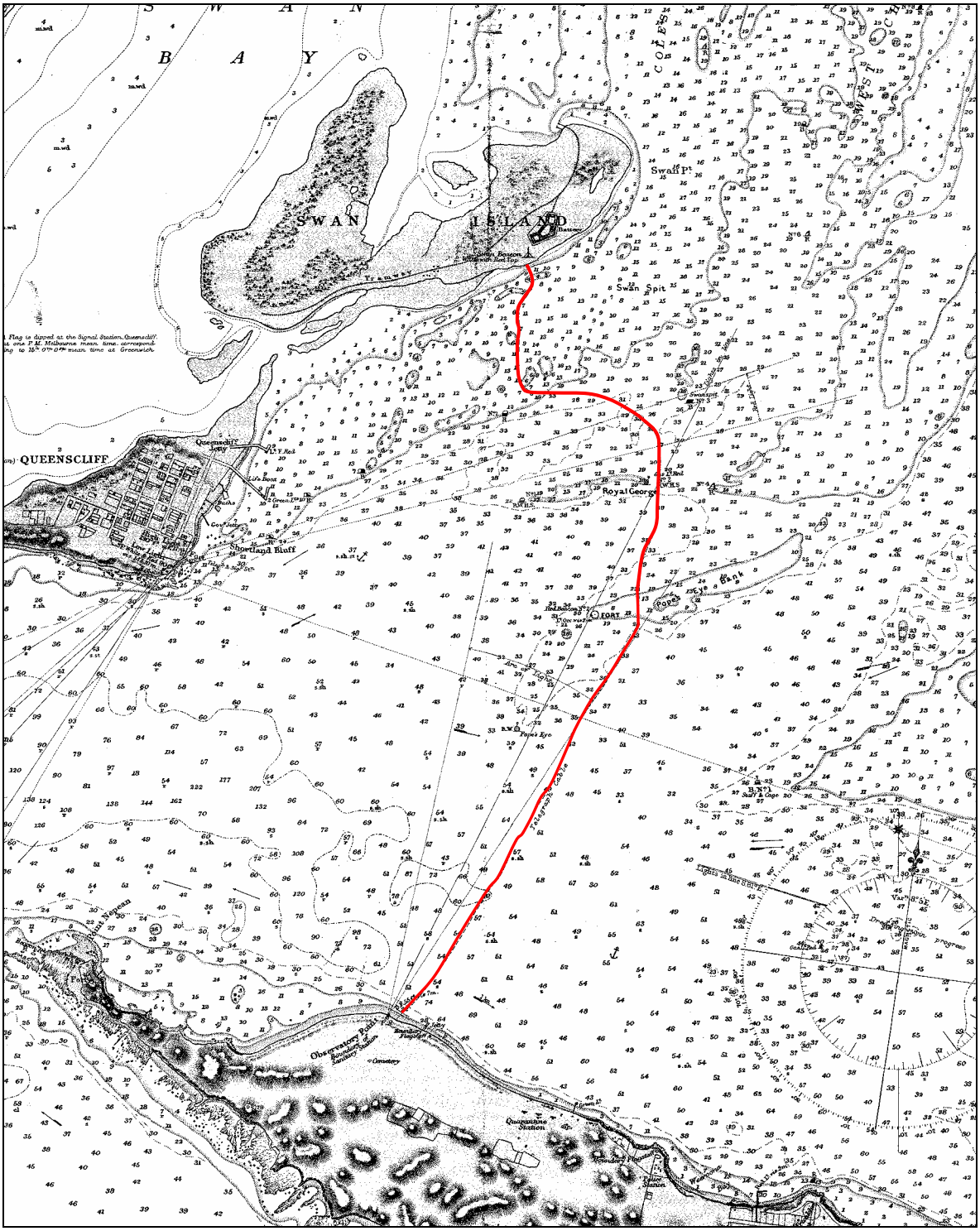

Figure C-6. 86: Cox 1864 [Updated 1903] chart showing location of submarine telegraph communications cable.

L) Memorials

Many defence memorials were scattered around the peninsula. Of particular note were those at Shortlands Bluff (Figure C-6.87) which commemorated seamen lost in many conflicts, along with a major maritime accident in The Bay (*HMAS Goorangi*) where many local defence personnel were lost; and a war memorial at Pt Lonsdale, where an annual service is still held (QH Nov 2003:1). Other less obvious memorials were the avenue of trees on the narrow neck road into Queenscliff (Figure C-6.88), and the RSL hall near the Fort Queenscliff. These sites provided important foci for grief whilst also acting as tangible reinforcements of identity (and hence belonging) within the general community.

Figure C-6. 87: Avenue of Honour, Queenscliff.

Figure C-6. 88: Shortland's Bluff defence memorials.

Appendix C-7: Potential and Actual Archaeological Signatures of Defence Landscapes

Feature	Artefact	Location																												
Defence		Capel Sound/ Rye	Sorrento/ South Sand	Portsea	Triconderoga Bay	Pt Nepean	The Rip	Pt Lonsdale	Lonsdale Bight	Shortlands Bluff/ Queenscliff	Queenscliff Bight	Popes Eye Shoal	Swan Bay	Swan Island	Duck Island	Swan Spit	St Leonards to Portarlington	Coles Channel	West Channel	Lorlia Channel	Symonds Channel	Mud Islands	Pinnace Channel	South Channel	Geelong	Melbourne	Westernport Bay	Western Victorian Coast
Defence Establishment	absence of alcohol bottles near official landing places jetties					a																								
	bombardier cordial bottles	a				a						a		a		a								a						
	knuckle dusters - dumped															a														
	pier - dedicated					ah								eh												ah				
	pier -shared with community										ae h																			
Artillery Practice	ammunition (projectile heads)					a									a															
	ammunition dump (bullets in cases)															a			a											
	ammunition dump (large artillery shells)					a																		a						
	anchorage/ mooring											h	a	ah					h					h						
	artillery shell craters													ah	ah															
	artillery shells/ shrapnel					a								a	a															
	batteries on high ground			a		a		a	a	a																				
	battery - usually located on elevated ground			ah		ah		ah	ah	ae h		ah	h	ae h											h	ae h				
	bombardier bottles					a					a					a								a						
	camoflauge - shoe leather for ground camoflauge								ah																					
	camoflauge - vegetation: pigface, samphire, weeds, pine trees, wattle			h						h				h										h						
	cannonballs								a		a					a										a				
	communications/telegraph cable			a		a		a				a				a								a						
	dead rabbits/wildlife																													
	defensive ditch around fortress										ae h																			
	direction range finding station + internal					eh		eh	eh	eh				eh										eh	h	ae h				
	engine house/generator shed					eh		eh		eh				h										eh						
	erosion control device/ hulk/pier												a	a		a														
	fortress - artificial island											ah												ae h						
	fortress - semi or totally enclosed			ae h		ae h			ah	ae h		a		ae h										ae h		ae h				
	fuses										a					a														
	gas check plate scatter										a	a		a											a				a	

	gabion																						h		
	magazine - above ground: later period				ae h		ae h	ae h																	
	magazine - below ground: earlier period				ae h			eh	eh			eh										eh	ae h	ae h	
	mortar shells													a										ah	
	pier/ dock				a				h		a	a									a				
	plantations - willow for constructing gabions																						p		
	powder hulk										a														
	refence reserve	h		h		h		h	h	h		h	h	h		h			h	h	h	h	h	h			
	searchlight carbon arc rods				h																				
	searchlight directing station - ELD						eh	h																	
	searchlight emplacements - low to medium elevation				a		a	a	a												a				
	searchlights emplacements				a		a	a	a	a		a									a				
	structural alteration to local housing to accommodate gunfire effects - gaps around windows								h																
	tampions									a															
	targets - barrel remains					h										h									
	targets - mooring chains and anchors from moored barrels					h										ah									
	tramway - along shore and on pier				ah							ah									ah				
Batteries	1860s - earthen embankments and timber carriages.								ah														h		
	1880s gun sizes increase - large casemates, underground magazines, large iron pedestals				ae h			ae h	ae h			ae h									ae h		ae h		
	1890s Battery Pedestal mounts - recessed square shafts								ae h												ae h				
	1940s recessed pedestal shafts, rings of gun mount bolts						ae h	ah	ae h												ae h				
Naval Torpedo Depot/ Mining Operations	blockade ship hulks													p							p				
	explosives siding at local railway station								h																
	hulk/shipwreck - used as pier											ah		ah											
	hulk/shipwreck - used as power source													ah										h	
	mine assembly sheds											eh											h		
	mine detonation cables			ah						ah				ah							h				
	mine detonation devices						a																		
	mine laying vessel											h											ah		
	mine storage hulks																						ah		
	minefield - submarine				a					h				ah		h					h				

	mines - discarded - empty												a		a												
	mines - used as breakwater												h														
	mines - used as local rubbish bins/ incinerators								ah							ah											
	naval anchorage									h			ah		ah			h						h		h		
	pier/dock												eh													h		
	powder hulk											ah													h	h		
	stranding sites on edge of minefields																							h				
	test room - for detonating mines												ah											h				
	timber groynes												a		a													
	torpedo boat dock												ae h											ae h				
	torpedo boats/ and subsequent hulks									a			h		a									h				
	torpedo charging facility - air compressor shed												ah															
	torpedo depot												ae h													h		
	tramway on pier												ah		ah											h		
	underwater topographic damage																											
	wreck (possibly transporting mines)																											
	wrecks - miltary										a																	
Other	air-raid shelter								h																	h		
	antiaircraft guns					h			h																	h		
	barbed wire entanglements							ah																				
	barracks			ah		ae h			ae h	ae h				ae h										h		h		
	boxthorn - as substitute for barbed wire							eh		eh														eh				
	bridge												ah															
	coal reply station									h																		
	comunications cables			ah		ah		ah			ah				ah													
	erosion control devices					ae h				ae h				ah		ah												
	foxhole							a																				
	machine gun emplacement							a																ah				
	memorials									e																		
	military base			ae h		ae h		ae h	ae h	ae h				ae h										ae h		h		
	prisoner of war camp							ah																				
	railway line/station									eh															eh			
	recycling or redundant equipement, eg hulks stripped, hulks as breakwaters, mine shells re-used													ah		ah											h	
	rifle range - spent bullets heads and cartridges									h		ah	ah												ah	ah		
	rifle range - target butts and embankments								h	h		ah	ah												ah	ah		
	tank traps																											

Degaussing Range																									ah		
Infrared Beam Detector	concrete structure resembling sentry box					ae h		ae h																		
	cubic concrete structures - split level windows in structure reveal higher and lower facilities			ae h		ae h		ae h					ae h													
	infrared beam			ah		ah		ah				ah		ah												
	reuse of searchlight							ae																		
Indicator Loop	armoured copper alloy wire											ah						ah				ah				
	circular/cubic concrete structure			ah		ah									ah									h		
	concrete bunker (cube)			ah								ah		ah												
Radar Station						ah																				

CODE	archaeological	a
	extant	e
	historical	h
	planned	p

Appendix C-8: Table of Installation and Decommission Dates of Forts in Port Phillip Bay

Fort	Where	Why	Date Begin	Date Serviceable	Date End
Pier Battery	Williamstown, Melbourne	Protect Hobson's Bay	1861		1889
Pt Gellibrand Battery/ Lighthouse Battery	Williamstown, Melbourne	Protect Hobson's Bay	1854/ 1861		1890s
Central Battery	Williamstown, Melbourne	If cruisers enter bay, to stop bombardment of Melbourne.	1861		1890s
Right Battery	Williamstown, Melbourne	Protect Hobson's Bay	1861		1890s
Fort Gellibrand	Williamstown, Melbourne	Repel Land Attack	1865		1890s
Sandridge Battery	Williamstown, Melbourne	Protect Hobsons Bay	1855	1855	
St Kilda Battery	St Kilda, Melbourne	Protect Hobson's Bay		1863	
Emerald Hill Advanced Battery	Albert Park, Melbourne	Protect Hobson's Bay	1861	1863	
Emerald Hill Central Battery	Albert Park, Melbourne	Protect Hobson's Bay		1863	
Sandridge Lagoon Emplacement	Albert Park, Melbourne	Protect Hobson's Bay		1863	
Sandridge Lagoon Battery	Albert Park, Melbourne	Protect Hobson's Bay		1863	
Beach Battery,	Beach St Geelong	Protect Corio Bay and Geelong Waterfront	1863	1863	1870s
Railway Pier Battery	Port Melbourne	Protect Hobson's Bay	1885		unknown
Swan Island Fort	Swan Island	To operate minefield in West Channel	1879	1881/ 1885	1909
Fort Franklin Examination Battery 2	Portsea	Support South Channel Fort, Cover dead ground between Pt Nepean and Portsea	1886	1889/1930	1906? /1943
Fort Nepean	Pt Nepean	To protect The Heads entrance and Nepean Bay/ Quarantine Station	1878	1882/1884	1945
Fort Pearce	Pt Nepean	To protect The Heads entrance and Nepean Bay/ Quarantine Station	1911		1941/1945
Eagles Nest Battery	Pt Nepean	To protect The Heads entrance and Nepean Bay/ Quarantine Station	1885?	1889	1945
Examination Battery	Pt Nepean	To protect Examination Ground inside Heads		1914	1945
Fort Queenscliff	Queenscliff	To protect The Heads Entrance and Lonsdale Bight	1860	1862?/1884	1946
Crows Nest Fort	Lonsdale Bight	To protect The Heads Entrance and Lonsdale Bight		1886, 1908?/ 1914	1918
South Channel Fort	South Channel	Protect and control South Channel minefield	1879	1888	1906
Popes Eye Fort	Popes Eye Shoal	Help close the West Channel	1886-1889		1894
Crows Nest Battery	Lonsdale Bight			1943	1944
Pt Lonsdale Battery	Pt Lonsdale			1942	1944

Appendix C-9: Chronological Comparison of War Scares and Technological Advancement on the Development of Port Phillip Defences

War Scare/Technology Development	Date	Defence upgrade	Date
French Exploration of area	1803	1st Colony established – Sullivan's Bay	1803/04
Melbourne Settled	1835	1st troops sent to colony	1836
Victoria Secedes from NSW	1851		
Crimean War	1853-56		
Aust. Imperial Troops responsible for defence	1853	*HMS Electra*	1853
French exploration and bases/ Russian warships in Pacific	1854		
War scare - *SS Great Britain* fires salvo at Heads	1854	Panic in Melbourne - call for defences at Heads	
Gold discoveries	1850s	Fear foreign warship could hold port to ransom	
		Pt Gellibrand/ Sandridge Batteries (Melbourne)	1854
		Geelong Volunteer Rifles and Artillery Corps formed	1855
		Sandridge Battery (Melbourne)	1855
		HMCS Victoria- new warship	1856
		Volunteer Corps expanded	1858
Introduction of Armstrong Gun (New Technology)	1859	Forts recommended at Heads	1859
		Shortlands Bluff Battery Built - Recommendations for four batteries at Heads	1860-1863
***Warrior* launched in England (New Technology)**	1860		
Threat of war with America	1861	Queenscliff Company of Volunteer Artillery - compulsory attendance	1861
		Forts at Hobsons Bay preferred to those at Heads - Select Committee Report	1861
		Four Williamstown Batteries constructed	1861
		Victorian Batteries constructed - Williamstown, Sandridge and Queenscliff	1861-1862
Russian Warship visits colony	1862	Guns installed at Queenscliff	1863/64
Merrimac vs. Monitor in Civil War - Ironclads (New Technology)	1862	Victorian Govt is advised the Admiralty will possibly approve Ironclad for colony	1862/63
		Increased defences at Hobsons Bay and Heads - completed and planned	1863
		Volunteer Corps replaced with Enrolled (paid volunteer) Corps	1863
Armed barges (New technology)	1864	Recommended for Hobsons Bay/ Heads Channels after smaller Armstrong guns proposed	1864

Confederate Raider *Shenandoah* enters Port Phillip	1865	*Cerberus* commissioned	1865
		Permanent Geelong Rifle Club formed	1865
		Demands for Victoria to be replaced	1865
		Hobsons Bay - Fort Gellibrand recommended to repel land attack	1865
		HMS Nelson granted to/arrives in Victoria	1866/68
Palliser Guns (New technology)		Palliser (rebored) guns approved for Colony	1867
Submarine mines (New Technology)		Submarine Minefields Hobsons Bay	1867
Imperial Troops withdrawn from Victoria	1870	*HMVS Cerberus* arrives Port Philip (New Technology)	1871
France and Russia at War	1870	Mud Islands declared Defence Reserve	1872
		Geelong Corps of Royal Vic Artillery formed - man Fort Queenscliff	1873
		Scratchley Report on Defences	1877
		Scratchley/Jervois Survey Defence at Heads	1877
Island Forts/Torpedo Fields/Searchlights (New Technology)	1877	Two island forts planned for Bay + torpedo field + searchlights (New Technology)	1877
		Permanent Artillery planned for coastal batteries	1877
Whitehead Torpedo Introduced/Torpedo boats invented (New Technology)	1877		
Imminent Russian Scare	1878	*HMS Nelson* fitted with 28 guns	1878
		Pt Lonsdale still Defence Reserve	1878
		Fort Queenscliff - 68 pr guns replaced with four 80 pr rifled guns	1878
		Pt Nepean Battery - temp	1878
Britain and Russia close to war in Constantinople - Russian War scare	1879	Queenscliff - Geelong Railway line opens	1879
Armstrong Guns now give greater firing range (New Technology)	1879	Scratchley Report - planned Armstrong guns installed at new fort at Swan Island to replace Popes Eye Fort + torpedo training depot + work to begin on South Channel Fort	1879
		Torpedoes (Mines) introduced to defences	1879
		Work begins South Channel Fort, Fort Queenscliff (remodeled) and Swan Island Fort	1879-1882
		Fort Gellibrand upgraded	1879s+
		Submarine mines used at Heads (New Technology)	1879
Disappearing Guns Introduced	1883	South Channel Fort - Low profile fort with disappearing guns ongoing work (new technology)	1882
		First permanent garrison at Heads	1882
		Minefields - West and South Channel	1880s
		Fort Queenscliff - defence wall, keep and ditch	1882 - 1885
		HMVS Miner obtained for Torpedo Corps at Swan Island/Pier built	1882
		Dept of Defence established	1883
		Swan Island Torpedo Depot established	1884

		Work ongoing at Swan Island, South Channel and Pt Nepean	1884
		Three torpedo boats (*HMVS Lonsdale, Nepean & Childers)* + torpedo launch *(Gordon)* + two gunboats *(Victoria, Albert)* + Nordenfeldt machine guns purchased for colony (new technology)	1884
Britain and Russia close to war in Afghanistan - Russian war scare	1885	Forts upgraded at Heads - guns now placed in position	1885
		Fort Franklin - compulsory acquisition of land, work ongoing (earthworks and guns installed)	1885
		Eagles Nest - 9 or 10" gun installed	1885
		Pt Nepean Batteries - work ongoing	1885
		Fort Queenscliff now an enclosed battery - moat and gunfire banks/ own water supply	1885
		Swan Island Fort enclosed battery - nine entanglements to deter land assault	1885
		West/ South Channel Torpedo fields being installed + block-ships prepared to be sunk in South Channel if necessary	1885
		Victorian Artillery - 50 extra men	1885
		South Channel Fort - work still underway	1885/86
		Crows Nest Fort/ Pillbox	1886
		Popes Eye Shoal surveyed for fort	1886
		Plan for succession of forts from fort to the narrows	1886
		Defence System Finished - includes minefield	1886
		Searchlights - two constructed at Queenscliff	1886
		Pt Nepean Batteries completed	1886/7
		Swan Island Jetty completed	1887
War Scare - Telegraph Cable Melbourne to London Accidentally Cut	1888	South Channel Fort fully operational - electric minefield, searchlights, low profile sand parapets, disappearing guns, Nordenfeldt machine guns (New Technology)	1888
		Fort Queenscliff - two batteries - Armstrong guns and other modern guns slowly replace old guns, wall raised to 12ft	1888
		Swan Island Fort - eight guns and torpedo field across the West Channel	1888
		Fort Franklin/ Pt Nepean Forts unprepared for war - in dismantled state	1888
		Fort Franklin/ Eagles Nest complete	1888-1889
		Popes Eye Fort Annulus constructed	1889
		South Grant Battery (Corps) moved to Queenscliff and renamed Port Philip Battery	1889
		South Channel Fort - 4.7 " quick fire gun installed - world first (New Technology)	1889
		Melbourne best defended city in the Empire	1890

		Hobsons Bay - Lighthouse Pier and Right Batteries removed	late 1880s early 1890s
		Swan Island Fort - tenders for gun emplacements	1890
		Fort gunfire practice - monthly	1890-1908
		Coles Channel to West Channel Minefield and Practice area	1890-1907
		HMVS Nelson withdrawn	1891
		New torpedo boat *HMVS Countess of Hopetoun*	1891
		6 pr gun planned for Crows Nest Battery	1892
		Searchlights (fixed and wandering) installed Swan Island, Queenscliff (two), South Channel, Pt Nepean Forts	1892/3
		Victoria Rangers proposed station at Heads to operate machine guns	1892
		Port Phillip Battery (Corps) disbanded - permanent soldiers only	1892
4.7' Guns (New Technology)		Fort Franklin - quick firing 4.7" gun installed	1893
Long range guns on Swan Island make fort obsolete		Popes Eye Fort abandoned	by 1894
		HMVS Victoria, Albert retired	1896
Federation of Australia	1900	State defence forces unified with Commonwealth Military Force under Federal Government	1901
		Focus defence moves to Heads from Pt King to Pt Lonsdale and Queenscliff - South Channel Fort redundant	1906
Anglo-Japanese Alliance - potential hostilities with America	1902 - 1922		
		Plans for Depression Range Finding Station at Crows Nest Battery	1905
		Australia standardises Coastal Defence Guns - Vic uses 6" Mark VII and 4.7" Quick Fire Guns	1906
War Scare - Tensions Japan and America	1907		
		Fort Queenscliff installs Mark VII Guns	1908
Great White American Fleet visits Port Phillip	1908	Calls to establish own Australian Navy	1908
		Fort Queenscliff - obsolete guns replaced	1908
		Crows Nest - Engine room and gun emplacements installed	1908
		Crows Nest - electric searchlights installed	1908-1910
		Pt Nepean and Queenscliff Forts - gun replaced (New Technology)	1908

		Swan Island/South Channel Fort demanned - Navy take over	1909
Defence focus now on Navy (New Technology)		Australian Navy formed - shift away from coastal batteries to armed seaborne fleets. Submarines recommended to replace mines	1911
		Fort Pearce (Pt Nepean) Battery established	1911
		Swan Island Torpedo depot placed under navy control	1912
		HMVS Lonsdale and Nepean used as destroyer targets	1912
		HMVS Childers used as breakwater Swan Island	1912
		South Channel Fort abandoned	1914
First Shot WWI	1914	Examination Battery and Port War Signal Station (Cheviot Hill) established	1914
		Infantry forces guard narrow neck, light-horse regiments guard surrounding countryside	1914
		Electric search lights, engine room and Electric Light Direction Station established at Pt Lonsdale	1914
		HMVS Cerberus used to protect Victoria	1914-1918
		South Channel Fort reduced to skeleton force	1914-1918
		Crows Nest Fort - used in WWI	1914-1918
		Barbed wire entanglements in front of Queenscliff guns	1914-1918
		Fort Pearce Barracks established	1917
		HMVS Albert sold as hulk ashore at Swan Island	1918
		HMVS Childers hulked as breakwater at Swan Island	1918
		7 ft high barbed wire fence installed around Pt Lonsdale defences	1919
		J Class Submarines given to Australia	1919
		Submarine mines given to Australia Navy by Admiralty	1919
		Searchlights - Fighting Lights - Pt Nepean (two pairs), Pt Lonsdale (one) and Queenscliff (two pairs)	1920s
		South Channel Fort - five men stationed here week at a time	1920s+
		Cerberus used as submarine depot ship	1921
		Navy takes control of Swan Island Mine Depot	1922-1960s
		J 3 Submarine scuttled as breakwater at Swan Island	1923
		J Class Submarines fleet decommissioned	1923-24
		HMVS Countess of Hopetoun used as pier at Swan Island	1924+
		Cerberus scrapped as a breakwater at Sandringham	1926

		J Class Submarines (J 1, 2, 4, 5) scuttled in Ships Graveyard	1926-27
		Fort Queenscliff - two searchlights, Pt Nepean and Pt Lonsdale	1929-45
		J7 Submarine scuttled as breakwater at Sandringham	1930
First Shot WWII	1939	Port War Signal Station estab. at Pt Lonsdale/Examination Service Estab. to inspect incoming vessels (Pilots Service and Master Mariners Drafted) and supported by Fort Nepean Examination Support Battery	1939
		Cottage by Sea used for military, Narrow Neck/Pt Lonsdale Tank Traps, Pt Lonsdale Internment camp	1939-1945
		Crows Nest Fort Gun and other Fort guns removed for scrap metal - replaced by wooden mockups	1939-1945
Pearl Harbour - Long Distance Plane Attack /U-boat Patrols (NewTechnology)	1941	Review - air and naval defences inadequate - sinking ships proposed to block channels in emergency	1941
		Fort Pearce guns vulnerable to aerial attack - moved to Cheviot Hill - dual gun emplacements built	1941
		German Minelayer *Passat* Mines Bass Strait	1941
		New Battery observation post and new Nordenfeldt gun at Fort Pearce	1941
		Two Fort Queenscliff guns removed to Pt Lonsdale	1942
		All Fort Pearce guns relocated to Cheviot Hill	1942
Japanese Midget Sub Attack in Sydney Harbour		Magic Eye/ Station M/Chinamans Hat	1942
		Sentry killed at Crows Nest	1942
Enemy planes and submarines sighted in area	1942	Anti-aircraft guns at Football ground, Shortland's Bluff to Crows Nest Fort restricted area	1942-1945
		Crows Nest - 4" gun battery built opposite *Maytone* Guesthouse	1943
		Port War Signal Station moved to Eagles Nest, Pt Nepean	1943
		Burnt Point Causeway surveyed for barbed wire entanglements	1944
		Crib Battery withdrawn/Pt Lonsdale Battery placed into maintenance. Guns removed from latter 1946	1944

Appendix D: Selected Tourism Landscape Data

> When these things come to pass, then a great day for Queenscliff will have arrived. Villas and summer retreats, snug little boxes for the thriving trader and loftier mansions for his rich neighbour over the way, will dot this picturesque peninsula from end to end (GA 24/11/1855:2)

> Queenscliff varies little to the other seaside towns – same hotels and a noisy army of touts (QS 7/4/1894)

Appendix D-1: Tourism Landscapes

1) Introduction

Although tourists represent a foreign influence on a local economy, their large numbers and seasonal appearance undoubtedly impose considerable influences on the structuring of any holiday destination region. Many towns cater for tourists' needs, which hence may lead to the installation and improvement of essential and recreational services, increased employment and opportunities for profitable ventures. Tourism can also result in inundation of territorial space, lack of privacy, (locally) unwanted redevelopment and conflict with residential communities. Tourists' interaction with any town's residents invariably establishes particular types of relationships between them, and may also introduce aspects of their own practices and perceptions both to the residential neighbourhood and the visitors. Therefore tourists and tourism play an active role in the shaping and re-shaping of local communities and their landscapes.

This chapter will examine the role that tourism has played in the development of Queenscliff, and its subsequent effects on the local population. Since its earliest days the borough was invaded annually by hoards of tourists, and many facilities and services were established to cater for their needs. The economic income that their visits generated has shaped (and continues to shape) the very structure of that society (both physically and cognitively), and still pervades the very character of the township in many different aspects.

To understand the nature of recreation in the area, it is necessary to examine the various ways that tourism has moulded the region. This chapter presents a summary history of tourism in Queenscliff with particular regards as to what factors influenced its evolution and the town's popularity. It will outline the types of facilities constructed to service the trade, and other key tourist local landscape features which were central to the tourism experience. The examination of the archaeological signatures of tourism activities is investigated in further depth, and several

characterisations of these landscapes are outlined. Early tourism landscapes will be shown to have been driven by underlying ideologies surrounding health, and values of escapism. The role of Queenscliff as a frontier tourism landscape will be investigated in greater detail, with particular regard to the notion of the area as a health resort and escape from normality.

It will be shown that early tourists imported with them hierarchical structures that were influential in shaping the social scene of Queenscliff, which further reinforced existing social status. The changing nature of the tourism scene will be explored in further detail, to examine what determinants drove its development. The inextricable links between tourism and folklore will be further investigated to highlight the importance of the latter in tourism/tourist landscapes. It will be further demonstrated that the seasonality of tourism played a pivotal role in the organisational structure of the township, but also led to exclusionary zones within the landscape based on status that were often inaccessible to some local townsfolk. Finally the different perspectives of tourism will be further explored, with particular regard to different gender experiences of tourist landscape.

2) An Historical Overview of Tourism in Queenscliffe

A) A Healthy Climate: Miasma and Pure Sea Air

In nineteenth and early twentieth century Australia, living conditions within the major metropolis' were affected by smoke pollution, sewerage and industry discharges, which inevitably led to chronic health problems. At the time of the founding of Melbourne and the Colony of Port Phillip (in 1835), the issue of health was paramount in many people's minds. The open sewers of early Melbourne produced an unhealthy environment where sickness was often attributed to the bad air, the miasma that transferred sickness. Medical practioners often espoused the therapeutic benefits of taking in the fresh air of the seaside regions, as the pure cool air and a salubrious climate was thought to assault germs and poisonous miasma in the air that caused sickness (QS 19/7/1884; Wells 1982:43; Inglis 1999:22).

The belief that sickness was caused by miasma was responsible for the popularity of the seaside English holiday, a practice which was also widely adopted in nineteenth century Australia (Inglis 1999:23). Seaside excursions became popular activities, and as early as 1842 pleasure trips were being undertaken to and around The Bay (Day 1992:286). By 1844, Superintendent Charles La Trobe had established a weekend cottage at Queenscliff, which he used for family outings (Inglis

1999:3), which drew attention to the small seaside area even before it was opened up as a township in 1853. When blocks were first sold in the Queenscliff area in 1853, many were purchased either by wealthy Victorians for holiday homes, or by speculators who recognised the potential of the area as a seaside resort (Fanning 1893; "Bluelight" 1912; Dod 1931:8-9). The attraction of Queenscliff as a major tourist destination was realised very early on, and in 1855 it was predicted that the township and peninsula would become a thriving tourist Mecca (GA 24/11/1855:2).

The township quickly grew into a seaside resort patronised by wealthy tourists from Melbourne, Ballarat, Bendigo and the Western Districts (QS 22/7/1893; Inglis 1999:72; [JG]), and many tourist excursion vessels plied the waters from Melbourne for holidays to the municipality. The virtues of Queenscliff as a resort were often extolled by regional newspapers (e.g. GA 19/8/1870:3), and the town was frequently compared to other famous health resorts in the Mediterranean (QS 23/9/1893). The major excursion vessels of the late nineteenth century reflected these philosophies, and were named to indicate their association with healthy living (e.g. the vessels *Ozone*; *Hygeia* (Goddess of Health); *Weeroona* (Indigenous term for sea breeze): Fitchett 1973:18).

Tourist accounts of the time also stressed their indulgence of "the pure sea air" (QS 22/2/1908) and the healthy lifestyles: "Living after the manner of vegetarian and consequently free from diphtheria, we look joyously forward to a good time in the coming summer" (QS 22/7/1893). Local residents still maintain that the sea air is responsible for the health of the local population:

> During the 1930s there was a polio epidemic. A doctor said that no-one in Queenscliff would get polio, as they were surrounded by sea air on two sides…and nobody did, except [name not recorded] who had gone to live in Melbourne for 3 months, where she caught it. This was the reason why the Cottage by the Sea [a children's convalescent home - discussed further below] was built here, so kids could convalesce in the healthy sea air. [GW]

When the Fishermen's Pier was altered to facilitate ferry access in 1860/61 (VPRS 2143), Queenscliff boasted five hotels and many other attractions (Inglis 1999:12). As time went on, many other tourist diversions were touted, which included a botanic garden, lovers walk, many parks, bowling greens and a golf course, all of which enabled visitors to partake of the healthy outdoor atmosphere. The town maintained a relatively exclusive and elite population of wealthy tourists right through the 1860s, and Queenscliff hotels were often promoted for their provision of accommodation and service for Governors, Judges and gentry (Beavis and Raison 1984:30, 35).

Rival resorts eventually sprang up on the opposite side of The Bay at Sorrento (1870), Portarlington (1886; QS 3/4/1886), and Frankston (1896), and also at Lorne (1873) on the West Coast, being described by one author in 1872 as "miniature Ramsgates and Brightons". Many of the customs and traditions of the English seaside were transplanted in these towns and were familiar facilities that reminded new colonists of their homelands, including bands, rotundas and promenades. By the late 1870s, Queenscliff offered many luxurious hotels, a pier, pavilion and subscription library (Inglis 1999:29, 31, 38). These resorts also focussed on healthy climates to market their services. For instance, the township of Sorrento was named after a Mediterranean Italian seaside town, whose region was also promoted as a health resort (Rogers 1960:66). The renaming of Ticonderoga Bay (which was named after a quarantined ship that previously anchored at this location with large loss of life) to Weeroona Bay (after the popular paddle steamer) around 1874 when it began to be extensively used by holiday makers (Welch 1969:33), and reflected the preoccupation with healthy environments and new attitudes to recreation where escapism from reality was paramount.

B) Getting There: Bay Steamers, Trains and Excursion Fares

In order to understand the popularity of Queenscliff as a tourist destination, it is also necessary to examine the tourist attractions available. In the nineteenth century, a cruise on a ferry was considered as much a part of the essential health experience to take in the sea air as the holiday at the resort, at least for the wealthy to begin with. Many vessels have serviced the township from Melbourne since its establishment in 1850s. The steamers *Aphrasia* and *Vesta* operated passengers and mail services around 1850 (MMH 19/8/1850:2; Fanning 1893), along with numerous others during that decade (*Wynvern* and *Williams*, GA 7/9/1855:2; *Apollo* and *Empire*) some of which often brought the former governor of Victoria, Sir Charles La Trobe on his regular sojourns.

The earliest dedicated Bay Steamer into Queenscliff (c.1862) was a small steam tug (*Mystery*) that transported about 200 passengers at full capacity into the town ("Bluelight" 1912; Fitchett 1973:24) with a solitary steamer (*Williams*) servicing Sorrento at exorbitant prices for the trip. When suggestions to reduce fares to improve trade to the area were ignored, a local businessman purchased the steamer *Golden Crown* from NZ in 1874, and ran the route himself at the lower rate. This sparked a price war, and the first competition for The Bay trade steamers was initiated

(QS 1/5/1886; Fitchett 1973:4, 8, 30-1, 39), which led to the introduction of other vessels to this route (eg. *Queenscliff*: Wynd 1988:130).

With the opening of the Railway in 1879, alternative access was now available to the town from Geelong, Ballarat and Bendigo, and although it facilitated easier access to wealthy graziers from the Western Districts of Victoria, it was not commercially competitive with the Bay Steamer traffic (QS 18/3/1893).

This situation was further exacerbated by the introduction of cheap Bay Steamer excursion fares, which led to increased numbers of "daytrippers" (tourists who came down for the day or weekend) who inundated the town (QS 21/1/1884, 26/5/1894; Inglis 1999:73-8). Until this time the township was fairly exclusive, and used mainly by wealthy tourists who could afford to stay in the township or owned holiday houses. The steamers were often overcrowded, and eventually in 1882 fines and taxes were imposed for every passenger above the number that the vessel was licensed to carry (QS 23/12/1882).

New opulent steamers offering luxurious comfort and capable of carrying thousands of passengers were introduced to The Bay Run. The introduction of the new bay steamer *Ozone* to the Queenscliff run by 1886 markedly increased the tourist trade (QS 3/4/1886). By 1889, a contract was issued to an overseas firm to design and construct another new vessel (*Hygeia*) that could be accommodated at the shallow bay piers, and was two knots faster than the *Ozone* (QS 22/6/1889).

By the early 1890s, tourism operators called upon the government to introduce excursion rate fares to encourage further tourism by rail (QS 8/3/1893); these cheap and fast fares also made the township accessible to the general community, not just the wealthy. Special excursionist trains began making short trips to the area, and in the peak of the summer season there were often four trains a day [JP]. Accordingly, the range of Steamer fare types available were extended, which included long weekend ferry tickets with return via train (QS 26/5/1894). By the mid-1890s, there was fierce competition for trade, with a number of newer vessels introduced that had increased carrying capacity, were faster and more luxurious (QS 26/5/1894, 23/11/1895). The frantic turnaround of Bay steamers often led to collisions with the pier at Queenscliff (Fitchett 1973:38, 40). This led to a boom time for the township as thousands of tourists flooded the town during the holiday season (Figure D-1.1), which was readily welcomed by the local business

community (Inglis 1999:13, 92). By the late nineteenth and early twentieth centuries, larger vessels (e.g. *Ozone, Hygeia* and *Weeroona*) were licensed to carry between 1100-1600 passengers, which meant that there could be up to 2500 passengers disembarking at the pier on holidays on any given day (Fitchett 1973:16-7).

By 1897, The Bay resorts had become so popular that there was discontent amongst the Melbourne resorts at the loss of their trade to their southern rivals:

> …the steamers plying to and fro are floating palaces and those who can afford it prefer a trip to some distant resort rather than spend a holiday at a resort close at hand…an excursionist floats around the world on the bosom of case and comfort in the time that he used to devote to picking up pebbles at Queenscliff and Sorrento shores at holiday time. (QS 18/9/1897)

A local businessman highlighted the enormous seasonal tourist influx:

> The boats and trains were big feeders for picnics. There were two boats in the 1930's that brought 3500 people on one day, 2000 on one and 1500 on the other. Once, a Greek picnic had 50 buses to drop everyone off. There were always picnics happening, Butchers', Grocers', Fruiterers' Picnics. They often came twice a week. There would often be 600 on the train from Geelong, bringing people from Ballarat, Bendigo and Colac districts for picnics. Every second house in town was let… over summer if you had a spare room, the guest houses would hire it from you [for the tourists]…this went on from 1900 to the 1930s when the boats finished. [CA]

In 1909, a new steamer to rival the existing *Ozone* and *Hygeia* was proposed (QS 18/9/1909) and was introduced the following year. The *Weeroona* (Figure D-1.2) operated from Port Melbourne to Queenscliff, and offered a two hour journey to The Heads (QS 17/12/1910). In 1915, The *Awaroa*, a steamship owned by the Queenscliff and Sorrento Steamship Company was introduced that could ferry 500 passengers and service The Bay trade all year round (QS 27/2/1915). The Bay Steamers were integral components of the Queenscliff economy, continuing until the last steamer, the *Weeroona*, was sold in 1942 (Fitchett, 1973:18, 56). A summary history and table of the regular Bay Steamers is presented in Appendix D-2.

After the *Weeroona* was withdrawn, there was a sorely felt need for transport to link the Bellarine and Mornington Peninsulas, and a fleet of smaller cross Rip ferries were introduced to service the southern end of The Bay. From 1953-1965, five motor driven ferries (*M.V. Judith Ann, Komuta, Weeroona, Hygeia, Nepean*) were built locally at Queenscliff for services to Sorrento and Portsea. These vessels provided a vital connection between the three communities, which had previously been continually linked by ferry services for at least 100 years. The size of these vessels gradually increased in size as demand for the service grew (Fitchett 1973:81-2, 94-5), and were

eventually replaced by two multiple decked car ferries in 1993 that currently operate between Queenscliff and Sorrento.

Figure D-1. 1: "Large group of people on the Queenscliff (*New*) Pier" in 1914 (Photo: L.L. Pitts, Image MM 000106, MV Collection).

Figure D-1. 2: Bay Steamer *Weeroona* approaching the New Pier c.1910 (Image a33146, SLV Collection).

With the advent of the motor car, later visits to the area included daytrips from Geelong:

> We used to go on Sunday drives from Geelong. There was a Sunday school train that used to bring church people to Queenscliff. There was a 100m track opposite Hewitt's old shop where they used to hold a kids race. There were caves above the pilot's enclosure in the sandstone, and we would play in them and in the pill boxes around the fort. There was a rumour that you could get in to the fort by going up the tunnels behind the searchlights. [LM]

However, the availability on personal transport markedly effected the reliance on local food and transport service providers, as picnic lunches could now be brought from home and tourists could travel at their own leisure/schedules.

C) Sea Bathing

The perceived health benefits of ocean environments were an important factor in the development of seaside bath complexes in Victoria. Local tonic manufacturers often claimed in testimonials that their products were "equal to a trip to the seaside" (QS 18/11/1911; Inglis, 1999:60). Many sea baths were established at Melbourne both in the Yarra and Maribyrnong Rivers, and at more popular resorts at St Kilda, Emerald Hill, Port Melbourne, Brighton and Williamstown from the 1840s onwards, with a flurry of bathing resorts appearing from the mid-1850s (Cooper 1931:160-61; Duncan 2003a:282, 317, 359, 383, 384, 385, 408). Sea baths were not just used for the swimming holes they later became, but were essential facilities which were used for cleanliness and washing, especially given the often grimy conditions of the metropolis. However, the proximity of these facilities to the city often still exposed the bathers to the noxious odours and effluent from many drain/sewerage outlets of the city, thus restricting some of the intended benefits of the experience. Additionally, as many of the baths were located closer to the poorer suburbs of the metropolis, they were often inundated with working class citizens, much to the chagrin of the wealthy elite who sought alternative bathing facilities amongst more "exclusive and respectable" patrons (Inglis 1999:72).

Figure D-1. 3: Governors Hole rock pool and bathing sheds, Shortland's Bluff (Samuel Gill, c. 1865, Mitchell Library, State Library of NSW Collection).

The first of a series of baths were established at Queenscliff starting with a natural rock pool below the Lower Lighthouse on the Back Beach (QS 2/11/1907) called *Governors Hole* (McWilliams 1865 [plan]) or *La Trobes Hole* (Cuzens 1912:1), which was reputedly used by the Superintendent (and later Governor) of the same name for bathing. Bathing sheds (see Figure D-1.3) were erected on the adjacent shoreline in the early 1860s (GA 12/6/1912), but after several

accidents due to their proximity to close to a tidal rip and undertow (QS 25/3/1893; Dod 1931:12), the shed was dismantled in the early 1860s (GA 12/6/1912) and new baths were planned in the sheltered waters of Queenscliff Bight Front Beach in 1862 (GA 22/5/1862:2). Although the back beach was used for 40-50 years (Cuzens 1912:1), by 1888 bathing at Queenscliff was only promoted on the eastern side of the bluff (Sutherland 1888b:158).

When the new Queenscliff Bathing Company Baths in Queenscliff Bight were completed in 1866 (Figure D-1.4), they filled the community desire for safe and commodious bathing houses. The new establishment contained 20 boxes, guard chains fixed to iron stanchions (to confine bathers to shallow water away from tidal influences) and a surrounding fence (GA 15/1/1866:2). The facility appears to have been built on the site of the (later) Steamer Pier (SGO 1882 [plan]), which could explain its short working life.

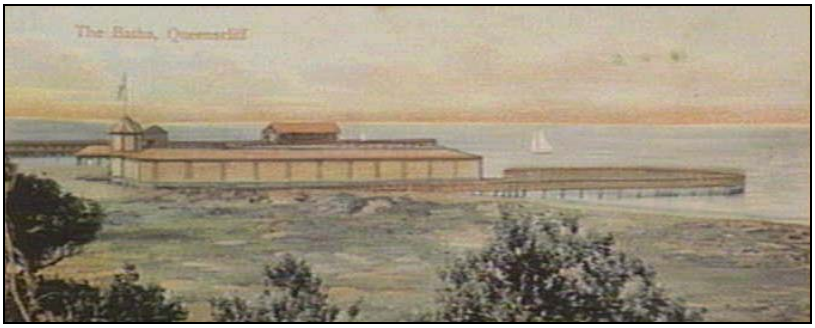

Figure D-1. 4: "The Baths, Queenscliff" c. 1908 (Image a03545, SLV Collection).

A new bathing facility which was available to men and women was constructed in 1871 (Figure D-1.5), with segregated bathing times available for each sex based on a flag system (GA 2/10/1871; 27/9/1871; 1/11/1871; 3/11/1871; [GW]). When the enclosed inshore portion (known locally as a "paddock") of the new Men's baths was built in 1889, they allowed separate facilities to be allocated for exclusive use of each sex, and this complex was extended to include a second paddock two years later (QS 2/11/1907).

The Queenscliff baths drew huge crowds to the borough, and were recognised as an essential component of the town's economy. The baths were owned by the municipality, and rivalled the Melbourne baths as they were situated close to ocean currents and not near river and sewer outlets. The healthy aspects of the baths were promoted in many testimonials in local newspapers, which attested to the mildness of the winter resort as a cure of rheumatism, gout and

sciatica, and its similarities to the Mediterranean climate (Beavis and Raison 1984:15-8), a very loose interpretation indeed as known by anyone who has ever experienced a Queenscliff winter!

> The baths are situated directly over the sea, ensuring the pure ozonic qualities of the water supplied. As a winter resort, the climate of Queenscliff is almost identical to that of Algiers or Orotava...the air is deliciously soft and mild…The postmaster told me that he never experienced such mild temperatures, and that he never knew what it was to be cold in Queenscliff, even in midwinter…it resembles the Isle of Mann in that particular… with temperatures around 17 degrees between midwinter and mid summer…it was the concentration of quietude. There are no baths the equal of the Queenscliff Baths in Victoria... and the hot sea baths have proved a very great acquisition for invalids. (QS 23/9/1893)

Figure D-1. 5Queenscliff c.1882 showing new baths, and remains of the old facility (Photo PH 294, QHM Collection).

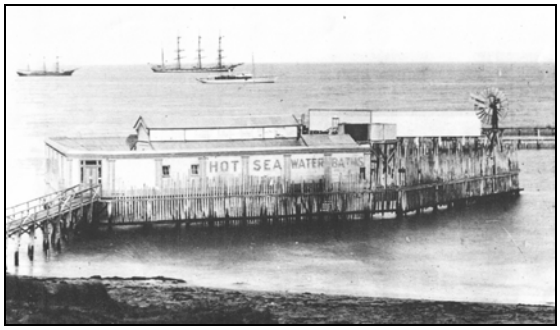

Figure D-1. 6: Queenscliff Hot Seawater Baths (QHM Collection Offprint).

A proposal for hot-water baths was raised in 1884 (QS 10/5/1884), after it was suggested that trade was being lost to a similar facility at Melbourne. The hot water baths (Figure D-1.6) were erected in 1892 consisting of five marble and four white painted baths, with associated waiting rooms for bathers, heating apparatus and a windmill/auxiliary oil engine for pumping seawater (QS 24/9/1892, 22/10/1892, 26/11/1892, 2/11/1907). It was suggested that while men preferred to bath in the sea, women favoured hot water baths (QS 7/4/1894), with the facility being open from 7.30 am on Sundays and Wednesdays in winter (QS 23/9/1893). The curative properties of the baths attracted increased numbers of patrons, often upon referral by doctors, especially for the treatment of rheumatism, kidney disease and lumbago. The popularity of the baths led other operators in Williamstown to open baths facilities there, with similar success (QS 2/11/1907). [JM] recalled the baths in the 1940s:

> My parents were employed by the local council to manage the Hot Sea Baths and the Seawater Baths, which were in the carpark near Harrys [Restaurant]. Water was pumped up from the beach, and a furnace heated up the salt water. There were eight individual bath rooms, a terrazzo with sunken baths that were three steps down and showers. They first baths built on the water, but were destroyed by the sea. The Hot Water Baths were built on the land in 1937. The locals were too poor to use the hot water baths. It was the

> tourists and squatters and the well to do who used them. The footballers used to use them too. The local kids would use the sea baths. There were no bathers before my generation. People didn't expose themselves to the sun. The costumes people use expose them when wet, more than when they are nude. There used to be a rope tied across the pool and people would jump up and down in the waves shrieking. [JM]

In the initial years men and women were segregated, particularly as it was common practice for men to bath nude (QS 23/11/1895). This habit proved hard to curtail, and in 1907 a local newspaper editor lamented that "I suggest the council make it imperative that every bather in our baths should wear a bathing gown of some kind…the only surprise is that the rude practice of bathing without attire should have been allowed to go on for so long" (QS 19/10/1907). Pickets were lowered down between the piles of the structures to provide modesty screens, and these were again raised at the end of the season to prevent storm damage during winter, and a tarred/ sanded raft was moored in the men's outer paddock. In 1907, the seasonal bathing season was advertised as from 1st November until 1st May (QS 2/11/1907, 21/11/1908).

The cost of maintaining the baths was considerable and ultimately contributed to the downfall of the facilities. Extensive repairs were often warranted, particularly after heavy storms (QS 2/11/1907). Siltation was a constant problem for the baths, but the severity varied over time, and in 1907, the depth of the baths was reported to be deeper than the previous season. The silting was reportedly caused by the installation of walings on the new pier, which slowed the current and dumped suspended sediment. The depths in the baths varied from 0-8 ft in the Ladies Baths, and 6-12 ft and 3-6 ft in the gents outer and inner bath paddocks, respectively (QS 2/11/1907). Alterations to the ladies baths were again proposed in 1911 (QS 11/2/1911), after the shallow depth of water in the facility proved unpopular amongst tourists and locals, and were approved in July to extend the baths by 100 ft to seaward (QS 29/7/1911); two alterations had been made during the previous nine years to combat this problem. The heavy reliance of the community on the baths as a tourist attraction was demonstrated when a councillor commented that if the situation was not remedied, hotels and guesthouses would have to be closed as tourists would go elsewhere for their holidays (QS 11/2/1911).

The baths dominated the visual landscape of Queenscliff Bight for many years (Figure D-1.7), as they occupied an area up to 500ft out to sea, with about 500 ft between them. They were removed around the 1950s, when the army blew up the piles for explosives practice [GR; GW].

Changing attitudes to the segregation of the sexes led to the introduction of mixed bathing at the ladies baths in 1917 for a period of two hours each day (QS 15/12/1917). This heralded a major turning point in approaches to bathing, which in conjunction with the relaxing of the strict standards of beach attire (particularly for women), saw an increase in popularity of open sea bathing (QS 14/2/1914; Wells 1982:86-7).

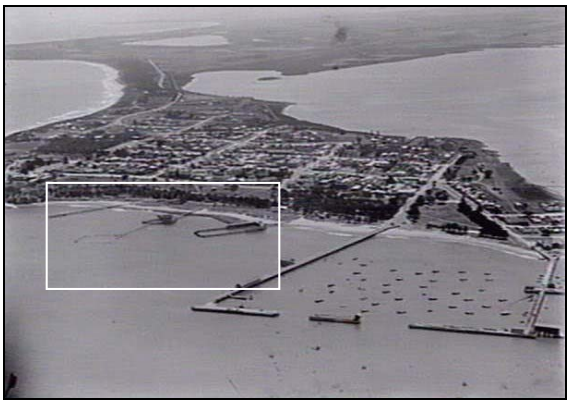

Figure D-1. 7: Queenscliff baths and piers c. 1925 (Photo: C. Pratt, Image b14708, SLV Collection).

By 1894, open sea swimming was popular at Pt Lonsdale, although the currents along the beach accounted for many drownings (QS 20/1/1894), which led to the installation of lifebuoys and lines on the foreshore in various locations (QS 14/2/1914). Although open sea bathing had been practiced around this time (QS 26/11/1892, 19/8/1911) and opinions of mixed bathing had been relaxed by the turn of the century, social inhibitions about changing in public had not. This led to a proliferation of beach bathing boxes along the beaches of Lonsdale Bight between Crows Nest Camp and Crows Nest Fort (associated with the army, MCL, and other private boxes (Read 1918 [plan])), and along the Pt Lonsdale front beach foreshore that were associated with the guesthouses and other private residences (Drosten 1929 [plan] - Figure D-1.8):

> There were many guesthouses here…They had their own bathing boxes in the early days too, as the only way you could come to bath in those days was that if you had a beach hut, as you couldn't get changed on the beach. [DS]

The widening of the Rip Channel with explosives from around 1901 had adverse effects on the beaches in Lonsdale Bight at Pt Lonsdale (Dunn 1949:72-4; [JP]). Historic photos revealed that until the 1920s, beach boxes were located on the foreshore dune (PH4941, PH 5370 – QHS Photo collection), but after that time the shoreline at Pt Lonsdale had begun to erode away, undermining the cliffs and exposing rocks on the shoreline for the first time. The flow of the tide in the area was also supposedly increased, and people now had to run to escape the increased velocity of the

incoming seas (Dunn 1949:73, 74; [JP]). This also affected swimmers, as the currents were now closer to the shore, and hence presented a greater danger. By the mid-1930s, sand groynes had been installed to slow the rate of shoreline erosion ([GH; MW]; PH375 - QHM Photo Collection; see Figure D-1.9). However by the 1950s, a seawall had to be installed to prevent the bathing boxes washing away, which further affected the dynamics of the shoreline [AH; JP]. When the sand groynes were later removed in the period 1977 -1990, the whole beach stripped away again, and three new groynes were recently introduced to stop the erosion [DS; GA; MW; WN].

Figure D-1. 8: Pt Lonsdale Front Beach c. 1920s (PH 5370, QHM Collection). Note the absence of a seawall or groynes.

Figure D-1. 9: Pt Lonsdale Front Beach c. 1950s. Note the seawall built to protect the bathing boxes, and sand groynes (PH 3791, QHM Collection).

From around the late 1920s, the attractiveness of ocean holidays increased, and surf beaches along the West Coast became increasingly popular with resorts appearing at surf beaches of Ocean Grove, Barwon Heads, Torquay, and Apollo Bay. As surf beaches became increasingly accepted as holiday destinations from the 1930s onwards, the popularity of bay-side beach holidays gradually declined (Wells 1982:151-59). This may have also been prompted by the closure of popular beaches at Lonsdale Bight and Pt Lonsdale during WWII [GW].

D) Accommodation: Hotel, Guesthouses and Boarding Houses

As a necessary accompaniment to the tourist facilities discussed above, visitor accommodation has been an integral income source to the community. Numerous grand hotels were originally established to cater for the needs of the elite, and demonstrated an opulence normally reserved for upper class society. However, with the introduction of reduced fares to the township from the late 1870s onwards, accommodation for the middle to lower classes also became a viable concern, and many boarding houses were established at Queenscliff from that period onwards.

The boom period of the 1880s saw the construction of many Victorian and Edwardian hotels of palatial stature, including the Royal, Grand (Figure D-1.10), Ozone and Queenscliff Hotels (Baker and Lawson 2004).

Tourism often provided a stable income that was exploited by families for many generations:

> My Grandmother [Hutchins] purchased *Olinda* guest house in 1915. She built the Queenscliff Inn on that site in 1926. She built Whitehall guesthouse in 1942 and cooked for over 60 people at the age of 76, and my wife and I took over this business in 1945. [CA]

Figure D-1. 10: Grand Hotel, Queenscliff c.1906(Image a03347, SLV Collection).

Boarding houses also offered short term accommodation, and were prolific throughout Pt Lonsdale and Queenscliff. Local families would also let out houses to tourists to make some extra money:

> In summer there could be 7000 people coming here by boat…every second house in town was let… there were little cottages in the back of the fishermen's houses, which they would move into and let the main house out…Over summer if you had a spare room, the guest houses would hire it from you [for the tourists]…this went on from 1900 to the 1930s when the boats finished. [CA]

Even the lower class fishing families profited from the provision of visitor accommodation. Many homes had small cottages or sheds in their backyards, which were used to house the family whilst the main house was rented to tourists (Ferrier 1991:2; [CS; HM; LID; WN]). Furthermore, many fisher women owned, operated or worked in the guesthouse trade:

> I used to work there with Nola (Auntie) when I was younger. We would wait on tables and serve meals. They always served heavy hot English food. There was also a French pastry Chef who made apple charlottes. I was about 17 or 18 then. I worked all morning until the afternoon when I got some time off. I would wake up early and clean rooms and set the table, and then clean out the rooms, change beds and clean the floors. Sometimes I would have a quick swim at the beach, and then prepare for lunch, which was soup, a main course and roast. The washing up was huge, and I would set the tables for tea and have a break between then and dinner time, when I would go to the beach. After that I would go back to work for the evening meal. It was 12 hour days.

> They had a ballroom, tennis court, crocket lawn and aviary, and they often had 100 people stay at a time. [DS]

The inundation of tourists led to boom times for the local business community. Numerous small businesses opened to directly service the needs of the tourists, including cafés, a coffee palace and other forms of entertainment. In turn other small service business centres sprang up around the town, including butchers, bakers, grocers, fruiterers/greengrocers and dairies [CA; JP]. Local transport companies also proliferated to meet the need for neighbourhood trips to tourist facilities and for cartage of tourist possessions to and from the piers [GW].

About a dozen of guesthouses were established at Pt Lonsdale from 1882 onwards (Allom Lovell 1984:11), and provided for every whim of their guests.

> There were many guesthouses here: Kora-weari, The Terminus, The Beach House. They would all get together for balls, lantern shows and that sort of thing in the 1950s. They organised social things together, but that changed in the 1950s and 60s. They had a ballroom, tennis court, crocket lawn and aviary, and they often had 100 people stay at a time. There was a culture of guesthouses. People would come here for 30 years, and then their kids took over their annual booking. There was often competition between houses in tennis and crocket matches. [DS]

The economic boon of tourism for the town can not be over stated. Anything that might adversely affect tourism was shunned, and on one occasion some townsfolk were criticised for shuttering their windows as a mark of respect for local deaths because of the gloomy image it portrayed to tourists:

> ...of all places, Queenscliff is the last which should perpetuate a practice of melancholic effect on passers by, many of whom depressed in mind and body by their own troubles and sorrows come here to "Exhilarate the spirit, and restore the tone of languid nature" Let us try and help them to this result by a cheerful appearance and not add to the depression by a custom more honoured in the breach than in senseless observance. (QS, 25/3/1893)

E) Convalescent Homes

The perceived healthy environment also led to the establishment of two convalescent homes at Queenscliff. In 1895, the former residence of Capt. Lilley was purchased by the MCL for use as a seaside vacation resort for underprivileged children and sick children, which became known as "the Cottage by the Sea" (Figure D-1.11; QS 1/6/1895). Prior to this time, children from various institutions and charitable societies (including the Victorian Deaf and Dumb Institution; QS 10/3/1894) visited the facility, and were often entertained by local philanthropists (e.g. Ballieu

family). Funds to run the Cottage by the Sea were provided by the MCL, and could accommodate up to 22 children at a time (QS 31/8/1907). The League also organised picnics for children from Melbourne, which often filled an entire excursion steamer (e.g. QS 22/2/1908, 17/12/1910). Another nearby facility, "Santa Casa" was run by Catholic nuns for similar purposes. These facilities received no government funding, by relied on charitable donors to keep operating (QS 14/12/1895). Many ill children used the facility:

> Santa Casa and Cottage by the Sea were both full of convalescent polio children. I heard of cases where they were strapped or bandaged to frames so they could take them down to the water to bathe. Cottage by the Sea had mirrors on the beds so that the children could see the ships going in and out. The Nuns at Santa Casa pushed kids on prams like a big flat platform with wheels onto the beach, so they could unbandage them and bath in the water. If there was a polio scare you were not allowed to go to school [in the early 1940s]. [JP]

Several holiday homes were established for clergy and nuns to recuperate, including Lathemstowe in Gellibrand St and Mt Nagle in Queen St (Allom Lovell 1984:39; [JP]).

F) Local Transport Services:

The influx of daytrip tourists saw the need for different types of services that did not revolve around accommodation. Carts were often used to transport sightseeing tourists to see local tourist attractions at Pt Lonsdale, or to wreck sites further along the coast (GA 4/1/1872; 15/1/1872; Dod 1931:68). Tourists predominantly used the central tourist facilities, but also occasionally ventured to more remote areas in Swan Bay for large picnics. Many locals recalled fleets of omnibuses that ferried picnickers to events and up to four daily trains serviced the town during summer [JP]. The small businesses around the town continued to thrive by servicing the daily tourists' refreshment needs.

G) Central Landscape Features: Tourism Sightseeing Attractions

Although these seaside attractions offered a healthy atmosphere to tourists, any use of the baths and the sea was heavily weather dependent, and so other aspects of the town's everyday life were promoted as tourist attractions (Beavis and Raison 1984). Tourists made the most of the many attractions the township provided. In the early days of the colony, the main attractions focused around the service industries and defence forces that were based in the township which forced an overlap between the visitors and the local residents. Many of the maritime industries based at Queenscliff were promoted to visitors and excursion tourists for sightseeing during both the

nineteenth and twentieth centuries. It was at this point that the tourists' landscapes began to markedly overlap with those of the local residents.

The navigational facilities in the Queenscliffe area were extensively touted as tourist destinations, as it possessed one of the earliest lighthouses in the colony (QS 29/6/1907, 22/2/1908; Raison 1997:2), and the local Progress Association often advocated the opening of these facilities to encourage tourism from as far afield as Ballarat and Bendigo. Lighthouses were often described in romantic terms in the late nineteenth century (QS 7/4/1894), and given that gas lighting was not available in the town until after 1884 (QS 21/1/1884), their beams must indeed have been a spectacle to behold in the darkened night sky.

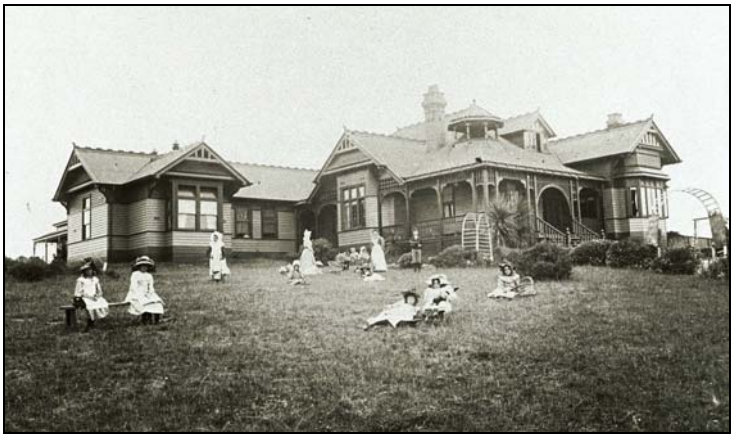

Figure D-1. 11: Cottage by the Sea convalescent home for children (Photo: PH 7290, QHM Collection).

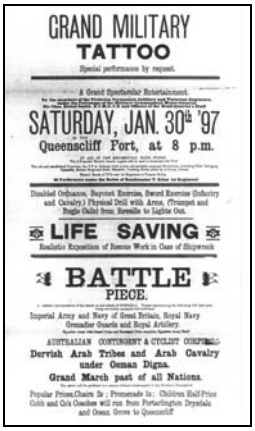

Figure D-1. 12: Military Tattoo advertisement (QS 10/1/1897).

Fort Queenscliff was a great attraction to colonial tourists, especially given the military fervor during the time of the Russian Scares. The fort represented state-of-the-art military hardware, and was listed in several tourist guides of the day (e.g. Sutherland 1988b:158; QS 7/4/1894, 29/6/1907, 22/2/1908; Beavis and Raison 1984:10). The annual Easter War Games (see Chapter Five) also provided a wealth of free entertainment for tourists, with momentous displays of firepower and mock battles, where night time artillery practice was particularly spectacular (QS 1/5/1886, 30/7/1910), as were the marching of the artillerymen to the railway station afterwards (QS 1/5/1886). The military also used these events to show off for the tourists, possibly in an attempt to secure more funding for defence, sometimes with fatal consequences, such as in the case of an accidental mine discharge in 1881where the explosive charge had been increased provide a more impressive display (Tate 1982:60). Military Tattoos (Figure D-1.12) were popular

performances, and often included displays of lifesaving in case of shipwreck, mock re-enactments of famous battles and trooping the colours (QS 5/1/1897).

Promenading on the pier was very popular in the 1890s as a way of taking in the sea air (QS 7/4/1894). The Pilots Station, Health Officers crew and fishers were also promoted as tourist attractions (Beavis and Raison 1984), as were the lifeboats used in shipwreck rescues. The monthly practice session attracted large tourist numbers, where the crew launched the lifeboat and fired the lifesaving rocket that was used to pass a line to shipwrecks:

> …once a month…they would fire off the rocket for practice. Everyone knew it was coming, but we would all jump when it went off, it made a hell of a bang, and it would go flying up high in the air over The Bay. Everyone in the town used to turn up to watch them practice, especially the kids. They came from miles around to see it set off. [GW]

Other unexpected events such as shipwrecks attracted hundreds of visitors to Pt Lonsdale and the surrounding surf beaches whenever they occurred (GA 4/1/1872, 17/1/1872:2; Dod 1931:68). This aspect is discussed in further detail in Chapter Seven.

Environmental features also formed an important part of the tourist landscape. A bush track along Lonsdale Bight (Lovers Walk) and visits to the natural rock formations at Pt Lonsdale were popular attractions, both of which were popular destinations for picnics, as were trips to Swan Bay, and Swan and Mud Islands for bird-watching and fishing.

By 1888, Queenscliff was also promoted for its range of facilities, including postal, telegraph and money order offices, a savings bank, entertainment facilities (Foresters Hall, Mechanics Institute), churches, administrative services (Health, Customs, Police Officers, Courts, Pilots) and local newspaper (Sutherland 1888b:158). Other attractions around the district were also of interest, including dedicated tourist facilities such as a botanic garden, exotic performing troupes, lovers walk, maze, bandstands and rotundas (used for dancing and bands), rifle club, and many other sporting endeavours (Dod 1931:65; Beavis and Raison 1984; Ferrier 1989:19; [CA; GW; PF]). Annual lawn bowls tournaments from 1887 onwards drew large crowds for many years from districts as far field as Ballarat and Bendigo (QS 28/5/1887, 2/11/1907; [CA]). By 1907-08 the tourism attractions at Queenscliff included: excursions to other tourist towns on the Bellarine and Mornington Peninsulas; fishing excursions, sailing round The Bay; the golf links on Swan Island; and the wreck of the *RMS Australia* (QS 29/6/1907, 22/2/1908).

From around the late 1880s onwards, drinking also became an important part any Queenscliff holiday, particularly for the daytrip excursionists from Melbourne. Many oral accounts in particular recalled how police often had to confiscate alcohol the tourists brought with them (Ferrier 1989:17) and that these visitors would often head straight for the hotels, only to return home the worse for wear with a bag full of alcoholic beverages [CS]:

> They would come off the boat and down the Esplanade [Street] into the Esplanade, Vic and other pubs. They would stay there all day, and then come out with a Gladstone bag full of grog for the trip home. [CA]

These behaviours often meant the town was full of drunken tourists, an aspect that greatly affected their relations with the local population (this is discussed further in Chapter Eight). The introduction of this type of behaviour radically altered the previous environment of gentility for which the township had become famous.

Queenscliff's tourist trade was heavily reliant on the annual picnics of many trades' organisations and other government institutions. Geelong Fire Brigade, Painters, Trade Clubs, Ports and Harbours Department, Post Office, MCL and numerous other agencies held their annual picnics there, often inundating the town's commons and parks (GA 27/1/1866:2; QS 27/2/1915 [JP; PF; GW]). The Bay Steamers were often besieged with people, far beyond their official capacity, and Captains were often forced to leave their berths to avoid overcrowding with hundreds of passengers still waiting to embark. The parks along the eastern edge of the township were very popular with daily tourists, and [WN] recalled how her mother and uncles would jump from the ferry onto the Queenscliff Pier and run to the park to claim a table for the family picnics, which were always in great demand.

H) Folklore and Tourism

Even folklore was manipulated to increase the tourist market. Three folklore accounts were identified in the area that persists even to this day. The origins of these tales were of interest, as they have persisted despite contrary historical and archaeological evidence. After many interviews with the local community, it became evident that these legends were associated with the tourisms industry, and will be therefore explored in greater detail.

The first concerned an escaped convict (William Buckley) from the failed Sorrento settlement (of 1803) who walked around The Bay and lived with the local Wathaurong Indigenous community

until discovered by Batman's exploration party at Indented Head in 1835. Although Buckley was an historically documented figure, local rumours abounded that he had lived in a cave at Pt Lonsdale for many years (Figure D-1.13), and this became the popular focus of many tourist forays after it was widely publicised in 1888 (Sutherland 1888b:158). In 1890, it was reported that a petrified body had been uncovered inside the cave after it had been scoured out by a violent storm, and it was insinuated that the government had tried to suppress news of the discovery (QS 27/9/1890). This attempt to inspire a conspiracy regarding the site, may demonstrate active attempts by the tourism operators to attract visitors to the area. The cave continued to be an important draw-card for the area (QS 23/7/1909). Given that Buckley was known to have lived in this area, the cave provided a tangible anchor for the romantic tale, which could then be exploited as a focus for tourism operations. The legend of Buckley still plays an active role in the area's tourism, and is the subject of a heritage trail around the Bellarine Peninsula.

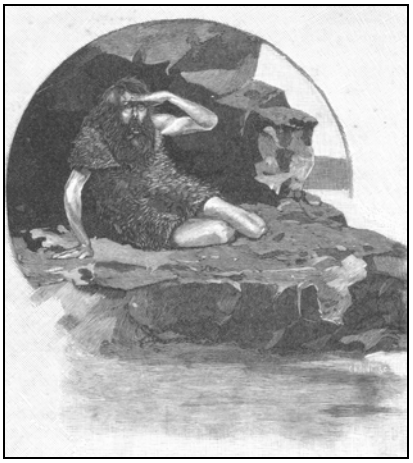

Figure D-1. 13: William Buckley and his cave (Sutherland, 1888a:64).

The second legend involved the visit of an historically documented pirate, Benito Bonito, who was as legend would have it sailed into Swan Bay to bury his treasure before being captured and hanged by the British Navy. This tale dates to at least the 1860s (Lawson 2004a), and was perpetuated by a local fisher (Kerosene Jack) who once lived on Goat Island, and identified himself as the son of the pirate. According to Jack, after re-discovering the buried loot, he blew up the cave where it was located to make sure it was never found again. He was said to have had a treasure map tattooed on his arm, and was subsequently pursued by numerous interested parties intent on getting him to reveal the treasures secret location, but never revealed its secret (Dod 1931:26; Argus 7/7/1937; Anon. 1938:85; Van de Klouster 1980:14; Hayden n.d.:9-14, 18;

[LID]). Many different versions of the story abounded in Queenscliff, but all maintained that the treasure was buried along the Swan Bay foreshore of Queenscliff.

Many attempts were undertaken to find the treasure, beginning with visitors and locals digging and poking around the cliffs/foreshore (Hayden n.d.:19; Anon. 1938), and coin hoards (some dating to 1816) that were discovered between 1909-26 (QS 25/9/1909; Thompson n.d.:8), along with a box marked "B.B." that contained a compass stamped 1777 (Hayden 1966:15; Lawson 2004a). [A more plausible explanation of these finds is offered in Chapter Seven]. The legend had such veracity in the Victorian community that it even spawned several mining syndicates to undertake serious searches with heavy machinery from the 1920s until 1994 (Hayden n.d.:19-21; Lawson 2004:9). Another similar legend also circulated about treasure on Swan Island in 1909 (QS 25/9/1909). An expanded consideration of these folklores is contained in Appendix D-3.

3) The Archaeology of Tourism Landscapes

A) Transport: Routes and Departure Points

There were many tangible remains of tourism evident in Queenscliff and the surrounding regions. The New Pier provides tangible evidence of the important seaborne tourist trade, as does the railway station. The buried and almost intact remains of the former Fishermen's Pier were also discovered in 2006 (Hewitt 2006). The two waiting shelter sheds are located on and adjacent to the pier, and demonstrate the connection of passengers to the pier and ferries (Figures 6.14-6.17). Similar features were also located on or next to the piers at Portsea and Sorrento.

Perhaps the most extensive indicators of tourism lie in the water. The large piers of Queenscliff, Sorrento and Portsea serviced The Bay steamer trade, which would discharge and collect thousands of day trip tourists. Accordingly, enormous deposits of predominantly aerated water bottles of Melbourne and Geelong origins dating up to as late as the 1930s were reported by divers at the approaches to, and under many piers in these areas [DL; LM; PF; SA]. One diver [SA] observed that he had only ever found lemonade and torpedo bottles (but no alcohol bottles) bottles at Bay Steamer Ferry piers located at Sorrento, Dromana and Snapper Point, and this observation was repeated for recreational fishing areas such as Portsea Hole (a deepwater hole just off Portsea). Oral histories also record that thousands of these types of bottles were uncovered when the first large steamers began to use these areas (uncovered by propellers and dredging), particularly at Sorrento Pier [PF]. These deposits vary slightly from those inspected in

Geelong, where the proximity of the piers to public houses meant they were used as rubbish dumps by the hotels, resulting in large concentrations of alcohol bottles ([CA]; Duncan 2004a). Many deposits of aerated water torpedo bottles have also been located in Lonsdale Bight which was probably associated with the many former bathing boxes scattered throughout this area.

The lack of alcoholic bottles on the seabed at the resort piers might also be explained by known contemporary recycling practices, whereby the crews of the Bay Steamers were known to collect all bottles to claim the recycling deposits levies (Fitchett 1973; Ferrier 1989:18, 1991:2), and by the prohibition of drinking alcohol outside of the local hotels.

Figure D-1. 14: The Waiting Shed (right) on the New Pier.

Figure D-1. 15: Waiting Shed near New Pier.

Figure D-1. 16: Queenscliff New Pier Waiting Shed, 2001 (Photo: M Gibbs).

Figure D-1. 17: Interior of Queenscliff New Pier Waiting Shed.

Furthermore, the West Channel route, which was used extensively by the Bay Steamer ferries, evidenced large concentrations of Victorian manufactured soft drink and alcoholic bottles, which contrasted highly with the South Channel, where artefacts were mainly of international origins.

The former observation was repeated in the Sorrento Channel, which was extensively used by ferries calling at Sorrento, Portsea and Queenscliff. The concentration of alcoholic bottles in the West Channel might also be related to the consumption of alcohol purchased at the resorts, which would have been drunk from the bottles and discarded overboard, whereas alcohol purchased onboard for the trip down would have been served in glasses, and the bottles retained by the crew for recycling.

B) Baths and Bathing Sites

Surprisingly, little survives of perhaps the most iconic structures for this area, the baths. No evidence of the Queenscliff Bight baths or any associated relics were visible during an inspection of the sites in 2002, but it is probable that vast archaeological deposits of relics from these facilities lie buried under the seabed, given numerous other observations of similar structures along the Hobson's Bay foreshore (Duncan 2004a). The natural reef rock platform known as Governors Hole was exposed during storms in 2002 and 2006, and now lies buried under prograding sand dunes on the southern side of Shortland's Bluff, and are still used by modern swimmers. It should be noted however, that remnants of the baths were exposed by storms in 1912 (50 years after they were demolished; GA 12/6/1912) and it is therefore possible that archaeological remnants of this structure are buried under the foreshore dunes. In 2005, a timber post possibly associated with this structure was exposed in front of the seawall after storms (Figure D-1.18). Changing rooms and a façade associated with the former hot water baths are still extant and is currently used as a café (Figure D-1.19).

Figure D-1. 18: Possible remains of Shorthand's Bluff Bathhouse at Governors Hole.

Figure D-1. 19: Former Managers Quarters and Changes Rooms of the Hot Water Baths, Now Harry's Restaurant.

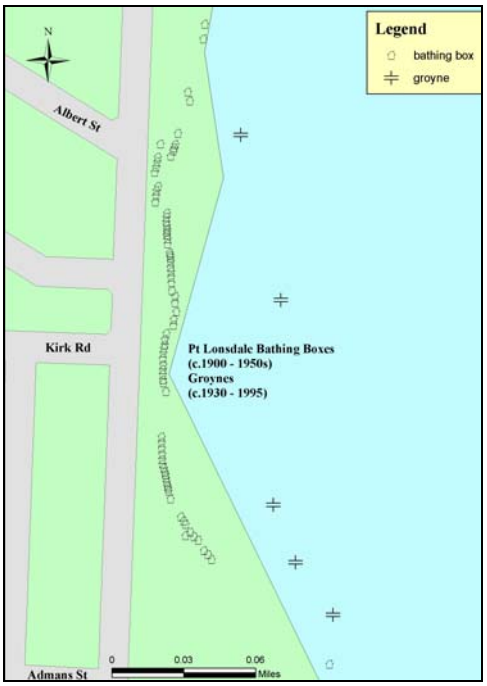

Figure D-1. 20: Pt Lonsdale Bathing Hut Sites and Groynes.

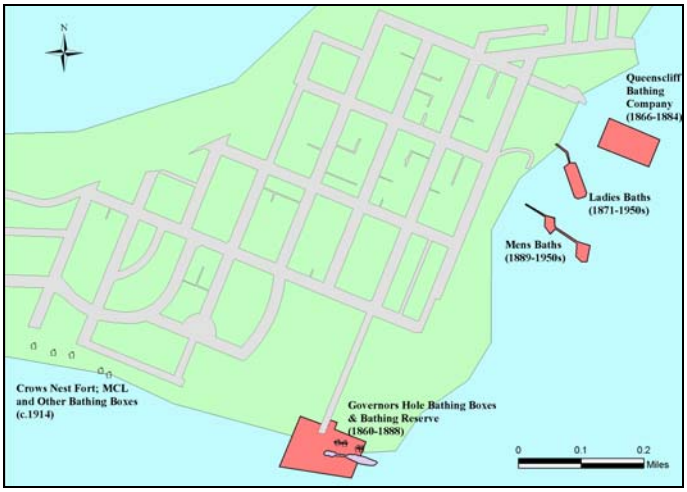

Figure D-1. 21: Bathing Sites at Queenscliff.

In general, baths and bathing places in this region were characterized by their close proximity to tourist population centres, and (except for the earliest facility at Shortland's Bluff) were located in local Bays predominantly sheltered from prevailing adverse weather (from the south west). The lack of evidence of the former baths structures in this area contrasts starkly to several other similar structures investigated at Melbourne and Geelong (see Duncan 2003a; 2004a), and others inspected at Clifton Springs and Portarlington during this survey, where often substantial archaeological deposits of both structural components and relics associated with former site use were evident. These difference in archaeological signatures might be attributed to the proximity of the Queenscliff sites to a defence facility (where they were used for explosives practice by the military, and removed at seabed level in the 1950s [GR]) and an active bottle collecting community. Furthermore, the proliferation of maritime infrastructure in Queenscliff Bight, along with other extensive modification of the littoral zone caused by Channel deepening and harbour redevelopment (see Chapter Eight) has led to progradation along this foreshore area, which may have buried any archaeological sites. In contrast, the bath sites at Melbourne were very exposed to prevailing weather patterns, which resulted in seasonal erosion of the sand covering those sites. The baths sites of Queenscliff, Melbourne, Geelong, Portarlington and Clifton Springs were all characterised by the existence of promenade approaches, consisting of bluestone seawalls which supported concrete pathways, and these sometimes features often added to the erosion of these

areas due to reflected waves [JP; PF; WN]. Furthermore, the actual entranceways to the baths at many of these locations were often evident by relict gaps in the seawalls, by doglegs in the seawall structure (Duncan 2003a), or piles from the access piers (at Portarlington).

Figure D-1. 22: Pt Lonsdale sand groyne in 1994 prior to demolition.

Figure D-1. 23: Pt Lonsdale sand groyne.

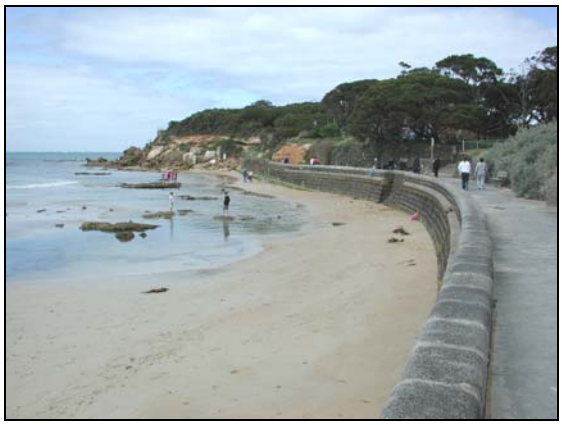

Figure D-1. 24: Pt Lonsdale seawall and promenade.

Open sea bathing facilities were still evident at Pt Lonsdale Front Beach in the remains of several timber sand groynes spread along the beach, which had been installed to encourage sand accretion along to stabilize the beach. These groynes consisted of a row of substantial timber piles (Figures 6.22-6.23) which supported horizontal beams and planking, which were often reinforced by natural rock formations or bluestone ballast rock. Similar evidence was found along the foreshore from St Leonards to Portarlington, where extant timber sand groynes were usually located close to popular swimming areas, and several small stone groynes performed a similar function at Indented Head. Furthermore, the accumulation and erosion of sand deposits in

these areas (caused by the above structures) is in itself an archaeological signature of bathing activities.

Bathing boxes were generally located close to guest houses and other private residences at Pt Lonsdale, and were also associated with seawalls, promenades and other local amusements. It is probable that the remains of bathing box stumps are still located behind and under the current seawall at Pt Lonsdale (Figure D-1.24), but this could not be ascertained as the promenade is still extant and intact. Many other examples of intact (and still used) bathing boxes were identified along the shores of the Mornington Peninsula. The continued use of those structures suggested that they were privately leased or owned (Port Phillip Authority 1985:13), as opposed to guesthouse/ tourism ventures, and may have survived as their existence did not depend upon the commercial viability of associated accommodation businesses. The lack of extant bathing boxes in Pt Lonsdale could either be attributable to the failure of their associated commercial accommodation ventures, to the subsequent erosion in Lonsdale Bight caused by the deepening of The Rip Channel, or their proximity to a commercial business district, where private use of public land was discouraged in the mid-late twentieth century.

Other evidence of bathing facilities included the installation of hulks to act as breakwaters to provide safe swimming areas at Indented Head (*Ozone* and *Dominion* shipwrecks).

C) Accommodation

Many tourism sites were still extant, or evident as archaeological sites, the most obvious being the accommodation in the form of extant inns, guesthouse and boarding houses (see Figures 6.25-6.28). The most opulent extant hotels date to the 1880s and earlier period of the town, and included the Royal, Vue Grand, Queenscliff and Ozone Hotels (Figures 6.29-6.32), which were located on the mid-to upper levels of the township close to the central business district. All of these structures had (at one time) been fitted with viewing parapets/spires, and all had at one time enjoyed clear fields of view to the water.

Many guesthouses were scattered around the township at numerous locations, and dated to the period of later middle to lower class tourism of the late nineteenth and twentieth century (Figure D-1.33). Guesthouses were particularly prolific near the waterfront at Pt Lonsdale (Figure D-1.34), and many dated to the later periods associated with open sea bathing of the twentieth century from around the 1920s onwards. These buildings were large multiple roomed structures

of simple construction usually located on large acreages where numerous outdoor sports could be undertaken. It was difficult to relocate the locations of many guesthouses, as the exact address of many were not listed in contemporary historical accounts, and secondary sources (e.g. Baker and Lawson 2004, Brown 2004) were used where available to pinpoint whether these sites still existed. Many early guesthouses were located on elevated areas, close to the business districts at Pt Lonsdale and Queenscliff, and those at the former were usually located within walking distance of the beachfront. Spatial and temporal analysis of accommodation sites presents another avenue of investigation yet to be undertaken.

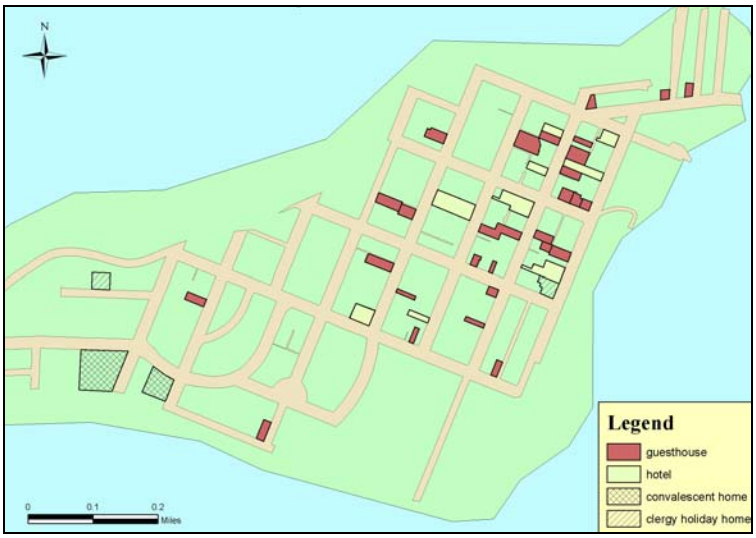

Figure D-1. 25: Historic visitor accommodation sites in Queenscliff.

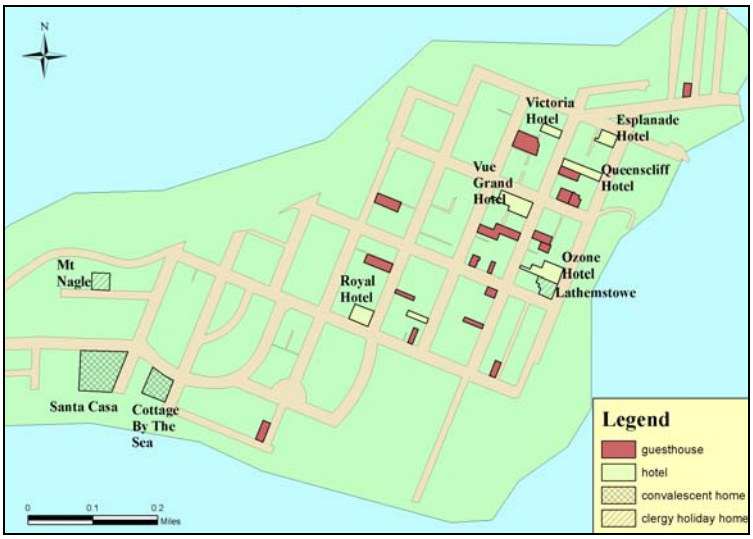

Figure D-1. 26: Extant visitor accommodation sites in Queenscliff.

Many fishermen's allotments demonstrated a main house (which was rented to tourists) with a secondary cottage at the rear for the owner's accommodation during the tourist season. These structures were very simple timber constructions of usually one or two rooms located at the rear of the main house (see Figure 7.8).

Figure D-1. 27: Historic Visitor Accommodation Sites in Pt Lonsdale.

Figure D-1. 28: Extant Accommodation Sites at Pt Lonsdale.

The tourism presence was also evidenced by a number of ornate timber shelter structures in parks and close to the pier (i.e. rotunda, waiting/shelter sheds in Princes Park - Figure D-1.15), which indicate where the tourists are entering the township. The presence of the large waiting shed on the pier itself was an almost certain indicator of tourism, as no similar structure was ever built on the other jetty, which was predominantly a working structure. Other extant tourism facilities included sporting facilities (Swan Island and Pt Lonsdale golf course, bowling greens, tennis courts etc), former botanic gardens (which was evident by a reserve), extensive parks, back beach walks and promenades. These dedicated tourist areas were often evident by empty space in the form of parkland which usually fronted the waterfront, and the proliferation of these types of sites in such a confined area was notable. Furthermore, the reclamation of former swamps for parkland, especially where numerous parks already existed might further evidence the tourism in this area.

Figure D-1. 29: Hotel Queenscliff, Gellibrand St.

Figure D-1. 30: Lathemstowe and the Ozone Hotel, Gellibrand St.

Figure D-1. 31: View Grand Hotel

Figure D-1. 32: The opulence of the Vue Grand Dining Room

Figure D-1. 33: Queenscliff Inn.

Figure D-1. 34: Kora-Weari Guesthouse, Pt Lonsdale.

The convalescent tourism facilities were also still extant and being used for their original purpose (Santa Casa and Cottage by the Sea - Figure D-1.35 and 6.36). These multi-roomed large

buildings did not display the luxurious architecture of the hotels, and were set on large acreages close to the beach. This factor is discussed further below in regards to the significance of empty space.

Figure D-1. 35: Cottage by the Sea convalescent children's home.

Figure D-1. 36: Santa Casa convalescent children's home.

The sheer density of all these types of sites, along with the former duplication of many mercantile businesses (e.g. butcher shops, grocers, bakers, greengrocers, banks etc) and multiple local business districts within the town was perhaps the most potent evidence of tourism in the township especially in a settlement as small as Queenscliff.

D) Shipwrecks

Several wrecks of former bay steamer ferries are located in the Ships Graveyard area to the west of the Heads and include the *Coogee*, *Hygeia* and *Courier* (Duncan 1994). The wrecks of several other former steamers are located at Cape Schank (*Alert*), inside Port Phillip Bay (Williamtown - *Black Eagle*; Swan Island - *Mystery*; St Leonards - *Empire*), and eastern Victoria (Gippsland - *Despatch* and *Awaroa*). The Bay Steamer *Ozone* was subsequently used as a breakwater at Indented Head, fittingly to provide shelter for a recreational beach area.

The abundance of these abandoned former tourist ships tangibly reflect the changing nature of tourism in The Bay, and the shifting economics fortunes of maritime industry, a notion which has been further generally explored on nationally by Richards (2002). The changing size and specifications of these tourism vessels wrecks over time is also indicative of the evolution of the needs of the tourism industry, both in terms of passenger capacity and hull construction that has adapted to changing environmental conditions (see below). These observations are consistent with Westerdahl's (1998) predictions relating to the evolution of hull design and transport zones.

This aspect is discussed further in Appendix D-4. A summary of the archaeological signatures of tourism sites is included in Appendix D-5.

E) Changing Tourism Landscapes/ Excursion Boat Landscapes

In the early days of the colony, small sailing and steam vessels were used to transport supplies and occasional passengers around The Bay. However, as the popularity of excursion trips increased, the size of the vessels grew to gigantic proportions, until they were disappeared over a short period of 20 years, predominantly due to the rise of road and rail transport networks (Fitchett 1973). These vessels were eventually replaced with smaller, locally built vessels to provide ferry services across The Bay entrance.

A temporal study of vessel size provides significant indications of the changing preferences of the public for this activity over time. Initial craft are smaller paddle steamers originally designed for cargo transport, where passenger conveyance is incidental. Over time, the design of the craft was more focused on passenger comfort, and designs encouraging increased speed and size were favoured. At about this time, there was a reversion to moderately sized craft that were involved in passenger and cargo deliveries. However, with the decline of The Bay excursion trade, vessel design sizes were reduced abruptly, and became more squat but sturdy vessels used for short, cross channel voyages only. These vessels again slowly increased in size as passenger demand grew, and the current use of large car ferries is indicative of the significance of these cross channel ferries to the local community.

The predominant use of screw steamers on the Geelong to Melbourne run is indicative of the relatively deeper waters encountered between those two area, whereas the use of paddle wheel steamers between Queenscliff and Melbourne is symptomatic of the shallow waters to be traversed at the Yarra River Delta and around the peninsula tourist pier (QS 22/6/1889).

The Bay Steamer ferry routes present insights into the changing tourism landscapes of Port Phillip Bay. Initial tourism was conducted from Melbourne to Geelong, and these were predominantly predetermined by the lack of other suitable destinations. However, around the beginning of the 1850s, tourism reports began to prosper originally at St Leonards and Queenscliff, and then later at Sorrento and Portsea, and then Portarlington and Clifton Springs. The popularity of annual picnics replaced the previous fervour for healthy air, and many more

destinations arose, particularly on the eastern side of The Bay at Carrum, Rosebud, Dromana and Mt Martha. As attitudes to recreational holidays changed and terrestrial transport networks developed, ocean sea bathing became more popular. As holiday makers were no longer constrained by the confines of the resorts, and tourism destinations along the open coastal beaches became trendier. After the disappearance of The Bay Steamers in 1942, the two peninsulas again became isolated from one another, necessitating a 130 mile trip by road (via Melbourne) to get to the other side (Fitchett 1973:82). However, the introduction of localised cross Rip ferry services from 1953 onwards reconnected the tourist landscapes again, leading to another bay excursion trade, this time across the strait. This has changed the contemporary tourist and working landscapes of many Geelong and Mornington Peninsula residents, as now Melbourne is no longer an essential component of the tourist landscape as the cross Rip ferries avoid the need for motorists to pass through there on a trip around The Bay.

The change in bathing/holiday destinations from the bathing resorts to the open beaches also changed the archaeological focus of relics, which were no longer centred on the piers/baths, but were scattered over much wider areas along the open coast. The former presence of bathing boxes, timber sand groynes, seawalls and promenades at Pt Lonsdale confirms this observation.

4) Cognitive Landscapes

A) Folklore and Tourism

The stories of Buckley's Cave and Bonito's Treasure also appear to have been adopted and exploited by the town to bolster the local tourist trade after open sea bathing became popular at the newly discovered surf beaches further along the West Coast [RL]. Some guesthouses were known to plant old coins in the area to keep the latter story alive [WN], and the popularity of the treasure story as a tourist attraction was evident in a newspaper advertisement from 1938 that encouraged treasure seekers to visit the town:

> Come to sunny Queenscliff and hunt for treasure…Have a holiday and exercise at the same time and perhaps grab a million or two of gold to boot. It's yours for the digging. Don't forget your pick and shovel and Miners Right. (as cited in Hayden n.d.: 19)

The influx of treasure seeking visitors and syndicates to the town proved a bonus for local businesses, and charities that made collections amongst the visitors (Hayden n.d.:23). 7000 visitors were recorded in one weekend in 1954 when a new syndicate started work (Lawson 2004b:12). As a former tourism operator [CA] commented: "Benito has done no harm to

Queenscliff's reputation". The mayor of Queenscliff in 1938 summed up the indifference of the local community towards the actual legend: "The Queenscliff treasure is like every other treasure – nobody ever finds it!" (Anon. 1938:87).

Although the story has interest as a social phenomenon, it also has implications for cultural landscapes studies due to the potential disturbance it may cause archaeological sites in the area. Additionally, the treasure hunting searches in themselves have generated archaeological signatures that are still visible even today along the Swan Bay Foreshore. Many shafts (up to 15m deep) were lined with iron or timber, and have only been filled in by the council in recent years (Lawson 2004b).

The continued prevalence of these legends in the area is notable, as it appears that the folklorism was being practiced as a draw-card to encourage tourists into the area. These three examples demonstrate the importance that folklore plays in actively shaping tourist landscapes in this area. Although the truth behind the legends of pirate treasure and habitation in caves may be doubtful, it has nonetheless shaped the tourism landscapes, and indeed the local community landscapes of Queenscliff through their exposure to those who were seeking the sites.

The legends have encoded various "natural" areas with cultural meaning, which have been actively exploited to draw tourists and thus encourage business opportunities in those areas. Given the proliferation of other tourism ventures in the surrounding region, which offered similar services and natural attractions, the presence of these additional cultural attractions added an exciting new dimension to the tourists' experience that may have given Queenscliff a competitive edge over their rivals. Similar folkloric traditions which use legends of buried treasure or mysterious artefacts have also been observed at Warrnambool in Western Victoria (in relation to the Mahogany ship legend; Mahogany Ship Committee 1985; Loney 1985:20; Potter 1987) and at Geelong (where ancient keys were said to have been discovered under several layer of rock during limestone mining: Gill 1982, 1987; McKiggin 1987), and have probably been similarly exploited. It is also notable that the name Buckley's Cave was formalised as part of the tourist toponymy of the area, which in itself demonstrates the significance of this folklore as part of the local history and economy.

These tourist and treasure hunting landscapes represent only one aspect of landscape associated with this legend. There also appears to be secondary folklore landscapes at Queenscliff, where it

is known that these legends are exaggerated, but where this knowledge is primarily accessible to the local community only. As such, there is a duality of treasure hunters/tourist and tourism landscapes, which represent opposing perspectives of the same legend, but which is used by the latter to exploit the former. These accounts effectively represent "Folklorism"(Gazin-Schwartz and Holtorf 1999:12) in which second hand introduced folklore is used for a particular agenda, in this case to bolster tourism in the area.

B) Empty Space

Tourism was predominantly evident by large tracts of empty space in the form of park land along the foreshore, both at Pt Lonsdale and Queenscliff, which retarded development in these areas. The use of open space in these cases did not function as an exclusionary boundary (such as for the defence landscapes) but acted as a catalyst to facilitate communal interaction. In a way these areas acted as space to be filled, rather than voids used for separation. These parks in effect assigned communal landscape space to visitors, thus placing them within the community framework of the township. It is interesting to note the liminality of these reserves, which were always on the edges of the township, and thus reinforced the notion that tourists were indeed removed from the local community. Furthermore, this parkland may have been deliberately used to marginalise of the transient lower class daytippers from the upper class (temporary resident) tourists through the assignment of their recreational own areas in the township. Figure D-1.37 demonstrates the development of tourist reserves within the township, and show how the appropriation of new areas by the military led to the reduction and transferral of park reserves to other sections of the town. It can be seen that the first tourist reserve areas were located at the southern edge of the township, and gradually spread down the hill along the eastern coastline. Archaeological traces of the parks are often remnant in current sporting facilities, caravan parks, and coastal walking paths. The botanical gardens, a former major tourist attraction is now the football oval.

Figure D-1. 37: Changing landscapes of Queenscliff parks and reserves.

C) Landscapes of Exclusion and Changing Tourism Landscapes

The purchase of many of the original township blocks by wealthy graziers and Melbourne's elite led to the exclusion of many poorer tourists from the local Queenscliff area. The town's founding population included Governor La Trobe, Judge Fellows, and Governor Barkly [PF]. The original focus of the town on the elite tourist market through the 1860s was evidenced by many Queenscliff hotels who often touted for their accommodation for the elite and gentry (Beavis and Raison 1984:30, 35).

> Another reason for Queenscliff popularity was that Governor LaTrobe came here, and had his own house in the area. Victoria was a class-based society, and the servants were often sent ahead to open up the houses [JG]

Many high ranking clergy also visited Queenscliff as a seaside attraction, and health retreat and resort. Lathamstowe, an impressive three story mansion, was constructed by funds donated from

Latham of the Carlton United Brewery Company to build a retreat for senior bishops and priests, which was used for many years until sold when the maintenance costs ran too high (QS 30/11/1907; Inglis 1999).

The annual trip to the seaside was to escape the heat and disease of Melbourne, but also the mixed rank beaches of Melbourne. St Kilda, the most popular seaside resort in Melbourne, was the favourite haunt of the working class as it was close to the city and easily accessed by train. By contrast, the cost of the trip by Bay Steamer to The Heads in the 1870s equated to around two-thirds of the weekly wage of the working class. Queenscliff offered an exclusive retreat away from the lower classes, where middle and upper class status groups could mix with their own rank and display their gentility at "fashionable" resorts. Inglis (1999:72, 73) has postulated that the seaside resorts operated as theatres where the gentry could identify themselves as members of a socially distinct and recognisably superior social class:

> The high costs of transport to Queenscliff, along with the very high house rents served to retain the area as a tourism enclave of the upper and middle class. The high cost of Bay Steamer transport also meant that not only the luxurious worlds of the early steamers were denied the poor, but also the experience of the waterborne trip and Bay itself. It was not until the later years of the nineteenth century when transport costs were reduced with the introduction of trains and excursion tickets that the township began to open up to the middle and lower classes. At that time, when middle class business and tradesmen first began to infiltrate the predominantly upper class social worlds of Queenscliff and Sorrento, the socially elite sought refuge in the "cult of gentility", whereby ones status was of utmost importance and was maintained by the performance of rituals associated with one's holiday, such as promenading, concerts, soirées, grand balls, fine dining, use of smoking, ladies and reading rooms, and extensive bathing. The pier was seen as a particularly important place to see and be seen in 1909, and was frequented by stylish fashionable people and the military alike. (Inglis 1999:73-8, 85).

Of particular note, status within the holiday makers' community was displayed by the standard of different accommodation used. Residence in one of the grand hotels which overlooked the water also overshadowed the lower class accommodations of the guesthouses and cottages (i.e. status is reflected in height above ground/views and grandeur). Visitors' books were used as much to observe status of former clientele, but also to record your own as a previous guest. Prestige was further gleaned from owning one's own marine villa, which symbolised wealth; at Queenscliff these included El Tambo, The Ridge and Mt Edgecombe (Inglis 1999: 81-2).

The influx of lower class tourists to Queenscliff from the 1880s onwards effectively lowered the social tone of the tourist trade, and hence the status of a Queenscliff holiday dropped accordingly. The often raucous nature of the new breed of tourists effectively deterred not only the socially

conscious classes from holidays in the region, but also family groups, as violence, drunkenness and vandalism began to permeate the town (QS 26/11/1892). This was a time of great forced intermingling of the classes [JG]. Wealthy families began to move further afield in search of more isolated (and socially acceptable) holidays at more remote areas like Lorne (Inglis 1999:94).

Many of the poorer or lower class Queenscliff residents (particularly the fishermen) were also excluded from the tourism facilities. Many residents could not afford to enter the more expensive hotels, and one resident declared that the hot water baths were never used by fishermen's children as they were too expensive [JM]. This led to differential access to some areas of the town, and introduced further class distinctions similar to those outlined above that were imposed on the poorer permanent members of the community. This will be discussed in further detail in Chapter Eight.

Furthermore, the introduction of convalescent homes for sick children also led to exclusionary landscapes in those areas in times of epidemics, as local children were forbidden from playing in those regions for fear of them being exposed to the diseased polio victims.

> Santa Casa and Cottage by the Sea were both full of convalescent polio children… If there was a polio scare you were not allowed to go to school. [JP]

This is succinctly demonstrated by the marginalisation of these two adjacent facilities at the very edge of the township, which was a form of pseudo-quarantine that enabled sick children to still enjoy a holiday whilst isolating them from the township's general population. In this case the space between these features and the township formed a cognitive protective barrier, as did the space around the buildings themselves that separated the facilities from the adjacent roads (see Figures 6.25 and 6.26).

D) Frontier Tourism Landscapes

It can be seen above that the tourism landscapes gradually progressed from central Melbourne to extend to the extremities of The Bay, and this can be clearly seen by the spatial progression of bathing complexes towards the Heads over time (see Figure D-1.38). Originally the wealthy classes chose Bay resorts as an escape from exposure to the lower classes, and as a demonstration of gentility embodied in one's ability to achieve/afford that escape. The remoteness of the township from Melbourne ensured that the social hierarchy was maintained. When decreased

transport costs brought the working class reality of the metropolis to Queenscliff, most of the elite simply moved to more remote locations.

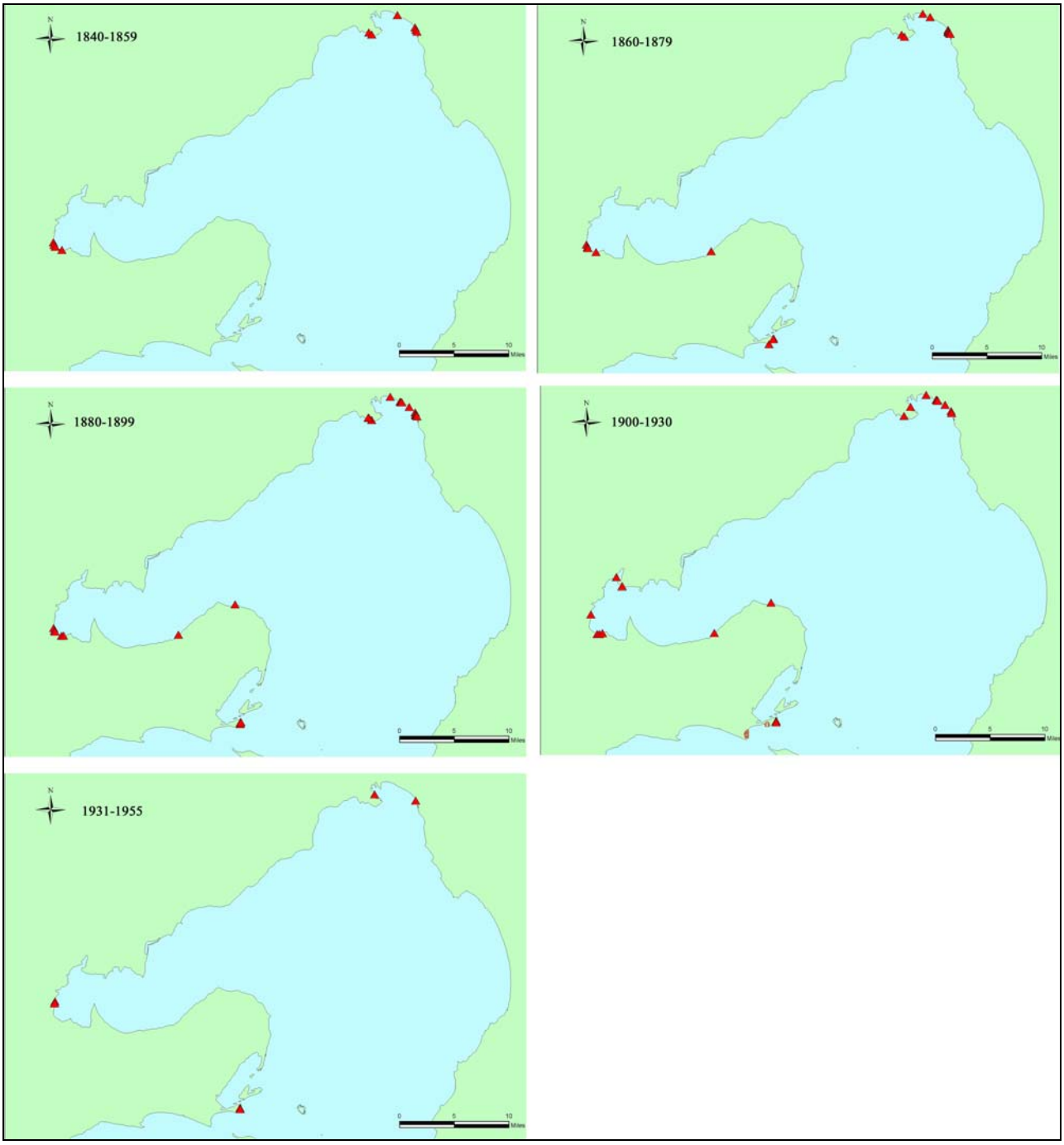

Figure D-1. 38: Bathing landscapes of Port Phillip Bay.

Furthermore, the demonstrated preference of the lower and middle classes for remote bay side holidays in preference to Melbourne resorts (QS 18/9/1897) suggests that the crux of their

tourism experience may have lain in their escape from the monotony of everyday life. Again, as more efficient transport lessened the perceived distance between their working and holiday lives, they moved further afield in search of more remote areas, which led to the opening of many resorts along the Western Victorian coastline.

Even within the Queenscliff holiday experience, many tourists sought remote areas on the frontier of Queenscliff itself such as at the Mud Islands, Swan Bay, Swan Island, Pt Nepean to escape the holiday societal culture (Beavis and Raison 1982:9). This situation is still true today, where backpackers endeavour to find even more remote locations to explore. It is possible that the less remote a destination is, the less its popularity will be, as it will become perceived as an extension to the mundane landscape of everyday life, and hence loses its appeal as an escape from it. It is therefore postulated that each time suburbia began to overlap with holiday landscapes, the tourist destinations would change. These observations suggest that the space between the tourist destination and the metropolitan area is significant, as it acted as a liminal region that separates mundane everyday life from the holiday experience. The visitor is temporarily transformed into a tourist, where there is a shedding of responsibility and cares. When the tourists again depart for home, they return to everyday life refreshed and in a sense born anew to again resume their daily responsibilities.

E) Traditional Ancestral Tourism Landscapes

Queenscliff has always relied on tourism from the gold field areas, particularly from the Ballarat and Bendigo regions (QS 22/7/1893), in addition to the trade from western region farming districts. Community members from these areas were predominantly affluent and desired the traditional seaside holiday so favoured in Britain. They often expressed their strong sentiments for Queenscliff and the welcome they received there (QS 13/8/1887), and responded favourably whenever collections were made for heroic deeds that were seemingly unrelated to their region (e.g. lifeboat service). The close ties established between these communities eventually led to the sporting competitions between those regions and Queenscliff, with sporting teams regularly sent to those areas (e.g. QS 30/11/1907). Reciprocally, when children from the Ballarat Orphans Society arrived on an excursion in 1890, full and free access to the municipal baths was afforded to them (QS 15/2/1890).

Many informants indicated that families from Ballarat and Bendigo would book the same accommodation in advance each year for the next annual holiday, or would return for every year to the same location for their holidays [CA; DS; PF; WN]. The practice of a habitual holiday destinations was (and still is) a common practice in this and many other Victorian coastal regions, where families have returned to the same location for over 50 years (Inglis 1999: 85-6; Wells 1982:132). At a recent meeting of the Geelong Historical Society, the author witnessed many people speaking of these types of repeated coastal holidays, the events that took place there, and the meaning of landscapes features to them. This suggests the presence of ancestral tourism landscapes, where families are introduced to, and educated about, their kin's holiday regions and the familial understandings and meanings attached to them. This observation is notable, as it suggests that permanent residence in an area is not a prerequisite for the formulation of cultural landscapes, as places can still have conations and meaning that stretch back several generations.

Furthermore, the existence of traditional coastal holiday destinations, which not only provided accommodation but also for other forms of entertainment, is reminiscent of the traditional British seaside holiday (Inglis 1999:29). English seaside holidays resorts were initially constructed to cater for similar health reasons, but later developed into cheaper holiday destinations that offered communal accommodation along with catered entertainment, and a variety of other attractions, which included bathing, promenading, carnivals, lighthouses, bands, joyrides and many other activities (see Pearson 2002) that were similarly available at Queenscliff, and many of the other resorts around The Bay. Although Queenscliff never appears to have engaged in the sideshow spectacles that were so common in the UK (which have also been adopted by some Mornington Peninsula tourist towns e.g. Mornington), the evolution of the town does have remarkable similarities to its British counterparts. Given the abundance of immigration from Britain in the nineteenth century, the Queenscliff tourism ventures may therefore exemplify a transported tourism landscape, where tourists and tourism operators alike sought to recreate aspects of their traditional homelands in the new colony.

F) Gendered Tourism Landscapes

Even within the tourism experience there appears to have been a gendered landscape, and this was most obvious in the segregation of women and men within the bathing structures. This was evidenced by the evolution of new material culture in the design of the baths (complete with segregated paddocks or access times; modesty screens in the form of enclosed paddocks with

removable pickets between piles; and restricted bathing rooms) and later enclosed bathing boxes and/or bathing machines to protect the modesty of female bathers. As attitudes to mixed bathing were relaxed, so too did the rigidly defined social structures associated with intermixing of the sexes. Mixed bathing led to the gradual blurring of the differential swimming landscapes between men and women, and also led to the evolution of new material culture in the adoption of new forms of swimming costumes and new forms of water sports such as surfing (Wells 1982:95-116).

However, within the tourist world, women and men were also commonly segregated in hotels via smoking and lounge rooms, public and ladies bars. Furthermore, men were often free to engage in nude bathing and sporting pursuits such as hunting and fishing, that frequently excluded female participation, especially in the mid to late nineteenth century where it was recorded that women were more prone to undertake croquet, archery or shell collection (Inglis 1999:90).

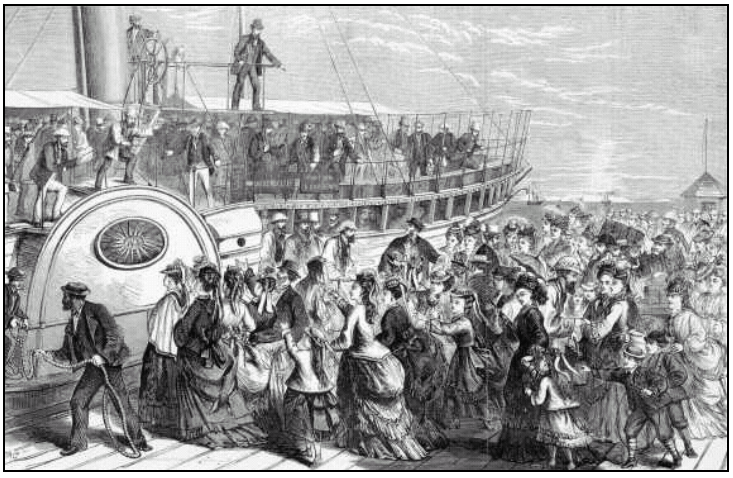

Figure D-1. 39: "Seaside Sketches - Arrival of the Husbands Boat at Queenscliff", 1874 (Calvert, IAN 25/2/1874, SLV Collection).

Although numerous wealthy families stayed in Queenscliff for extended periods, many husbands were forced to either abscond or return home for work commitments, and therefore only holidayed at weekends. Inglis (1999:90) has suggested the predominant presence of upper and middle class women at holiday resorts, especially during weekdays, may have further contributed to the upholding of genteel behaviour as Victorian women of their status often were the guardians of notions of conduct and decorum. Additionally, these situations often led to scenes of despair and jubilation (Figure D-1.39), as husbands respectively departed and returned from Melbourne at the beginning and end of each week, and the women were left to fend for themselves and their

children for the week alone (see Dod 1931:19). This further highlights the gendered differentiation and multivalent perceptions associated with the piers and railway stations as significant landscape features within the tourist landscape.

Furthermore, the guesthouse tourism industry was experienced differently by the genders as it appears to have been predominantly run by the women of the town, who also were heavily involved as staff such as maids and waitresses [CA; DS; JM; PF; WN]. Tourists and tourism therefore offers the best evidence encountered for the gendered landscapes of women in the Queenscliff area, which are readily accessible through both archaeological and historical evidence.

5) Discussion

The study of the tourist theme has relied heavily on archaeological and historical as evidentiary sources, which further exemplifies the foreign nature of these landscapes within the local area. Where local oral histories and ethnography were accessible, they were more likely oriented to the viewpoint of the local community than the sightseers, and hence in many cases presented a tourism, rather than a tourist perspective. Given the hindsight derived from the data collected, perhaps a more efficient way to have accessed tourist perspectives of the township would have been to canvass families in Ballarat, Bendigo, Geelong and Melbourne who have habitually holidayed in the region. However, this point is significant as it highlights that tourist landscape may never be personally accessible within a specified study region itself, as by definition tourists are foreigners to the area. This was reflected in the dearth of oral histories and ethnography (from the visitors' viewpoint) that were available in the area. The only sources in this respect that were accessed derived from Geelong residents with whom the author was already cognizant through personal connections. Without these sources, investigation of the tourist perspective would have been problematic.

Tourism has been demonstrated to have played a pivotal role in the shaping of Queenscliff. It has influenced the development of the township since its very inception, and has led to the provision of many essential services. Many extant structure and archaeological sites still exist today that characterise the effects of tourism in the area. These include accommodation buildings, piers, baths remains, but also less obvious structures such as sand groynes, seawalls, shipwrecks and even seemingly natural features such as eroded/ prograded beaches. These sites provide tangible

evidence of the importance of tourism in the evolution of the settlement. It has also been demonstrated that even seemingly natural places, such as bathing holes, beaches and other undeveloped regions have cultural significance and are the foci of complex social/cultural meanings.

Cognitive landscapes have also been shown to be integral components of tourism landscape development. Tourism has also been shown to be driven by ideological notions of health that influenced not only the development of many coastal townships as health resorts around The Bay, but also those nationwide. Furthermore, folklore and legends have been shown to be powerful determinants in the construction of local tourist landscapes, as they often create cultural landscape features which might otherwise be of little interest to tourists as "natural" places. These tales are important components of tourism landscapes, as they also allow sightseeing operators to both exploit and entertain tourists, whilst also distinguishing social divisions between those who have access to the truth available in local knowledge and those who do not. This observation further demonstrates the existence of both tourism and tourist landscapes within the area, where the same region is experienced differentially based on the origins of the participant, and even non-residents of Queenscliff can experience ancestral landscapes based on continued and hereditary tourism practices, knowledge and perceptions.

More importantly, it has been shown that tourism has affected the very fabric of the community, through the transportation of hierarchical social structures that used restricted access to tourist facilities based on initially on wealth and later class, and the use of empty space as a tool of social separation to reinforce the social status quo. Tourism in the middle nineteenth century was therefore a social structuring agent that both reflected and reinforced the notions of social class distinction at that time. Furthermore, it has been demonstrated that tourist landscapes often represented escape from the mundane reality of the metropolis which was embodied in the space between the holiday venue and the homeland, and therefore this empty space was a significant component of a tourist's landscape. In the poorer classes, the journey down The Bay was symbolically utilised to shed the restraints of socially accepted behaviour that was required in the city, and to indulge in conduct outside the social norm. Furthermore, empty space was locally used as a tool to facilitate social interaction through the provision of public parks, and may have even been used to separate the upper class tourist (residents) in the township, from the daily visitors.

The socially restrictive standards of acceptable bathing practices have also driven the changing nature of tourist landscapes. It has been shown that as segregations between sexes were relaxed, and tourist landscapes expanded beyond the restricted framework of the enclosed baths to embrace open sea bathing. These practices led to a twofold redefinition of coastal tourist landscapes beyond the former resorts to open ocean areas, and to the disbandment of the gendered divisions of bathing landscapes.

Tourism also responded in surges and falls to other landscape users which have not been further addressed here. Military occupation of tourism areas often restricted tourism access, and vast crowds were often drawn to the area in response to wrecks. These factors are discussed further in Chapters Seven and Eight.

The structuring of tourism landscapes varied markedly to defence landscapes which are directed by technological developments and political events. Tourist landscapes have been driven largely by social phenomena, such as ideologies of health, class, escapism and gender segregation, many of which reflect similar practices in ancestral homelands. However, they were also heavily determined in their locations by the environment, through the placement of tourism facilities beside suitable natural tourism features, but also by changes in topographic environmental features (such as the deposition and erosion of beaches). The study of tourist landscapes therefore presents an opportunity to also investigate the ideological frameworks that underpinned Victorian society, and is therefore is a crucial theme for the examination the maritime cultural landscapes of any society.

Appendix D-2: Bay Steamers Ferries

1) Bay Steamer

Queenscliff has always been heavily reliant on Bay Steamers for tourism patronage and supplies for the town.

A) Express

In 1854, Capt Howard Smith brought the schooner rigged steamer express from England to Victoria, and the Port Phillip Bay Steamer Trade was born. She was used in the Melbourne to Geelong Trade for many years as the principle carrier on that run. The vessel was sold to his Geelong agent, T.J. Parker in 1862, who used it to form the Express Steam Agency, and was replaced by the *Despatch* in 1869 (Fitchett 1973:1-2).

B) Black Eagle

Around the same time that the *Express* ferry was established, a small paddle steamer tug, the *Black Eagle*, established a service to St Kilda, Brighton and Mornington, and was later joined by many other craft that provided regular ferries for weekend travellers. She was brought to the colony by Dove and Oswald, but sold to James Deane in 1872. She ended her life when she sank at the St Kilda Pier in 1884. She was removed from alongside the pier to be broken up around that time (Fitchett 1973:4, 22).

C) Despatch

The *Despatch*, which had been sent from the Clyde in 1869, was very successful in the Bay Trade and led to the formation of the Huddart Parker Company. The vessel was replaced by the steamer *Alert*, and was chartered by the government as a lighthouse tender. She later became a ferry used for trips to the Gippsland Lakes, but still offered weekend trips to Queenscliff (enroute to Gippsland) returning on Tuesday (QS 26/5/1894). She was eventually sunk at Lakes Entrance in 1911(Loney 1971:94).

D) Empire

The *Empire* was the first government schooner that was used by the Harbour Master. It was replaced by the *Pharos* in 1867. It was the first vessel to service Queenscliff, and provided for the lighthouse service, pilots and boats crews at the Bluff (Noble 1979:37). By 1853, the area began to be recognised as a potential township location, which was sorely needed to provide for the needs of the pilots. As smuggling and duty avoidance were rife during this time, a Customs Officer was stationed there, along with a Health Officer and their respective six boat crews. All of the men at this time were married, and their families' needs had to be catered for, and eventually money was allocated to construct houses for them. The *Empire* was engaged regularly to convey men and materials to Shortlands Bluff (Cuzens 1912:1).

A pier was eventually built on the later location of the Fishermen's Pier to a depth of 9ft, to service incoming vessels and the boats stationed there. It connected via a raised plank road that extended to the current Gellibrand St. The road was used for about ten years, until a programme of organised roadworks was undertaken when the Queenscliff Borough was proclaimed (Cuzens 1912:1).

Queenscliff was recognised as the gateway to the Colony, through its provision of pilots and the navigation lights located there. It also provided the first point of contact to the outside world, as

the first mails from incoming overseas and interstate vessels were transferred here, which led to the establishment of the first telegraph service outside Melbourne and Geelong (Cuzens 1912: 2).

E) Aphrasia and *Vesta*

By 1851, the paddle steamers *Aphrasia* and *Vesta* operated services between Geelong and Melbourne. George Cole, a local St Leonards landowner, later purchased the *Vesta* to establish a steamship service to Melbourne attract buyers to his seaside resort. Cole purchased the hulk of the St George in 1853, which had stranded at Swan Island, and used it as a landing stage for the *Vesta* at St Leonards. This service was extended later to Queenscliff and Portsea, and the channel from St Leonards to Portsea was named Coles Channel (Noble 1979: 42-3).

When the government took over the cattle station lease at Shortlands Bluff, the steamship service and established a road to Geelong, Queenscliff was also established as a seaside resort (Noble 1979: 43).

F) Temporary Bay Excursion Steamers

During the late nineteenth century, many coastal steamers joined the bay excursion trade to take advantage of the huge demand during the summer season and other public holidays. The coastal steamers *Elingamite*, *Nelson* and *Leura* all offered services to Snapper Point, Sorrento and Queenscliff, and even tugboats (eg *Sprightly* and *Resolute*) were licensed to carry passengers, in addition to smaller trading vessels such as the, *Casino, Dawn, Onion, ,Maitland, Manawatu, Murray, Vesta,* and *Wyrallah.* Services were run to St Kilda, Brighton, Portsea, St Leonards, Point Henry (outer Geelong), and Werribee (Fitchett 1973:24).

G) Mystery

This paddle steamer tug was engaged as a ferry to Geelong from Melbourne whenever tug boat work was unavailable. She operated between 1867-1872 (Fitchett 1973:3).

H) Williams

The first regular passenger first class service to Queenscliff, Sorrento and other southern towns began in 1872, when the *Williams* was placed on that run. This paddle steamer was specially converted for that trade, and made her first trip to Queenscliff in November 1872. She proved a popular service until the introduction of the faster and larger vessels *Ozone* (1886) and *Hygeia* (1890). The steamer was sold for scrap when she was unable to compete in 1894 (Fitchett 1973:4).

I) Golden Crown/ Lonsdale

The *Golden Crown* was a paddle steamer specifically built in New Zealand for tourist excursions in 1874 for the Sorrento and Queenscliff Steam Navigation Company. It rivalled the *Williams* for competition, and both vessels were around the same size and speed and could hold just over 200 people. A special train was provided by the Melbourne and Hudson Railway Co. from Melbourne to Sandridge to meet the vessel on Sundays. Another steamer, *Lonsdale*, was purchased by the company in 1883, which changed its name to Port Phillip Steamship and Hotel Company. The *Lonsdale* was purpose built for the trade by James Deane, but when she proved too slow she was sold to the Port Phillip Steamship and Hotel Company, who rebuilt her. When the company experienced difficulties when new faster vessels were introduced to the trade (i.e. *Ozone* and *Hygeia*) both vessels were repossessed by the bank. The *Golden Crown* was broken

up for scrap sometime after 1888, but the *Lonsdale* remained in service until 1889, after which time she suffered the same fate (Fitchett 1973:4, 8, 30, 31,39).

J) Queenscliffe

A new steamer, the Queenscliff was introduced into the Bay Trade in 1876, and ran from Melbourne to Portsea, Queenscliff, and Portarlington return (Wynd 1988: 130).

K) Alert

The steamer *Alert* arrived in Port Phillip in 1878, and was purchased by the newly formed Huddart Parker Company to replace the *Despatch* on the Geelong run. The vessel regularly stopped at Portarlington and operated until 1893, when she was placed on the Gippsland trade. The vessel foundered off Cape Schank during a coastal voyage (Fitchett 1973:3, 33).

L) Edina

Howard Smith again entered the Bay Steamer Trade in 1875, when he purchased the *Edina*. The vessel had been first brought to Victoria in 1862 to establish a service between Melbourne Portland and Port Fairy, and was later used for trans-Tasman Sea voyages. The vessel was refitted for the Bay Steamer Trade in 1880, when she began a service between Melbourne and Geelong via Portarlington. She was eventually forced to retire in 1938, after road transport led to decreasing passenger numbers, and after becoming a lighter (*Dinah*) was broken up in the Maribyrnong River (Fitchett 1973:2, 6, 7; Duncan 2004a:111).

M) Excelsior

The excursion trade was well established by the 1880s, which led Huddart Parker and Co. to commission a new steel screw steamer, the *Excelsior,* in 1883. The vessel was involved in two mishaps, the most famous being the collision with the Edina, where she was sunk off Pt Gellibrand in 1897, but when raised was returned to the run until 1919 when she was dismantled (Fitchett 1973:7).

N) Ozone/ Courier

This paddle steamer was introduced by Bay Steamers Ltd in 1886, and was known for a short time as the greyhound of the bay, as she was exceptionally fast compared to the other bay ferries. This title was threatened by the introduction of the Huddart Parker screw steamer *Courier* in 1888, which advertised that they were contenders for the title. . This led to great competition between the two vessels, despite the fact that they traded on different routes. The *Courier* was designed as an ocean going vessel, and at the request of the Victorian government incorporated 14 pound Nordenfeldt gun platforms on her bow for use in time of war, although the guns were never fitted (Fitchett 1973:7-11, 42). The *Ozone* was sunk as a breakwater at St Leonards after it was dismantled in 1925 (Foster 1988:55). The *Courier* was stripped and scuttled in the ships graveyard in 1928 (Duncan 1994).

O) Coogee

By 1890, the Huddart Parker Company had purchased a new vessel, the *Coogee*, which operated between Melbourne and Launceston and in the Bay Excursion Trade. The vessel was used in the Melbourne to Launceston trade fro 1890 until 1910, when she was re-introdcued to the Geelong excursion trade. The *Coogee* was inducted into the Australian Navy in the final years of WWI. In 1928, the stripped hulk was sunk in the Ships Graveyard Area (Fitchett 1973:11, 14, 44; Duncan 1994).

P) Hygeia

The arrival of the paddle steamer *Hygeia* in 1890 coincided with the peak years of the excursion trade, which lasted for forty years. Eight vessels were engaged in the trade (*Hygeia, Ozone, Coogee, Courier, Edina, Alert, Williams*, and *Excelsior*), with the same number twenty years later (the *Alert* and *Williams* had been replaced by the *Weeroona* and *Charlotte Fenwick*). By 1930, there were only four vessels in the trade. The vessel was heavily involved in the annual picnic trade, and once took farmers from Werribee to Sorrento in 1916. Many of the crew made extra money selling the empty bottles from the bar, which were stored in the chain locker. On one rare occasion the vessel had to anchor after its rudder chains were damaged, and the crew frantically rushed to the locker to save their stash while the mate stalled the Captains orders. The vessel was later scuttled outside the heads, after nearly wrecking at Pt Nepean when her towline parted, and ended up ashore near Rosebud. The *Hygeia* was of light steel construction, as (apart from her delivery voyage where she was reinforced with timber braces) she was never destined to be used in open sea conditions (Fitchett 1973: 15-8, 46-7).

Q) Weeroona

The *Weeroona* was the biggest vessel ever involved in the Bay Steamer Trade in 1910. She was lavishly appointed and specifically built for the excursion trade, and was fitted with lounges, dining rooms, bars, a hairdressing saloon and bookstall. She was used in the bay trade until 1942, when she was sold to the US Navy during WWII, and ended up as a stripped hulk before being dismantled in Sydney in 1951. With the passing of the *Weeroona* the bay excursion trade declined, and was the end of an era in the minds of many locals (Fitchett 1973:18, 56).

R) Charlotte Fenwick/ Awaroa/ Reliance

Several smaller vessels continued the passenger cargo service on the bay for many years. The *Charlotte Fenwick* was a small screw steamer that operated on Port Phillip Bay from 1903-1913 servicing the needs of the tourist resorts of Queenscliff, Sorrento and Portsea.. Until this time the seaside towns had relied on passing small steamers and ketches to drop supplies off enroute. It was an essential service in winter, when the other bay steamers did not operate and left the towns virtually isolated. The *Awaroa* replaced this vessel in 1915 until 1918, and a third vessel, the *Reliance*, came into service on the same run in 1916, until it retired in 1943, when she was sent to Westernport Bay as a ferry. Meeting the local steamers became a major social event for seaside residents, who came down to the piers to meet passengers, collect cargo and generally mingle (Fitchett 1973:18, 52,53). The *Awaroa* was eventually used in the Melbourne to Launceston run and foundered off Cape Liptrap in 1925 (Loney 1971:84).

S) Sorrento

With the passing of the *Weeroona*, the bay excursion trade entered its twilight years. The former captain of the Weeroona tried to resurrect the trade when he formed the Port Phillip Ferries company in 1946. A smaller screw river steamer was purchased from Tasmania and renamed the Sorrento, but proved too slow and small for a public used to the former luxuries of the excursion steamers, and was sold to interests in Sydney in 1949 (Fitchett 1973: 18).

T) M.V. Judith Ann/ Komuta/ Weeroona/ Hygeia/ Nepean

After the closure of the last Bay Steamer Ferry in 1942, there was a sorely felt need for cross Rip ferry services to link the Bellarine and Mornington Peninsulas. From 1953-1965, the Cayser Brothers of Queenscliff built five motor driven ferries (*M.V. Judith Ann, Komuta, Weeroona, Hygeia, Nepean*) for services between Queenscliff, Sorrento and Portsea. These vessels provided a vital link between the three communities, which had previously been linked by ferry service for at least 100 years. The *Judith Ann* was originally built as a shark boat, and

began service in 1953, when it was converted to a ferry. Increased demand led to its replacement by the *Komuta*, in 1955, and another vessel (*Weeroona*) was added to the run in 1958. Further larger ferries capable of carrying twice as many passengers were added in 1962 (*Hygeia*) and 1965 (*Nepean*) to cope with increased patronage. The operators, Sorrento, Portsea and Queenscliff Ferries, was run by the Farnsworth Brothers, whose family had a long association with tourism on the Mornington Peninsula, and once operated a horse drawn coach service from Sorrento to Portsea to meet incoming steamer services (Fitchett 1973:81-2, 94-5). Two vessels, the *Hygeia* and *Nepean* were still operating in 1995, but were facing closure due to competition from the Queenscliff – Sorrento car ferry.

2) Changing Excursion Boat Landscapes

In the early days of the colony, small sailing and steam vessels were used to transport supplies and occasional passengers around the bay. However, as the popularity of excursion trips increased, the size of the vessels grew to gigantic proportions, until they were disappeared over the short period of twenty years, predominantly due to the rise of road and rail transport networks (Fitchett 1973). These vessels were eventually replaced with smaller locally built vessels to provide ferry services across the Bay entrance.

An archaeological study of the varying size of the vessels gives significant indications of regarding the changing preferences of the public for this activity over time. Initial craft are smaller paddle steamers originally designed for cargo transport, where passenger conveyance is incidental. Over time, the design of the craft is more focussed on the passenger comfort, and designs encouraging increased speed and size are favoured. At about this time, there was a reversion to moderately sized craft again, that were involved in passenger and cargo deliveries. However, with the decline of the eminence of the bay excursion trade, vessels designs size are reduced abruptly, and become more squat but sturdy vessels used for short cross channel voyages only. These vessels again slowly increased in size as passenger demand grew. The current use of large car ferries is indicative of the significance of these cross channel ferries to the local community.

The predominant use of steamers on the Geelong to Melbourne run is indicative of the relatively deeper waters encountered between those two area, whereas the use of paddle wheel steamers between Queenscliff and Melbourne recognises the shallow waters to be traversed at the Yarra River Delta. Lighter drafted vessels were required to operate in the shallower waters around the peninsula tourist pier (QS 22/6/1889).

The bay steamer ferry routes present insights into the changing tourism landscapes of Port Phillip Bay. Initial tourism was conducted from Melbourne to Geelong, and these were predominantly predetermined by the lack of other destinations. However around the beginning of the 1850s, tourism reports began to prosper originally at St Leonards and Queenscliff, and then later at Sorrento and Portsea, and Portarlington and Clifton Springs. The popularity of annual picnics replaced the previous fervour for healthy air, and many more destinations arose, particularly on the eastern side of the bay at Carrum, Rosebud, Dromana and Mt Martha. As attitudes to recreational holidays changed and terrestrial transport networks developed, ocean sea bathing became more popular as holiday makers were no longer constrained by the confines of the resorts, and tourism destinations along the open coastal beaches became more popular. After the disappearance of the Bay Steamers, the two peninsulas again became isolated from one another, necessitating a 130 mile trip by road to get to the other side (Fitchett 1973: 82).
However, the introduction of localised cross Rip ferry services from 1953 onwards reconnected the tourist landscapes again, leading to another bay excursion trade this time across the strait. This has changed the tourist and working landscapes of many Geelong and Mornington Peninsula residents, as now Melbourne is no longer an essential component of the tourist landscape, as the ferries avoid the need to pass through there.

Archaeological deposits were no longer centred on the piers, but along the open foreshore areas. The presence of bathing boxes, timber sand groynes, seawalls and promenades at Pt Lonsdale confirms this observation.

3) Table of Bay Steamer Ferries and Destinations

Bay Steamers	Date Start	Date Retire	Type	Fabric	Tons Gross	Comments	Owner	Geelong	Clifton Springs	Portarlington	St Leonards	Queenscliff	Sorrento	Portsea	Rye	Mornington	Brighton	St Kilda	Melbourne
Aphrasia	1851		paddle steamer					x											x
Vesta	1851		paddle steamer					x											x
	1853					To promote St Leonards resort	George Cole				x								x
	later										x	x		x					x
Empire	1853		governme nt schooner			provided building materials to Queenscliff	Govern-ment					x							x
Express	1854	1862	screw steamer	iron	199		Howard Smith	x											x
	1862					replaced by the *Despatch*	T.J.Parker - Express Steam Agency	x											x
Black Eagle	1854	1872	paddle steamer tug	timber	110		Dove and Oswald									x	x	x	x
	1872	1884					James Deane Co												
Mystery	1867	1872	paddle steamer tug	timber	105	replaced by the *Williams, sporadic services to Qcliff*	James Deane Co	x		x									x
Despatch	1869	1878	Screw Steamer	iron	237		T.J. Parker	x											x
	1894	1911				Gippsland Trade via Queenscliff	Huddart Parker Co					x							x
Williams	1872	1894	paddle steamer	iron	322	replaced *Mystery*, retired when *Ozone* and *Hygeia* introduced	James Deane Co					x							x
Golden Crown	1874	1888	paddle steamer	timber	330	new service - Jame Deane owner	Sorrento and Qcliff Steam Nav Co					x	x						x
	1883	1888				company changes name , later liquidates	Port Phillip Steamship and Hotel Co					x	x						x
Queens-cliffe	1876									x		x		x					x
Alert	1878	1893	screw steamer	iron	243	replaced *Despatch, based on Clyde Steamers- retired to Gippsland Trade*	Huddart Parker Co	x		x									x

Appendix D-2: Bay Steamer Ferries

Edina	1880	1938	screw steamer	iron	322		S.G.Henty	x		x								x
Lonsdale	1883	1889	paddle steamer	steel	551	slow vessel - leads to conversion	Port Phillip Steamship and Hotel Co					x	x					x
Excelsior	1883	1919	screw steamer	steel	350	collision with Edina	Huddart Parker Co	x		x								x
Ozone	1886		paddle steamer	steel	572		Bay Excursion Co					x	x					x
	1917	1925					Bay Steamer Ltd											
Courier	1888	1927	screw steamer	steel	762	scuttled ships graveyard	Huddart Parker Co.	x		x								x
Coogee	1889	1928	screw steamer	steel	762	Melb-Launceston	Huddart Parker Co.											
	1910					Geelong excursion trade		x										x
Hygeia	1890		paddle steamer	steel	987		Huddart Parker Co.					x	x	x				x
	1917	1931					Bay Steamer Ltd											
Charlotte Fenwick	1903	1913	screw steamer	timber	73	same construct-ion as *Awaroa* and *Reliance*	Carpenter Brothers					x	x	x				x
Weeroona	1910		screw steamer	steel	1410		Huddart Parker Co					x	x	x				x
	1917	1942					Bay Steamer Ltd											
Awaroa	1915	1918	screw steamer	timber	352	same construction as *Charlotte Fenwick* and *Reliance*	Sorrento and Qcliff Steam Nav Co					x	x	x				x
Reliance	1916	1943	screw steamer	timber	158	replaced *Charlotte Fenwick* , same construction as Charlotte Fenwick and *Awaroa*	Carpenter Brothers					x	x	x				x
Sorrento	1946	1949	screw steamer	timber	113		Port Phillip Ferries					x	x					
M.V. Judith Ann	1953	1955	shark boat	timber		sharkboat built by Cayser Brothers	Portsea, Sorrento and Queenscliff Ferry Service					x	x	x				

Appendix D-2: Bay Steamer Ferries

M.V. Komuta	1955	1965	motor ferry	timber		built by Cayser Brothers	Portsea, Sorrento and Queenscliff Ferry Service					x	x	x					
M.V. Weeroona	1958	1972	motor ferry	timber		built by Cayser Brothers	Portsea, Sorrento and Queens-cliff Ferry Service					x	x	x					
M.V. Hygeia	1962		motor ferry	timber	55	built by Cayser Brothers	Portsea, Sorrento and Queenscliff Ferry Service					x	x	x					
M.V. Nepean	1965	2004	motor ferry	timber	68	built by Cayser Brothers	Portsea, Sorrento and Queens-cliff Ferry Service					x	x	x					

Appendix D-3: Local Folklore Used For Tourism Promotion

1) Buckley's Cave

William Buckley was a former convict who escaped from the Sorrento colony in 1803 and made his way around or across Port Phillip Bay to become the first non-Indigenous resident of the Queenscliffe area. He lived with the local indigenous population (Wathaurong) on the Bellarine Peninsula [where he was believed to be one of their descendents come to life again (due to the colour of his skin (Blair, as cited in QS 23/7/1909)] until 1835, when he discovered Batman's exploration party at Indented Head. Buckley received a free pardon for his role as interpreter and peacemaker between the explorers and the Indigenous people.

A large cave located beneath the current Pt Lonsdale Lighthouse has always been known as Buckley's Cave. It was touted by Sutherland's (1888b:158) history of Victoria as "a stalactite formation, a natural curiosity well worth a visit". The exposed location of the sea cave make it doubtful that this feature was ever inhabited, given that many sheltered areas from the wind and rain exist are located just behind the primary dune less than 50 m away. In 1890, strange discoveries were reported at the cave in the shape of a petrified body uncovered when waves scoured out the cave, and it was insinuated that the government had tried to suppress news of the discovery (QS 27/9/1890). This attempt to inspire a conspiracy regarding the site may represent active attempts by tourism operators to attract visitors to the area. The cave may or may not have been home to Buckley, but newspapers stated that it: "was of interest to both visitor and townsman" (QS 23/7/1909). Given that Buckley was known to have lived in this area, the cave provided a tangible anchor for the romantic tale, which could then be exploited as a focus for tourism operations. The legend of Buckley still plays an active role in the area's tourism, and is the subject of a heritage trail around the Bellarine Peninsula.

2) Benito Bonito's Treasure

Benito Bonito was a Portuguese pirate who plundered a series of ports along the South American Pacific coast in the early nineteenth century. Historical accounts and legends record that he ransacked the annual Spanish gold shipment from Mexico City to Acapulco around 1821, a fortune said to be worth eleven million dollars. He stashed the proceeds in a cave on the Cocos Islands, near Costa Rica, and after a hostile disagreement with some of the crew, he abandoned them and sailed of in his vessel the *Relampago*. Later that year, he was supposed to have committed suicide during an engagement with a British corvette to avoid capture. Between this time however, Benito was blamed for the raid on another the vessel (*Mary Dear*) in which the Spanish were transporting some of Lima's riches from San Felipe to avoid capture by rebels. According to legend, rather than return to Cocos Island, he sailed around the Australian coast to Port Phillip, where he buried the treasure in the cliffs of Swan Bay in the area that was to later become Queenscliff, and upon sailing out the Heads, was chased by a Man o War and sunk. This end to the story is disputed by many historians, who maintain the Captain of the *Mary Dear* pirated the vessel himself (Hayden n.d.:9-14, 18).

At this time there were no European inhabitants in the Port Phillip area, aside from an escaped convict, William Buckley, who had escaped from a failed settlement at Sorrento in 1803 and who had lived with the indigenous peoples of the Bellarine Peninsula for the next 32 years. When he returned to "civilisation" he recounted sighting several vessels in this area, one whose crew had tied some of their shipmates to trees before shooting them. Although Buckley had tried to contact them by shouting out, he had assumed they were foreigners as they couldn't understand him. This account was used to reinforce the possibility of the pirate visiting the area (Hayden n.d.:15).

For many years, the legend has circulated in the Queenscliff community that Benito Benito was supposed to have buried a treasure along the shores of Swan Bay on the northern side of Queenscliff. Legend has it that Benito sailed his ship into Swan Bay in the 1840s, and in attempt to avoid capture and confiscation, buried his loot in a cave below the cliff face of the northern shores of Queenscliff. The story dates back to at least 1860s (Lawson 2004a) and was perpetuated by a local character, Kerosene Jack(sometimes known as Stingaree Jack), a local Portuguese/ Italian fisherman who lived on Rabbit or Swan Island (Anonymous 1938:85; Dod 1931:26). Kerosene Jack derived his name from his abode, a hut made of kerosene tins (Jurgens n.d.). He claimed to have been Benito's cabin boy /or son and to have a map of the treasure's location tattooed on his arm (Argus 7/7/1937: Van de Klouster 1980:14; [LID]), and also to have discovered the treasure, only to rebury it again in another location (Van der Klouster 1980:14). When Jack died in 1902, rumours circulated that the map was skinned from his arm and tanned, but was lost or taken out of the district, but this was contested by one resident [LID] who claimed that although there was great excitement when Jack died , no map was ever found on his arm.

Another version of the story names the fisherman as Giovanni Carossini/Karisino (Kerosene Jack), Bonito's illegitimate son, who discovered the treasure in a cliff cave on the Swan Bay foreshore, but blew it up in fear of its loss to authorities. Karisono lived on Swan Island, and enjoyed many years for free rum from those trying to glean the treasure's location. A third story was related by a convict, Mary Welch, who claimed she was Bonito's lover and therefore was transported from England to Van Diemans Land for her association with the pirate. She maintained that the pirate escaped the English to bury his treasure in the Swan Bay area (Hayden n.d.:16-7; Van der Klousten 1980:15).

Local stories have also rumoured that the local Baillieu family, one of Melbourne's wealthiest clans who lived in Queenscliff, could trace their fortune to the discovery of the treasure [PF].

Many attempts were undertaken to find the treasure, beginning with visitors and locals digging and poking around the cliffs and foreshore (Hayden, nd: 19, Anonymous, 1938). The earliest recorded search took place in 1911 when James Hillard (a friend of Kerosene Jack) uncovered a box marked "B.B." contained a compass stamped 1777, and other maritime artefacts (Hayden, 1966:15; Lawson, 2004a). Many local residents [e.g. CA] recall numerous searches for the treasure since at least the 1920s. Many syndicates were formed to hunt for the treasure, and in recent years a "copy" of the map had surfaced and been used for an (unsuccessful) search for the treasure. Serious attempts began from the 1930s onwards with the onset of the Great Depression, when several tunnels were dug under the high school, and several shafts were dug to reach the submerged cave from 1937 onwards under Mining Licences. Heavy earth moving equipment , liquid nitrogen (to freeze the water table), and explosives used in many searches often impacted on the local community, as aside from the constant noise, the earthworks size proved dangerous and local school children were often hit by glass from windows broken during blasting (Hayden n.d.: 19-21). Syndicates continued to search the area predominantly concentrated on the Swan Bay area between Hobsons and Flinders Streets using divining rods until at least 1994 (Lawson 1994:9), when the council stopped further explorations in the area. These activities further demonstrate the power and significance of legend for some sectors of the community.

Hayden (n.d.:16) maintained that the story may have been introduced from deserting sailors, many of whom were Portuguese, and may have hailed Bonito as a folklore hero whose adventures and treasure could have been transposed to include Queenscliff when recounted to their children.

The origins of the treasure story may lie hidden in factual historical events. One newspaper account detailed finds of coin hoards dating to 1816 that were discovered on Rabbit Island as early as 1909 (QS 25/9/1909), and Thompson (n.d.:8) reported that his brother also found very old coins on Swan island between 1913-1926. Kerosene Jack's story of his re-buried treasure

could have had some grounding in truth if contrasted with historical accounts of shipwreck looting and subsequent reburial of plundered items. Indeed the artefacts found by early treasure hunters could be attributable to these activities which were widespread throughout the community, as will be demonstrated in Chapter Seven. It is therefore possible that there actually **was** buried treasure in Queenscliff, but that it was attributable to a much more rational source than a long distant pirate.

The story of Bonito Benito could therefore represent an exaggeration based on actual events, which were incorporated into the local sea culture by wily old fishermen. The story also appears to have been adopted and exploited by the town as a tourist attraction. Benito story was actively exploited to bolster local tourist trade after open sea bathing became popular at the newly discovered surf beaches along the West Coast, and shifted away from Queenscliff [RL]. Some guesthouses were known to plant old coins in the area to keep the story alive [WN], and a former tourism operator [CA] commented that: "*Benito's has done no harm to Queenscliff's reputation*". This was also evident in the historical record, where an advertisement in 1938 encouraged treasure seekers to visit the town:

> *Come to sunny Queenscliff and hunt for treasure…Have a holiday and exercise at the same time and perhaps grab a million or two of gold to boot. Its yours for the digging. Don't forget your pick and shovel and Miners Right* (cited in Hayden n.d.:19)

The influx of treasure seeking visitors and syndicates to the town proved a bonus for local businesses, and charities who made collections amongst the visitors (Hayden n.d.:23). Seven thousand visitors were recorded in one weekend in 1954 when a new syndicate started work (Lawson 2004b, 12).

Although the story has interest as a social phenomenon, it also has implications for cultural landscapes studies due to the disturbance of any archaeological sites previously located in this area. Additionally, the treasure hunting searches in themselves have generated archaeological signatures that are still visible even today along the Swan Bay Foreshore. Many shafts (up to 15m deep) were lined with iron or timber, and have only been filled in by the council in recent years (Lawson 2004b). The mayor of Queenscliff in 1938 summed up the indifference of the local community towards the actual legend: *The Queenscliff treasure is like every other treasure – nobody ever finds it!* (Anon.1938:87).

3) Swan Island Treasure

In 1909, a report appeared in the QS (25/11/1909) which old time residents of the Queenscliff had long maintained that a quantity of treasure was buried on the island in the early nineteenth century by sailors who had scuttled and deserted their ship in Swan Bay and disembarked on Swan Island. The report went on to state that three months earlier, a Melbourne resident (Miss Dugan) had discovered a concreted lump of coins on the Western Beach at Queenscliff. When cleaned, coins bearing the dates 1816, 1817, 1819 and George III's head, one Queen Mary shilling dated 1845, and two Queen Victoria sixpences of 1839 and 1846 were revealed. It was also advocated that the beach where the coins were discovered had altered considerably in the last 50 years, so that it was possible that the location where the supposed treasure was buried was now underwater, and that the bulk of other coins could lay close by. A thorough search of the beach was organised by a local resident in whom Miss Dugan had confided (QS 25/9/1909). It is possible that this account was responsible for either the genesis or continuation of the Bonito legend that has endured up until the present day.

4) Local Folklorism?

These three examples demonstrate the importance that folklore plays in actively shaping tourist landscapes in this area. Although the truth behind the legends of pirate treasure and habitation in caves may be doubtful, it has nonetheless shaped the tourism landscapes, and indeed the local community landscapes of Queenscliff through their exposure to those who were seeking the sites. The legends have encoded various "natural" areas with cultural meaning, which have been actively exploited to draw tourists and thus encourage business opportunities in those areas. Given the proliferation of other tourism ventures in the surrounding region, which offered similar services and natural attractions, the presence of these additional cultural attractions added a new and exciting dimension to the tourists' experience that may have been used to give Queenscliff a competitive edge over their rivals, particularly as access to these sites were not necessarily weather dependent. It is also notable that the name Buckley's Cave was formalised as part of the tourist toponymy of the area, which in itself demonstrates the significance of this folklore as part of the local history and economy.

These tourist and treasure hunting landscapes represent only one type of landscape associated with this legend. There also appears to be secondary folklore landscapes at Queenscliff, where it is known that these legends are exaggerated, but where this knowledge is primarily accessible to the local community only. As such, there is a duality of treasure hunters/ tourist and tourism landscapes, which represent opposing perspectives of the same legend, but which is used by the latter to exploit the former. These accounts may represent what Gazin-Schwartz and Holtorf (1999:12) call "Folklorism", in which second hand introduced folklore is used for a particular agenda, in this case to have been begun to bolster tourism in the area.

Appendix D-4: Transport Zones of Port Phillip Bay

The southern portion of Port Phillip Bay conforms neatly to Westerdahl's (2000) theory of Maritime Transport Zones. Examination of the structures of many vessels revealed a number of probable transport zones in southern Port Phillip Bay. Queenscliff conforms neatly to Westerdahl's definition of a maritime enclave. It operated for many years as an isolated virtual monopoly for Pilotage, Customs, Quarantine and Health, Navigational, Hydrographic and Postal services, until these were centralised predominantly at the harbour ports of Melbourne and Geelong. However, one aspect of Queenscliff society varied from Westerdahl's prediction. Fishing was a secondary introduction to the town, after numerous other maritime services had already been established which varied markedly from the Westerdahl's model that advocated that fishing activities generally led to the genesis of other maritime industries. This was evident in other social aspects of the town, namely in that fishermen were not involved in any pilotage activities, as would be expected, due to their late arrival in the town after a specialised service had already been introduced. This situation is anomalous to Westerdahl's prediction, and sees fishermen at the bottom of the social rung, instead of potential inclusion near it zenith.

1) Bay Steamers/Piers

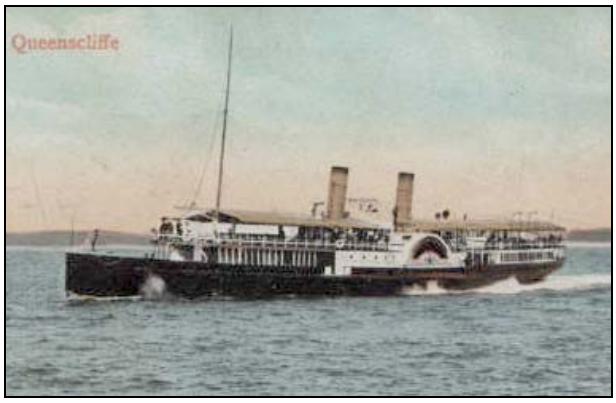

Figure D-4.1: *SS Ozone* at Queenscliff (SLV Collection).

The development of the bay steamers which were specifically adapted to meet the specific conditions of the tourism trade demonstrates Westerdahl's notion of Transport Zones demonstrated in vessel hull designs. In the early days of the colony, small sailing and steam vessels were used to transport supplies and occasional passengers around the bay. However, as the popularity of excursion trips increased, the size of the vessels grew to gigantic proportions, until they were disappeared over the short period of twenty years, predominantly due to the rise of road and rail transport networks (Fitchett 1973). These vessels were eventually replaced with smaller locally built vessels to provide ferry services across the Bay entrance.

In particular, the *Hygeia* was specifically built for the local topographic conditions of Port Phillip Bay's tourist trade, and as such archaeologically demonstrates constructional local evolution. Bay steamers were required to be shallow drafted to enable their navigation through the shallow waters alongside the southern bay steamer piers (QS 22/6/1889). The *Hygeia* was of light steel construction, as (apart from her delivery voyage where she was reinforced with timber braces) she was never destined to be used in open sea conditions (Fitchett 1973: 46).
Although much of the Bay Steamer Trade has disappeared, ferry services are still offered between Queenscliff Portsea and Sorrento, and vessels used in these services vary from smaller purpose built ferries to modern car transport catamarans.

The predominant use of screw steamers on the Geelong to Melbourne run is indicative of the relatively deeper waters encountered between those two areas, whereas the use of paddle wheel steamers between Queenscliff and Melbourne recognises the shallow waters to be traversed at the Yarra River Delta. The latter lighter drafted vessels were required to operate in the shallower waters around the peninsula tourist piers (QS 22/6/1889).

An archaeological study of the varying size of the vessels gives significant indications of regarding the changing preferences of the public for this activity over time. Initial craft are smaller paddle steamers originally designed for cargo transport, where passenger conveyance is incidental. Over time, the design of the craft is more focussed on the passenger comfort, and designs encouraging increased speed and size are favoured. Around the turn of the century, there was also reversion to moderately sized craft again, that were involved in both passenger and cargo deliveries. However, with the decline of the eminence of the bay excursion trade, ferry vessels designs size are reduced abruptly, and become more squat but sturdy vessels used for short cross channel voyages only. These vessels again slowly increased in size as passenger demand grew. The current use of large car ferries is indicative of the significance of these cross channel ferries to the local community.

2) Couta Boats

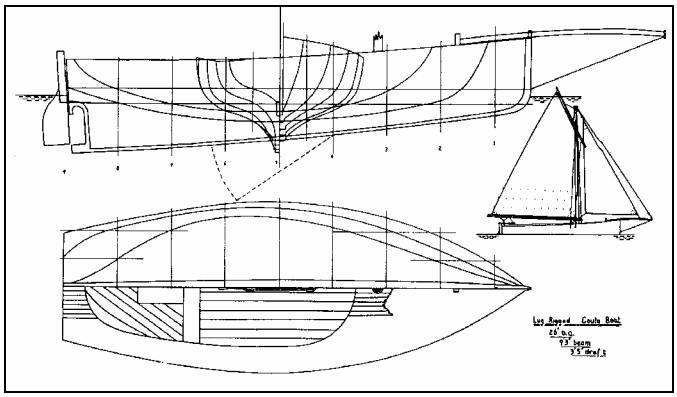

Figure D-4. 2: Couta Boat Design (In: Kerr, 1985:53).

Figure D-4. 3: Couta boats ashore between the two piers (QHM Collection).

During the earliest fishing days at Queenscliff in the 1860s, the abundance of fish stocks inside the Bay meant fishermen did not have to fish outside the heads (Thwaites, as cited in Kerr, 1985:54). Most of the early fishing boats at Port Phillip Heads were based on earlier designs used for net fishing, which were double ended (similar shaped bow and stern) to allow nets to be easily drawn in over the stern (Quote Couta boat book; Mouchmore, pers comms). As the

boats were subsequently used for barracouta fishing, a modified and widened square stern was added to allow two men to trawl side by side without tangling the lines, and the first of this type of vessel was introduced to Queenscliff by John Fitzpatrick (Jurgens n.d.). Many of these earlier boats and sails were made by Geelong and Melbourne boat builders. The earliest designs were cat rigged, clinker built open boats, with an iron centreboard and removable ballast (Raison 2002: 9).

When the couta stocks forced the boats to venture out of the bay and further offshore, the design of the vessels was further adapted to strengthen their construction for open ocean conditions (Quote Couta Boat Book). The vessels were lengthened and broadened, the foredeck partially enclosed for shelter and storage, and the sail design was altered to a gaff rig to allow better handling in fresh winds (Raison 2002:9, 19). Similar designs evolved at Port Fairy and Portland by the late 1880s, where fishing boats operate under similar open ocean conditions. In later years however, Queenscliff boatbuilders were supplying vessels for those ports, and others as afar afield as Western Australia and NSW (Raison 2002:10).

This observation was predicted by Westerdahl (2000:16) who stated that any successful innovation would soon be copied and adapted by peer polities (or communities) to the particular circumstances of their own transport zones, and that this would form the characteristic signature of vessels of those transport zones. The adaptation of vessel design from one region into another was further evidence of interaction between transport zones.

The design of couta boat construction has evolved to incorporate features specifically adapted to fishing to regions in and around the heads of Port Phillip Bay. These open, though robust vessels operate in the most marginal maritime zones, often over laden with heavy catches, and have to be able to handle heavy seas, strong currents and shallow waters. This had led to a design of heavy beams, shallow draught (both to access low waters and to minimise the effects of current, but with a centreboard to compensate in high winds) but able to handle often heavy loads and rough seas. The influence of Anders Hansen's Scandinavian boatbuilding traditions, where boats are built for similar boisterous conditions, may be seen in the heavy construction and wide beams of the couta boats.

Further modifications to this design occurred when the vessels were used at other regional locations. Queenscliff fishermen often had 18 and 21 ft couta boats that they used at Lorne. These boats were lighter than those used at Queenscliff, as the dearth of suitable harbour at Lorne meant boats had to be pulled out of the water and placed on the pier in bad weather (Kerr, 1985:71). The double ended net boats were of lighter construction than the couta boats, which reflected the shallower environment that they operated in. Prior to 1900, both types of boats had low freeboard for easier rowing, but this changed after 1900 when carvel construction was favoured in preference to clinker built designs (Kerr 1985: 49). Deep centreboards were introduced into couta boats around the 1880s, and were possibly a feature introduced from yachts. Prior to this time, as couta boats were essentially 13 -14 ft flat bottomed boats, they carried sand or rock ballast that was substituted with the fish catch on the return journey (Kerr 1985: 54). Motors were introduced to couta boats around the 1920s, and this led to a change in fishermen's habits, as they no longer had to rely on early morning tidal ebbs to get out of the bay (Kerr 1985: 56).

3) Pilots Boats

The pilot vessels have evolved dramatically in the Rip region over time. Originally standardised whaleboats were utilised to row out the heads to awaiting vessels, due to their solid construction and ability to handle rough seas. Eventually, these vessels were replaced by sleek lined schooners and yachts, whose deep keels and robust construction handled heavy seas well, but were still able to negotiate the current of the Rip. Later pilot vessels emerged as modern iron vessels capable of withstanding long periods stationed outside the Heads in the open ocean,

which were serviced by smaller fleet vessels as required. Perhaps the most interesting development is the evolution of the modern pilot boat, which combined the speed required to traverse the rough waters of the Rip, but are also capable of handling large seas in most weathers. This design represents the adaptation of many of the features of earlier sailing and steaming craft, into a deep streamlined hull with modern propulsion systems.

Figure D-4. 4: Pilots Tender Boat from Pilot Cruising Vessel Wyuna (QMM Collection).

Furthermore, until the high speed launches were introduced, all pilots were transferred via small clinker built, single ended boats to incoming ships. The design of the transfer boats was based on years of hereditary experience, and those used on the *Wyuna* (the last of the cruising stations), were very similar in construction to those used by the sailing pilot vessels (Noble, 1979:53):

> There were no plans used to make these boats. We used a moulding model. The only difference they ever had in their design was that we put in a bigger stern in to carry the engine. They were row boats originally, but they redesigned the stern and after mould to carry the engine. The only set of plans that were even taken were made by Tim Phillips, he's in Sorrento, he's a boatbuilder. The design was used until 1900, and they used a mould they had in the shed. In 1945, they put in engines and redesigned the stern and midships. [JB]

4) Swan Bay Flatty

Flatties were shallow drafted boats used to navigate the shallow waters of Swan Bay. Flatties were first mentioned by Dod (1931: 26) when describing small flat bottomed vessels used to row across the flats between Swan Island and Queenscliff. Ferrier (1989:17) detailed that they had topsides built with weatherboard planks, and flat floors, and were rowed or sculled. Monk (2003:10) described two examples which were 20ft and 10ft long, that were sailing boats used at the Swan Bay Boat Club in 1925. The later types of boats appear to be derivations of couta boat design, with the transom stern, short bowsprit and lug or gaff rigged sail.

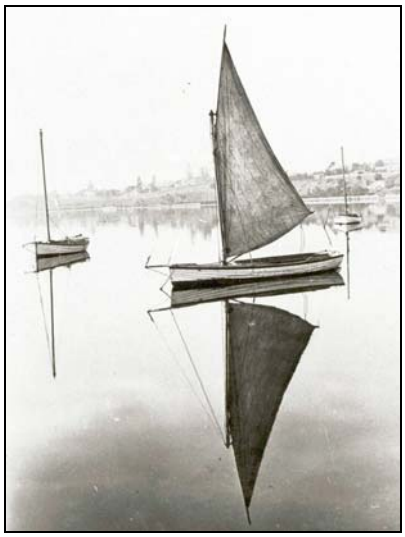

Figure D-4. 5: Swan Bay Flatty of the later period (QHM Collection).

5) Swan Bay Duck Punts

Figure D-4. 6: Duck Punts from nearby Lake Moolap, (In: Wynd, 1988:151, source Mrs T. McAllister, Newtown).

Duck punts were used extensively in Swan Bay for duck hunting. [CS] recalled:

> We had a duck punt that we used on Swan Bay. We call the ducks to the boat, you know using duck calls, and then we would shoot them. We would give a lot of them away. We would go rabbit and duck shooting all the time. My family had big duck hunting punts, that was before my time. They took out whole flocks at a time, the whole mobs. I had a Belgian gun that shot pellets. [CS]

The boats were very simplistic in design, and resembled other punts known to exist in this region:

> In Duck Season, we went out in duck punts. They were long things, 16ft long and double ended. We later added sails to them and raced them. They were totally flat bottomed with 4 lining boards wrapped around them. My first boat was clinker planked and built of Kaurie. Peter Loch later rebuilt it. [CA]

6) Transport Zones – Differences in Channel Artefacts

Interviews with many divers, along with the authors personal experience revealed an interesting trend that may signify another source of Transport Zones. As mentioned earlier, Port Phillip Bay is serviced by two main channels through the Yarra River delta, the West and South Channel. Divers interviewed consistently reported two generally distinct types of artefacts were found in either channel. The West Channel revealed artefacts predominantly from two distinct periods and origins

1. Early artefacts (bottles and ceramics) from the United Kingdom (England, Ireland and Scotland) from c.1840s-1870s
2. Ceramics and bottles predominantly from coastal manufacturers around Port Phillip Bay (including Geelong, Queenscliff, Sorrento, Rye, Mornington, Portsea, and Melbourne).

Artefacts from the South Channel were predominantly of intrastate (Port Fairy, Portland, Gippsland), inter-colonial, interstate or international origin. Sample inspections by the author in these areas revealed similar observations, particularly in the West Channel. During a systematic swim-line inspection a 500m section of the southern portion of the West Channel in 2001 using four divers, all the artefacts located and identified were locally made around Port Phillip Bay.

Historical accounts reveal that differences in the types and origins of vessels using these two waterways. The West Channel was originally used by early colonial shipping as the preferred passage to Melbourne and Geelong. Due to restrictive British trade laws, most early shipping in the area originated predominantly from the United Kingdom. However, as larger shipping began to use the port, the shallow waters of the West Channel (and dynamic sandbanks surrounding it) proved hazardous, and another route through the longer South Channel to Melbourne was utilized predominately by foreign and interstate shipping. Smaller vessels that did not possess the local knowledge required to navigate the West Channel also used this route, as it was safer and deeper, and also the preferred pilots' route.

Generalized observations of other smaller channels within the Bay also displayed similar archaeological signatures related to the types of vessels using them. The Sorrento Channel, which hugs the shoreline between Rye and Sorrento, was used almost exclusively by Bay Steamers from the Excursion Trade vessels, and demonstrates predominantly aerated water and alcoholic bottles, but almost no ceramics tableware. This is consistent with expected archaeological signature for that trade, as vessels were exclusively used for day pleasure cruisers, and no facilities were provided for meals onboard.

Furthermore, artefacts form the Lonsdale Bight Channel (in front of Shortlands Bluff) consisted predominantly of modern beer bottles and lead sinkers, which is consistent with the use of this area for both recreational and early commercial fishing respectively.

Although it is recognized that the observations made by the sports divers were not undertaken systematically, initial observations suggest that the general archaeological signatures of each channel may be distinctive. It is therefore suggested that, (pending further investigation), that channels (and associated artefacts) may also be distinctive markers of transport zones in the landscape

Appendix D-5: Potential and Actual Archaeological Signatures of Tourist and Tourism Landscapes

Potential and Actual Archaeological Signatures of Tourist Landscapes																										
Feature	**Artefact**	**Location**																								
Tourism		Capel Sound/ Rye	Sorrento/ South Sand	Portsea	Triconderoga Bay	Pt Nepean	The Rip	Pt Lonsdale	Lonsdale Bight	Shortlands Bluff/ Queenscliff	Queenscliff Bight	Popes Eye	Swan Bay	Swan Island/ Duck Island	St Leonards to Portarlington	Clifton Springs	Coles Channel	West Channel	Sorerento Channel	South Channel	Geelong	Melbourne	West Coast Victoria			
Accomodation	bottle dumps large (land)									a											a					
	bottle dumps large (water)												a								a					
	caravan parks							eh		eh					eh						eh					
	close to beach									a																
	convalescent homes								ae	ae																
	cottages in rear of houses									ae																
	hotels, inns, boarding houses									e																
	tents							h		h					h						h					
Baths	aerated water bottles/artefact concentrations										a				a	a					ae					
	changing rooms/ toilets		ae	ae				e		ae											ae					
	enclosed paddock - private			ae h																						
	enclosed paddocks - public		a						ah		h				ah	ah					ah	ae h				
	piles									a	a				a	a					a					
	promenade/ seawall										a				a											
	rock cut swimming pool - natural									a												ah				
	siltation/ shoreline progradation										a															
	site later used as boatharbour																									
	space (between baths and home)		h								h				h	h					h	h				
	surf lifesaving club later built on site							e														ae				
Open Sea Bathing	bathing boxes (see below)																									
	bathing ship																					h				
	changing rooms/ toilets		ae	ae				e		ae											ae					
	erosion - groynes removed							a																		
	lifesaving rings							e	a	a																
	sand groynes - piles/ planks	a	a	a				a							a						a	a	a			
	scattered assorted artefacts on beach/ water							a	a	a												a				
	seawall/ promenade																									
	shipwreck /hulk as breakwater														ah											
	surf lifesaving club							e	e													e				

Bathing Boxes	levelled beach dunes							a													
	promenade/ seawall		eh	eh			a			a											
	stilt piles	h	h				a	a													
Promenade	seawall - rough cut rocks						a	e		ae											
	seawall - stone						a	ae	ae	ae			ae h	a				ae h	ae h		
	seawall - wood						ah	h		a											
Tourist Transport Pier	aerated water bottles/artefact concentrations around pier and approaches and channels		a	a						a				a		a	a	a	a		
	alcoholic bottles around piers and channels															ah		ah			
	anchorage - artefacts scatters		ah	ah						ah											
	landing stage - hulk																		ah		
	pier piles		a	a						a				a					a		
	shelter sheds (land and on pier)		e	e						e											
	shipwreck - landing stage																		a		
	ticket shed						e		a												
Merchants	multiple examples of same service, eg butchers, banks, grocers, tearooms etc		e	e					e												
Tourist Facilities	bay steamer service - waterbourne transport		ah	ah						ah			ah	ah					ah	ah	
	boatsheds												ae								
	botanic garden								h												
	bowling green						e		e												
	breakwater - shipwreck/hulk									a			a								
	business district																				
	empty space																				
	fortress			ae h		ae h			ae h			ae h									
	golf course						e		e			e									
	guesthouse						ae h	ae h	ae h												
	hotel/ restaurant																				
	lifeboat and rocket practice						h			h											
	lighthouses						ae h		ae h												
	mines used as rubbish bins								h				ah								
	movie theatres						a		a												
	multiple parks/ sports fields								ae												
	natural features - eg Buckleys Cave, iconic rocks at Pt Lonsdale		e	e			e		e												
	parks on margins of township						eh		eh				eh	eh					eh	eh	
	public library/ mechanics institute								e												
	reclamation of marginal areas (eg swamps)								eh												
	rifle range - butts, bullets							a			a	a									
	rotunda								e												
	tracks - natural environment walk						eh	eh	eh	eh											
	train station								e										e	e	

Folklore	planted treasure/ mysterious finds as tourist drawcard						h		h			h	h							h		h

CODE	archaeological	a
	extant	e
	historical	h

Appendix E: Selected Fishing Landscape Data

Appendix E-1: Economic Marine Species Exploited by Queenscliff Fishers

Fish		
Local Name	**Common Name**	**Species**
Cod	Red Cod	*Pseudocaranx dentex*
Couta	Barracouta	*Thyrsites atun*
Eel	Estuary Catfish	*Plotsidae cnidoglanis macrocephalus*
Flathead	Sand Flathead	*Platcephalus bassensis*
Garfish	Southern Sea Garfish	*Hyporhamphus melanochir*
Leatherjacket	Toothbrush Leatherjacket	*Aluterus scripta*
	Unicorn Leatherjacket	*Aluterus monoceros*
Ling	Largetooth Beardie	*Lotella rhacina*
	Pink Ling	*Genypterus blacodes*
	Rock Ling	*Genypterus tigerinus*
Mullet	Sea Mullet	*Mugil cephalus*
Pilchards	Australian Pilchard	*Sardinops sagax*
Salmon	Western Australian Salmon (also known as salmon trout)	*Arripis truttacea*
Shark	Gummy Shark	*Mustelus antarcticus*
Snapper	Snapper	*Chrysophrys auratus*
Trout	Salmon Trout/ Salmon/ Trout	*Arripis truttacea*
Tuna	Skipjack Tuna	*Kalsuwonis Pelamis*
	Southern Bluefin Tuna	*Thunnus maccoyii*
	Yellow Fin Tuna	*Thunnus albacares*
Whiting	School Whiting	*Sillago flindersi*
	King George Whiting	*Sillaginodes punctata*
	Silver Whiting	*Sillago bassensi*
Whitebait	Australian Anchovy	*Engravlis australis*
Yellowtail	Horse Mackerel	*Trachurus novaezelandiae*
Birds		
Local Name	**Common Name**	**Species**
Gannet	Australasian Gannet	*Morrus serrator*
Mutton bird	Short Tailed Sheerwater	*Puffinus tenuirostris*
Pelican	Australian Pelican	*Pelecanus conspicillatus*
Seagull	Silver Gull	*Larus novaehollandiae*
Tern	Unspecified	*Chlodonias* or *Sterna* Family
Other Fauna		
Local Name	**Common Name**	**Species**
Cockle	Cockle	*Bivalvia cardiidae*
	Sydney Cockle	*Bivalvia anandara*
Crayfish	Southern Rock Lobster	*Jasus edwardsii*
Krill	Krill	*Crustacea euphasiacea*
Squid	Not specified	*Cephalopoda*
Mussel	Mussel	*Bivalvia mytilidae*

Appendix E-2: Fish Species Locations, Season and Exploitation Practices

Fish Species	Season	Where	Method	Who
Cod	Not specified	Outside Rip on edge of the 200 ft Bank - known as Grandma fish - soft eating for people with no teeth	line	[JB]
Couta	late spring - 2nd week Sept	San Remo - shallow water	troll	[HM]
	3rd week Sept - March	Port Phillip Area - channels/ 4-5 M offshore, fish bite around dawn onwards	troll	[HM]
	June, July, August	Lorne - fishermen live in Lorne	troll	[HM]
	Not specified	4-5 M offshore from Barwon Heads to Cape Schank	troll	[LF]
		Port Phillip Bay Channels / Open Ocean	troll	[PF]
Flathead	late spring	San Remo	line	[HM]
	unspecified	Port Phillip Bay - abundant flathead spawn in Swan Bay, but present in Bay for most of year	line	[HM]
Crayfish	15th Nov	Lonsdale Bight: west side of Clarke Beacon Leads	pots	[HM]
		Up to 20 fathom bank: Apollo Bay - San Remo	pots	[HM]
		Lonsdale Bight: Victory Shoal to Lonsdale Reef - Corsair Rock - edge of dropoff and reefs;	pots	[CS]
		Nepean Rock to Cape Schank - 100m to 1/2 M offshore	pots	[CS]
Garfish		Swan Bay - poaching	seine net	[CS]
	Anzac Day to Sept (Spring)	Swan Bay - St Leonards	seine net	[JB]
Eel/ Ling		Swan Bay - shallow waters	net	[CS]
Mullet	summer	Lonsdale Bight - come inshore from	net	[PF]
Salmon	summer - last quarter ebb tide	Behind Corsair Rock	line/ troll	[HM]
		Yellowtail Reef, Lonsdale Bight - Salmon are surface fish	net	[PF]
		Lonsdale Bight		[CS; GR]
Shark - Gummy		20 M offshore: Cape Schank to Apollo Bay		[CS]

Snapper	1st week Nov +	In Channels on ebb tide	line	[HM]
	1st week Nov +	West Channel: Ebb tide - fish feed in dirty water	line/net	[PF]
	1st week Nov +	Mornington	long lines	[HM]
	1st week Nov +	West Channel: Swan Spit - West Channel Light South Channel: The Rip - South Channel Light	lines	[CS]
	1st week Nov +	Mud Islands	net	[CS]
	1st week Nov +	Mud Islands - up to 2.8 M north of islands on Great Sands	net	[PF]
Squid	spring	grass beds: Pt Lonsdale to Queenscliff	jigs	[HM]
Trout		unspecified		[CS]
Tuna	summer		trolling	Wilson 1992: 37
Whiting	summer - morning daylight	Swan Island, West Channel	lines	[HM]
		Channel sand banks	lines	[PF]
		Mud Islands - up to 2.8 M north of islands on Great Sands	net	[PF]
		Mud Islands	net	[CS]
		Mud Islands	net	Fitzsim-mons
Yellowtail		deep water - Convent Beach - Lonsdale Bight	weighted lines	[HM]
		deep water - Convent Beach - Lonsdale Bight	weighted lines/ net	[CS]
		Yellowtail Reef: Pt Lonsdale	lines	[PF]
		Eliza Ramsden Shipwreck	lines	[PF]

Appendix E-3: Bait Types and Extraction Locations Used Queenscliff Fishers

Bait Type	Economic Catch Species	Where/how obtained	How used	Source
cockles	whiting	Swan Bay (at foot of Queenscliff Hill)	ground up for burley	[LID; PF; CS]
couta	crayfish	By-product of couta fishing	heads used to bait craypots	[HM]
crayfish	fishtraps	byproduct of crayfishing	undersized crayfish sometimes used in fishtraps	[HM]
gannets/ mutton birds/ pelicans	crayfish	Mud Islands Swan Bay	used by early fishermen to bait craypot	[PF]; Kerr 1985:78; Adam-Smith 1983
mussels	Whiting/ snapper	taken from piles in the bay, piers, and in the Creek	ground up (shells included) for burley	[HM]; Wedlick 1965:33
sheep heads	crayfish	butcher	used by early fishermen to bait craypots when gannets not available	[PF]
unspecified	couta		small burley nets used to chum up water to keep fish biting	[HM]
unspecified - fish	crayfish	fish were caught in fish traps	used to bait craypots	[HM]
various - snapper, couta, leatherjackets etc	crayfish	dead fish killed during Rip blasting operations floated to the surface and was scooped up by fishermen for bait	used to bait craypots	[HM]
whitebait	couta		whitebait thrown out in couta school to keep fish biting	[HM]

Appendix E-4: Seasonal Indicators of Various Fish Species Availability

Fish Species	Area	Season	Notes
Couta	Park opposite Ozone Hotel	3rd week Sept.	**1.** "The couta were running in the third week of September, regular as clockwork. It was the second week in San Remo. Big patches of them would be left behind, which we would catch. After March, we would go to Lorne…We would go to Lorne in the winter months, June July and August, following the couta" [HM] ***2.*** "In the park in front of the Ozone (hotel) there are The Harbingers of Spring. These are little white flowers, when they came out it signal that the barracouta would come" [JB] ***3.*** "The milkmaids flowers were called the Harbingers of Spring in Queenscliff, but that in Melbourne pink flowers (unspecified) heralded spring" [WN] These flowers are English Daisies (*Bella Perensis*)
Flathead	Swan Bay Hills	unspecified	***1.*** "We could tell it was the flathead season when the paddock is yellow with Capeweed on the mainland. We called them the Flathead Flowers, as they indicated the season for flathead, as the fish came in to spawn then." [HM] **2.** "When the capeweed comes out, the flathead are around. There are yellow patches in the paddocks opposite Swan Bay, they are the yellow capeweed flowers, and that means the flathead are in the bay." [CS] **3.** "When the flathead flower, that was the capeweed, the dandelions, and the ti-tree flower bloomed it was the fishing season again for flathead and snapper. The fishermen pay off their debts and life became affluent again" [JM]
Snapper	Port Phillip Bay	1st week Nov.	**1.** "When the ti-tree flowers come out, the snapper are running in the bay." [CS] **2.** "When the ti-tree flowers the snapper are running" [JB] **3.** "When the flathead flower, that was the capeweed, the dandelions, and the ti-tree flower bloomed it was the fishing season again for flathead and snapper. The fishermen pay off their debts and life became affluent again." [JM] **4.** "When the ti-tree is in flower, the snapper come in." [PF] **5.** "When ti-tree flowers are out, the snapper come in." [GW]
Snapper	Port Phillip Bay	1st week Nov.	Blowflies attracted to ti-tree smell **1.** "When the ti-tree flowers it attracts the blowflies with its smell, and this signals that the snapper are running." [SJ]
Snapper			**1.** "When the bogong moths are here, the snapper are around."[CSp]

Appendix E-5: Ancillary Local Resources Used By The Queenscliff Fishing Community

1) Plants

Many other resources were used by fishermen for their industry, or for subsistence and daily survival. Some of these resources were used to either maintain or build essential fishing equipment. The location and traditional knowledge of these sources represents important components of the fishing cultural landscapes.

Common Name	Scientific Name	Use
Black Boy/Grass Tree	*Xanthorea australis*	Sap used to stain furniture. Collected by Jack Clay after fires and mixed with shellac and turpentine to stain timber. Also used by local Indigenous people to waterproof their water containers.
Bearded Glasswort	*Sarcocornia quinqueflora*	Burnt for potash for glass manufacturing.
Bower Spinach/ Warrgul Greens	*Tetragonia implexicoma*	Eaten fried or boiled as a substitute green vegetable during depression - and tasty too!
African Boxthorn	*Lycium fero cissimum*	Used by Military as a natural alternative to barbed wire.
Chinaman's Bread	*Malva australiana*	Segmented fruit bearing plant – eaten.
Coastal Beard Heath	*Leucopgon parviflorus*	Berries used by Indigenous People and children - white berries size of pea available in Jan and Feb. Tastes like a nashy pear.
Eel Grass/ Swan Grass - angiosperm	*Zostera muelleri*	1. Insulation in buildings and heaters. 2. Mulch to grow asparagus.
Flat leafed Sedge - Reed/ NobbyClub Rush	*Lamanda*	Used to make baskets.
Kelp		1. Manure for gardens. 2. Indigenous people rolled kelp into rolls to sustain them during inland hunting trips - provided basic sustenance. 3: Used to make tennis balls for children.
Kelp/ Seaweed		1: Potash/ Iodine/ Bromine - industry suggested, unclear if exploited. 2: Local use as an antiseptic for cuts.
Old Mans Beard	*Clematis aristata*	Indigenous people used the fluff from this bush to line the cradles for babies.
Ruby Salt Bush	*Enchylaena tomatosa*	Used by Indigenous people as a red dye.
Sour Sobs	*Oxalis pres-carpae*	Used by children to clean coins.
Ti-tree - Melaleuca	*Leptospernum & Levagantum*	Craypot/ fishtrap manufacture.
Wattle (Acacia)	*Papanacia vilbata melan*	Bark used for tanning fishing nets and lines.

Indigenous and introduced wild plant species exploited in Queenscliff.

A) Craypot Material from Ti Tree at Rye/ Fish Traps

Several fishermen reported that local ti-tree (*Melaleuca*) was used for the construction of crayfish pots [CS; HM], and also to construct fishtraps, which were used to catch fish for bait [PF]. This material was collected from the foreshore area at Rye on the north coast of the Mornington Peninsula, and could later also be bought from the same area [HM].

> We would make the pots out of ti-tree sticks. We made big cray pots. [CS]

> We used ti-tree for making the craypots, and the ti-tree came from Rye. You would get 51 trees to a bundle from near the Yacht Club at Rye. I made the pots in Cayzer's shed. It had an "L" shape at the end of the shed where we used to store the timber. I used to make my own craypots. I would go to Port Melbourne and buy the old SEC lines (electrical power lines) for the craypots. I would use them for the frame of the pots and I would weave the cane around them. We had to stop using the SEC wires after they changed to aluminium lines, as they wouldn't last in the salt water. I used cane for the pots. I bought the cane, it was ti-tree sticks from Rye. You would buy it by the bundle from a bloke over there. One time Paddy and I went over there and cut our own. [HM]

> They used to go near Rosebud and get ti-tree for the craypots. The wire on the bottom of the pots they got from the SEC from the old electric wires, but they couldn't use the (electric) wires once the SEC changed to aluminium wires as they corroded too quickly in salt water. The only thing they had to buy was the cane for the necks of the pots. [GW]

Similar practices were undertaken by fishermen at Rhyll (Westernport Bay), Port Welshpool and Sealers Cove (Wilson's Promontory - Kerr n.d.: 29-30).

B) Wattle Bark for Tanning Nets and Ropes

Nets and ropes used by local fishermen were made of cotton and had to be tanned to protect them from rotting through exposure to salt water and jellyfish. The fishermen tanned the nets and ropes using a saturated solution of tannin from local wattle tree bark and saltwater:

> The nets were made of cotton, and every year we used a cement tank in our backyard to tan the nets. You would get bundles of bark in the tank, which had the tannin, and put in salt water for half an hour, and then soak the nets in them for a couple of days. You'd then dry them and then wash them in salt water. We got the bark from Swan Island and Swan Bay from the black golden wattle trees. The kids used to strip the trees, and they would also fell the tree for timber. The nets would last up to thirty years old when they were tanned. [CS]

Wattle bark was also used by couta fishermen to tan the baited hand lines:

> We used the wattle bark to tan the cotton fishing lines to make sure they had a long life and wouldn't rot away. No, we didn't have the concrete tanks for tanning in our house, but I knew some people who did further down the road. We put the wattle bark in a forty four gallon drum and boiled them up. You would light a fire under a forty four gallon drum and boil the bark in the drum, and you would leave it there for two to three days soaking, and then put in the lines...No, we didn't do nets, just the couta lines, which is what we mostly fished for. We did have small burley nets that we used to chum up the water to keep the couta around and biting, and we'd pop those in too. They were all made of cotton line in those days, the nets and the lines, and if it wasn't done they would rot away. The cotton hand lines were only done once and they lasted until they were worn out. We got the cotton lines from Jarmans in Geelong and a Melbourne chandlery, TH Smith I think. [HM]

C) Seaweed, Kelp and Seagrass

I) Kelp for Iodine

Several local informants indicated that they knew of traditional practices undertaken by the past local indigenous community, where kelp was wrapped around cuts and sores and used as a natural healing aid:

> Local aboriginals would come and wrap themselves up in it (kelp/ seaweed) for their sores. When they took off the seaweed the sores were healed...my dad told me that [GW]

[JP] also observed that after storms kelp would was up on the beach in banks, and water would often be trapped behind it in small pools. This discoloured water was often used by visiting Italians to paddle in, as the warm water was impregnated with the iodine from the kelp which was good for their feet.

II) Seaweed and Kelp for Gardens

> Nana would say to us "Are you going to the beach? Can you bring me back some seaweed?" She used it for mulch and manure. We often brought back long strands of it for her. [WN]

A former resident of Queenscliff, [BM] recalled the use of kelp for fertiliser at Barwon Heads. "They grew asparagus on it until about 40-50 years ago. Kelp is a good fertiliser, but seagrass is not. I took some home for my garden and you can dig it up two years later and its still there. [JP] reaffirmed this observation: "It wasn't uncommon for people to bring home kelp as manure. They used kelp, and seagrass from Swan Bay. Ernie's mum used kelp from the shore in her garden". Kelp was used as fertilizer, and was dug in to rot, while seagrass was used as mulch [LID]. The author also observed seagrass being taken from the Swan Bay foreshore in 2004. Upon approaching those concerned, the (unidentified) person stated that they were using the seagrass to grow asparagus, as they had always gotten good results when using it. Similar behaviour has also been observed on the Geelong foreshore at Corio by the author.

Although several people tried kelp farming in the area, it was not a successful venture as the kelp did not grow fast enough [LID]

III) Kelp for Recreation

> My grandfather made tennis balls out of bull kelp, which the kids played with until they rotted and fell apart [LID].

IV)Kelp as an Indigenous Food

> The Indigenous community used kelp like a roll-up, you know like Uncle Toby's makes. They would take it with them when they went hunting to keep them alive. They would never put on any weight eating it, but it would keep them alive while they were moving if they didn't find anything else to eat. [DS]

V) Seagrass as an Insulator

A marine seagrass known locally as eel or swan grass (*Zostera muelleri*), was used extensively amongst the community for the insulation of houses and other public buildings such as the football ground grandstand and the Barwon Heads Golf Club [GW; LID]. Resourced principally from Swan Bay, the string-like grass was found in great quantities there, especially during the winter months. The grass had excellent insulation properties for both sound and heat,

and was used in many houses, especially in the fishing community, where it was stuffed into the recesses between the walls and ceilings [LID; PF].

> Swan grass from Swan Bay was used [for insulation] in the football ground grandstand. It had very good sound insulation. It could be roaring outside, and you couldn't hear a thing inside…it doesn't rot or burn, must be because it's damp, I don't know, but it's very good for insulation. [GW]

> …they [the fishermen] used eel grass as insulation in many houses. It had really good insulation qualities. [PF]

These qualities also made the seagrass suitable for use in thermal heaters, and it was also used by the local iceworks manufacturer (Icy Jones) to insulate the insides of (Jonette) kerosene heaters [LID].

> Swan grass was used for insulation in many homes in Queenscliff, especially amongst fishing families. Eel grass had good insulation properties, and also did not burn reputedly. It was also used by Icey Jones, an ex army engineer, who ran the iceworks. He also built Jonette heaters made with eelgrass insulation. The Barwon Heads Golf Club also used the seagrass for insulation. [LID]

Swan grass was also harvested in commercial quantities along the eastern coast of Westernport Bay until at least 30 years ago for housing insulation use in Melbourne [BM]. Similar practices using marine resources (eg reeds, shells) and other agricultural produce discard (eg oat and corn husks, walnut shells, straw) for insulation were known in Suffolk and East Anglia in England until at least the 19th century (Evans 1966: 43, 44), and it is possible that these practices were transposed here by early settlers from those regions.

Many other indigenous plant species were exploited by the fishing community and other sectors of the community, especially during the depression in the 1930s when many families could not afford vegetables or other mainstream commodities [DS; WN].

D) Bearded Glasswort for Glass manufacturing/ Potash

> Bearded glasswort was used at Limeburners Point in Geelong to make glass. It is also known as Samphire. They burnt it to extract potash which was used in the glass manufacturing process. You can eat it if need be to supplement your diet. It is very salty. [WN]

E) Black Boy Resin for Furniture Staining

> Jack Clay made a special furniture stain from the local grasstree. He used shellac as the base, and for the colouring agent he used the sap of grasstrees, the plants they call Black Boys. He would go into the Pt Lonsdale area after a fire had been through the area and grass trees would be popping up everywhere and he would find a burnt tree. When these trees are burnt, the sap bubbles up and makes globules of resin, which he would pick up and take home. He would melt them in a saucepan, and put in shellac and turps as a thinner, and he would use this to paint furniture. It created lovely stain finish, and had a beautiful smell to it. The Aboriginals also used this resin to fibreglass and waterproof their drinking containers. They would coat one side, and then the other with it, and it would waterproof their drinking containers. Its scientific name is *Xanthorreas australis*, and it is from the mallow family. [WN]

F) Bower Spinach/ Warragul Greens (latter is its modern name)

Another plant that grew wild here was Warragul spinach. That's what they call it at the trendy markets now, but back then the locals here called it Bower Spinach. The locals ate this to supplement their diet in the 1880s, to give them some greens when they couldn't afford vegetables. They ate a lot of it during the depression. My grandparents told us about it. Its scientific name is *Tetragonia implexicoma*. [WN]

G) Chinaman's Bread

There was another plant called Chinaman's Bread. It was a mallow, which people here used to use to supplement their diet in the 1880's and during the depression. It had a central core with segmented fruit sections surrounding it. It was mainly kids who ate these. It grew everywhere around the town, but a lot of it was along where the Bellarine Rail trail and line is now [WN].

We ate Chinamens bread when I was a child. [DS]

H) Sour Sobs ("Sweet Grass")

Those yellow flowers we used to clean coins with. We called them Sour Sobs, but their scientific name is Oxalis Pres- Carpae. We used to squeeze out the juice to clean pennies with the oxalic acid that was in them. They would clean coins up very well too. These plants were introduced from South Africa by the Adelaide Botanic Gardens in the 1880s as an ornamental bulb. We used to spend hours polishing our coin collection as a hobby. [DS, WN]

I) Coastal Beard Heath Berries

The Indigenous people used the Coastal Beard Heath (Leucopgon Parviflorus). Berries from this plant were used by Indigenous People. They ate the white berries that were the size of pea available in Jan and February. They tasted like a nashy pear. The berries from this bush are a glucose source. [WN]

J) Old Mans Beard

The Indigenous people used to use the fluff from this bush, it was called Old Mans Beard, to line the cradles that they used to carry their babies around in. The fluff was thrown away when the baby had dirtied it in the cradle. [WN]

2) Animals

A) Rabbits - Swan Island/ Duck Island/ Swan Bay/ Lonsdale Lakes/ Mud Islands

Many fishermen and other community members recounted the importance of rabbitting as part of their childhood. [CS] described how he would often take his dogs and hunts rabbits at Swan Island, Duck (formerly Rabbit) Island and Lonsdale Lakes, and would use them for pet food. [LID]'s grandfather also engaged in rabbiting, which were sold from his fish shop and later from home to supplement his income. Fishers also supposedly introduced rabbits to the Mud Islands as a food source, which later decimated the vegetation and large trees ([HM; LF; LID; MW; PF]; QH April 2002:12; Yugovic 1998:90, 96-7). Rabbits had reached plague proportions in the area by 1912, causing denudation of vegetation in parts of Swan Island (QS 11/5/1912);

but many fishermen stated that their families might have starved if rabbits had not been available to supplement their diet [CS; LID]. This situation was common in many other Victorian coastal towns, especially during the depression and WWII (Hunt 1999:9, 29):

> We lived on the Flats. We would walk along the railway line and hunt rabbits. There were lots of rabbits there at one time. We would head home at 3pm. We got most of the rabbits from around Lake Victoria, and we fed the dogs with them. We also got rabbits at Swan Island. The best rabbits were salt fed, on the salt bush. We had big wadis (sticks) that we killed them with. [CS]

B) Wild Game

Local game was also heavily exploited by both the fishing and local communities, particularly from Swan Bay which was a haven for wildlife. Specialised duck punts were used to shoot game on this area:

> We ate swans, wild duck and rabbits from Swan Bay. When they flew over the bridge we would shoot them. They were a big part of the fishermen's diet. The swans were around from November to April, and they were protected then, but the fishermen still used to eat them. We had a duck punt that we used on Swan Bay. We call the ducks to the boat, you know using duck calls, and then we would shoot them. We would give a lot of them away. We would go rabbit and duck shooting all the time. My family had big duck hunting punts. That was before my time. They took out whole flocks at a time, the whole mobs. I had a Belgian gun that shot pellets. We also used to hunt Quails in Swan Bay. The quails would fly across the straits into Swan Bay. They would fly into the head wind. We often caught eels in the mangroves at the north end of Swan Island. The eels used to go into Duck Swamp. They were just used for local meals, they were never exploited commercially. [CS]

> Nan grew flowers at Pt Lonsdale, and used to sell them to guesthouses and to Geelong for funerals and weddings. She would sit up all night to make wreaths for funerals, and Bob (grandad) would be feeding her cups of tea and coffee to keep her awake. Nans name was Edith Maude Beggood, nee fall. Mum was a fisherman's daughter. Fishermen lived off fish during the depression. Bob often went to the back paddocks behind the Lakes (Lake Victoria) with ferrets to get rabbits, and used to come back with them hanging on the bikes handlebars and would ride around Queenscliff selling them. He used to skin them and tan the pelts using urine. Bob bred greyhounds, and he used to have a box to hold the ferrets in. Bob would put the ferrets down the rabbit holes after he had put nets over their holes, and they would run out and into the nets trying to get away from the ferrets. [WN]

C) Cockles

> We used to swim over to Swan Island to get cockles. There were tons of cockles over there, and they were a good feed too. We used to get them near Langenby's Island, which was named after the bloke who lived on the island. That's the first one near the bridge. [CS]

Appendix E-6: Traditional Weather Indicators and Predictions

The following is an expansion of indicators used to predict weather both for Port Phillip Bay and Bass trait in general.

1) Local Weather Patterns

A) Effects of Tide on Wind, Seas and Tides through the Rip

> Fishermen had to rely on local knowledge – the force of the current can hold back the tide, and you had to judge the tide before you could go out. You would follow the deep water out as it wouldn't break - you need to read the mood and colour of the water [LF].

B) Temperature change and noise

> [LF] stopped during our conversation where we were sitting outside and said " I'll show you how your body tells you the weather. The temperature is getting cool, and I bet without me turning around, that the clouds behind me are getting dark, and that it is going to rain soon" [and sure enough dark rain bearing clouds had suddenly gathered behind him and it rained five minutes later]; "… body temperature can tell changes in the weather".

C) Bird movements (or not)

> …look at the which way the birds fly, and that indicates the direction of the winds (or approaching winds)…you watch the direction of seabirds in V formations to tell bad weather. If the V is flying home to their nests, bad weather is coming…birds come home to roost (at the approach of bad weather) [LF].
>
> Seabirds stay in their rookeries in gales…birds will not fly into bad weather, or will not leave their nests when bad weather is approaching…we used to watch the sandpipers, and someone would say, look at them they've been on that nest for days, and I would say, well you wouldn't go out into a big storm would you, and neither will they! [LF]
>
> If the seagulls got past the park at the bottom of the hill it was going to rain. The seagulls would hang around the park looking for tucker [food], but you wouldn't see them come any further up the hill – this was just a saying amongst the kids only [GW].

Several British researchers (e.g. Goldsmith Carter 1945:10-11; Evans 1966:165) have recorded that bird movements in England also heralded the approach of inclement weather.

D) Wind

Many local residents had several observations regarding wind and weather:

> …the wind was usually off the land in winter. If the wind came onshore we would pull the boats up on the shore. If it was offshore we left the boats on the moorings between the piers. [HM].
>
> The Rip is controlled by natural elements and if you watch them you can judge the conditions…when there is no wind, it is calm, if there is a SW wind there will be a gale, and an easterly wind is generally calm weather [LF]

Weather lore was often encoded in phrases in Britain to record these very types of observations, for instance the following phrase: "When the wind backs round agen the sun, Trust it not, for back it will come" (East Anglian Weather Lore cited in Goldsmith Carter 1945:25, 38, 45). Although none of these sayings was encountered in the study area, they may exist but have not been accessed.

E) Boat Movements at Anchor

When asked what was first considered in judging the weather, [LF] responded:

> We would go down and look at the movement of the boats, and the way they were hanging at anchor…they were a forewarning of forthcoming conditions; forewarned is forearmed. Judging by the boats movements we would consider are the conditions calm enough to go through [The Rip]. [LF]

F) Clouds

Clouds were also used as weather indicators:

> You need to look at the sky and where the scud (clouds) was coming from, and how fast…The heavens above have different levels. If you see cumulous clouds, two days later you can expect calm weather. Wispy upper clouds can indicate the approach of changes in weather and storms, and most weather comes from Adelaide, so people today rely on weather forecasts from other states. [LF]

> The Fishermen used to say that if the sky had streaky clouds and cobwebs landed in the rigging, it meant that northerly winds were coming. [JB].

> We would always look at the glass, we would never miss a night to check it. There was one on each pier. You would look for streaky skies, you know the clouds. If they were windy looking skies it meant bad weather was approaching. The fishermen were always accurate in predicting the weather. [CS]

Goldsmith Carter (1945: 14) recorded similar familial observations of weather prediction:

> *Mackeral skies and mares tails*
> *Tall ships carry short sails*

G) Animal Movements - Cattle and Sheep

Observations of stock movement were also tangible weather indicators:

> I heard that the fishermen around the Prom watched cattle movements to tell the weather. The sheep would face the wind, but cattle would put their backsides into the wind, and they went to the lee side of the island as the cows don't like wind in their faces. If the animals moved, they could predict the weather movements. [JB]

Kerr (n.d.:21) records that the Swedish Norling Family also used stock movements on the Bass Strait Islands to predict wind directions. These observations may have older origins from continental Europe and the United Kingdom. Evans (1966:164) noted that cattle movements in East Anglia often heralded the arrival and direction of inclement weather in farming communities.

H) Rheumatics

One respondent [LF] indicated that intangible factors could be used to gauge weather changes: "sometimes you can feel the approach of bad weather. My body feels it, you know, rheumatics. I get a bad headache, and I know bad weather is coming. Not everyone gets that of course, its only me who gets the headache, but when people know I have a headache, they know to watch out for bad weather". When asked about the lore in the fishing community [LF] replied, "Look at the wind, look at the things you can touch and feel, look at the tides and who controls the tides, its controlled by the Lord!" (NOTE: [LF] was once an ordained Presbyterian Minister, and has very strong views regarding religion). When asked about how he judged sea conditions, [LF] replied: "You have a perception of things, sometimes a premonition of things to come. You use your perceptions of The Rip, built up from years of experience. I got my experience from life, the world was my University. You can feel what the weather is going to be like".

Proulx (1993:313) demonstrated intimate local knowledge for predicting weather patterns in Newfoundland. The character Yark predicts the arrival of bad weather: "Weather coming on. I see the spiders is lively all day and my knees is full of crackles".

I) Frogs:

> The Frogs will start croaking when rain is approaching. [LF]

J) Coastal Silhouettes

Kerr (1987:166) reported that many Tasmanian ketch skippers often demonstrated an intimate knowledge of coastal and submerged features.

> But those old skippers were clever old bastards, they knew every rock, reef, tide rip and shoal. They knew all the little quirks a particular cove or shelter might have. They made it a point of knowing a particular part of the coastline by its silhouette. The older they were or the longer they were at it the more they knew, and the tricks that went with it.
>
> At the time of our trip the area was only partly surveyed as far as Balmoral Hill, the rest was in his head. (Kerr 1987:170)

2) Regional Weather Patterns

A) Cobwebs in Rigging

Cobwebs were also a sign of inclement weather direction:

> The Fishermen used to say that if the sky had streaky clouds and cobwebs landed in the rigging, it meant that northerly winds were coming [JB].

Kerr (n.d.:21) recorded similar weather forecasting observations amongst Bass Strait fishermen.

B) Cloud Movements and Types

Meteorological observations of cloud patterns and movements were important indicators of approaching inclement weather, especially for fishermen:

> You would look for streaky skies, you know, the clouds. If they were windy looking skies it meant bad weather was approaching. The fishermen were always accurate in predicting the weather. [CS]

> The Fishermen used to say that if the sky had streaky (cirrus) clouds and cobwebs landed in the rigging, it meant that northerly winds were coming. [JB]

Other indicators included ranges of visibility. One local resident recalled that increased visibility across the Bay heralded the onset of bad weather.

> Mount Martha was a good gauge of what the weather was going to be. The clearer it got the worse the weather was going to get. If you could see the houses on the Mount, the weather was going to be nasty. If it was misty, there would be light showers of rain. [GW]

This observation makes sense when considered from a meteorological perspective, as the bad weather usually is preceded by a high pressure system, the latter of which usually brings the clearest weather. Therefore the weather gets clearer as the high pressure system passes just prior to the onset of the low pressure system.

Similar observations were made by Goldsmith Carter (1945:114) in Dover, where the lighthouse light would be visibly brighter as a herald to an approaching easterly gale.

Kerr (1987:85) recorded that Hobart's ketch and bargemen used Mount Wellington as a weather indicator: "With the wind hard in the mornin' you never left town. You'd have a look at mountain, "Aw, sou-west or south'ard today, won't go today". Similarly, Goldsmith Carter (1945: xvii) observed that an increase in the visible loom of a lighthouse meant a storm was approaching.

Appendix E-7: Superstition, Folklore and Rituals

1) Birds Eggs/ Peacock Feathers

There were many examples of superstitious beliefs which were associated with influencing fate or bringing bad luck. The keeping of birds eggs was one such superstition, even though bird nesting to collect eggs was a popular activity amongst fishers' children (Dod 1931:93; [HM]):

> There were flocks of orange bellied parrots on Swan Island. We used to go bird nesting as kids to collect eggs. We couldn't bring bird eggs into the house. It was bad luck, our father wouldn't let us keep them. [CS]

Peacock feathers were also viewed unfavourably by some fishing families:

> My mother always reckoned that peacock feathers were bad luck in the house. [JB]

> My father told me off for bringing Peacock feathers into the house when I was 12 [1923]. He thought they were bad luck. [CS]

Although these observations may seem irrelevant, they do have implications for subsequent archaeological signatures. The absence of native bird species eggs in the archaeological record could be interpreted as a lack of exploitation of those natural resources (especially by the fishermen). However, the identification of traditional and possibly superstitious beliefs pertaining to these resources can explain their absence at some habitation sites, even though they were known to be exploited by fishermen's children.

2) Friday – Boat Launching

Some fishermen stated that there was an unwritten lore regarding boating activities on a Friday: "you wouldn't launch your boat on a Friday, It was bad luck. You wouldn't launch on a Friday even if you had won lotto" [CS]. A former boatwright with the Pilots' Service, confirmed the existence of this practice:

> No, they wouldn't do it. That came from England, the superstition. It was all the fishermen. They wouldn't do it, wouldn't launch on Fridays. If a boat had just been finished being built, and it was ready by the Friday, they would launch it on the Thursday, or delay it to the Saturday or Monday. No, they wouldn't go fishing on a Friday either. It was bad luck to go fishing on the Friday. One bloke had his boat up on the slip and he went to launch it on a Friday, and he broke his mast when someone forgot to open the door properly, and the mast broke on the way down. There were also no markets on a Saturday, so you couldn't sell your fish if you went out then. They fished from Monday to Thursday, and Thursday's fish was sold at Friday's market. They worked on the boats on their days off, went to Geelong to go shopping and mowed the lawns. Things like that. The small boats that worked inside the Rip sometimes caught snapper on the Friday. They kept fishing as they had local markets at Geelong and Queenscliff, and would sell them on the pier. [JB]

Although the inside vessels sometimes did work on a Friday, Mullen (1969:219, 211) has suggested that the incidence of superstition amongst fishermen was directly related to the amount of risk they were exposed to, and has observed similar behaviour in Texas, where inshore fishing vessels may risk breaking the taboo as they were less exposed to the dangers experienced by offshore fishermen.

Although other fishermen (eg [HM]) had no knowledge of this practice, this suggested that this was a personal belief limited to individual families:

> No there were none that I heard of, only walking under ladders and that sort of thing. No, there was never any problem launching your boat on a Friday, I never heard of that. I have heard of people putting pennies under their masts, but I didn't do it here or at Lorne. We had tabernacle in our boats, you know where you lower away the masts, so we couldn't have put a penny under there even if we tried. The older boats might have though. I have heard hearsay evidence of that happening here. [HM]

This worldwide phenomenon was related to the crucifixion of Christ on a Friday (Kemp 1992:847; Jeans 2004:308), and sailors would not risk ill omens by departing from port on this day (Patterson 1897; Mullen 1969:218; Poggie and Gersuny 1972: 69). The following familiar rhyme was related to it

> *On a Friday she was launched*
> *On a Friday she set sail*
> *On a Friday met a storm* (Jeans 2004: 308)

Mullen (1971:407) recorded that this belief amongst American fishers originated in England, which may also be the case in this study area.

[BM] offered a more pragmatic explanation, who stated that no fishing was undertaken on this day as there was no Melbourne market available until Tuesday, and that any fish caught on Friday would spoil before that time. Although this observation was also confirmed by [JB], he still maintained that superstition played a part in the practice. Later observations of this practice in modern times (post 1960s) may have been a continuance of traditional practices, but also for practical considerations:

> Gil Albutt told me he wouldn't launch on a Friday because if something went wrong you had to pay overtime for the crane driver and workers on Saturday. [LID]

Similarly, fishing on Sunday, the traditional Christian day of rest, was originally discouraged amongst local fishermen. Historical newspaper accounts detailed a rift between the Queenscliff fishing community and other fishermen in 1893, where some fishermen were working on a Sunday, contrary to popular religious beliefs. This led one pious fisherman to complain to the Customs Minister that the day was being desecrated, and that it would have a detrimental effect on ensuing generations (and he probably felt he was being penalised by loss of fish catches due to his religion). It appears that non-Christian fishermen were continuing their catches on this day, to the detriment of those whose religions required them in church (QS 3/6/1893). By the beginning of July that year, all the fishermen in the town had agreed not to fish on that day. However, this effectively meant that there were now three days that the fishermen did not take a catch, as any fish caught on Saturday usually spoiled before getting to market on the Tuesday (QS 1/7/1893).

These beliefs and practices were to have marked effects both locally and regionally, especially on the Melbourne Fish Market, where fresh fish was available from Tuesday to Friday, but meant that the fish market was closed on Mondays as no fresh produce was available [BM]. This practice appears to have changed in later years:

> ..before the Co-op was established, there was nothing to do [but fish]. Most fishermen fished on Sundays to get a catch for the market the next day. If you didn't fish on Sundays you missed a day supplying the market. After the co-op was built, you could

> fish any day as they could freeze it, and you weren't dependent on supplying fish fresh on market days only. [GW]

The constraints of religious observance were also observed by Parker (1995:94, citing Duffy 1992) who observed that West Country fishermen would not go to sea on saints days, and Hunter (1994:262) in the Shetland Islands, where despite the presence of a rich potential catch presented by the appearance of 200 whales, the islanders waited until after the stroke of midnight on Sunday before they would launch their boats. Similar prohibitions were also observed by American Fishermen in the latter part of the nineteenth century (Procter 1873:92; Collins 1882:126-7; Mullen 1969:218).

3) Blessing of the Fleet and Religion

This Presbyterian ritual was a relatively recent introduction, first undertaken when the Reverend W. F. Hart conducted the first such ceremony Australia that was held at Queenscliff in 1935 [LF]. The ritual was undertaken to place a blessing on the fishing fleet to ensure their safety from inclement weather over the coming year, and a ceremonial cross (made of gelatine so it could not be souvenired from the water) was thrown into the water as a symbol of Christ's blessing on the water. The service was broadcast nationwide, and it was reported that Townsville fishermen who had gathered to listen to the service experienced record catches the next day (Wane 2003:31) perhaps explaining the popularity of later similar Catholic services, which are now conducted in many fishing ports around Australia (e.g. Fremantle and Ulladulla). The fishing communities at these ports were largely dominated by southern European immigrants from Italy, Greece, Dalmatia and Portugal (Broeze 1998:185, Anon. 2004; NRMA 2004). The Catholic rite practiced at the latter towns originated in southern Europe. After blessing the fleet, a priest originally threw a gold cross into the water, and local youths competed to retrieve it to receive his personal blessing. The service represents a ritual cleansing of evil from the sea, or a votive offering to the sea god (in this case Christ) to offset bad weather, which may have earlier origins in pagan rituals. Its relatively late introduction into traditional Australian fishing culture may reflect the changing fishing community composition and ethnic origins after 1945, as more southern European immigrants entered the industry (Broeze 1998:189). Blessing of the Fleet ceremonies have become popular social events, which often overshadow the spiritual component of the ceremony (Broeze 1998:191), a sentiment echoed by [GW] who said that: "it was more for show" [than religious purposes].

Until this time religion does not appear to have played a large role amongst the majority of fishermen. Indeed, one fishermen who was also a Minister commented:

> ...religion was non-existent to them. The fishermen would never go to church to worship, and the only time they had a need for god was when they got into trouble at sea - they talked down the Lord, who they had no need of at other times and would blaspheme his name when they got ashore, and would say 'by Christ I cried out to the almighty to save me'. [LF]

This view was shared by [GW]:

> Fishermen weren't religious, not a bit. The only time they had seen a church was at weddings and funerals - they weren't religious people…I once heard a minister say that Queenscliff was the most unreligious town he had been in. [GW]

4) White Rudders and Sharks

Fishermen in Port Phillip Bay have always feared the presence of sharks during their fishing activities. Sharks often followed snapper and mullet schools into The Bay, which were a problem as they usually stripped fish from the line before they were hauled in [PF]:

> You always let the sharks have the snapper if they were chasing it, as they would be attracted to the boat otherwise… If you saw Mako sharks under the boat, you would pull up the long line and all the snapper had been taken from the line. [HM]

Numerous historical accounts documented this happening (eg QS 4/11/1899), as did many oral accounts of where fishermen had "run-ins" with sharks:

> Sammy Culliver was fishing on the snapper beds once and was losing a lot of double enders as there was a snapper shark there, and he was losing a lot of fish. He decided to go for it and get both fish in before the shark took it. As he reeled the fish over the side of the boat, the shark leapt out over the back of the boat, and Sammy fell over backwards into the fish well, and had to fend the shark off with the tiller. There were teeth marks on the boat to prove it. Sammy was as white as a sheet when he got back, and staggered into the pub to tell his story. He was shaking so bad he could hardly hold his beer. [PF]

This story may also be conflated from many different occurrences, as the person concerned has been identified as Sammy Culliver, Bluey Walsh or Dugga Warren [JB; LID; PF].

Sharks were left alone for fear of them attacking boats.

> …another time, some Queenscliff fishermen went to Lorne and a great white started circling the boat. To get rid of it, the fishermen speared the shark, and it bit the back off the boat. [PF]

> Dugga Warren was out fishing in an old 21ft boat on a snapper bed with old Fred Farman, when a shark started to make a nuisance of itself. Fred decided to pull in the fish before the shark got it, and had it inboard and between his legs when the shark launched itself over the stern and across the brass horse as it was called. It bent the brass horse, and tried to get old Fred, and scared the hell out of both of them. It was a bronze whaler. Old Reggie Wells put down a drum attached to hooks, and the shark took the bait and drum and disappeared. [PF]

This story was also repeated in Hunt (1999).

[PF] recalled that this sometimes influenced the designs of boats:

> Fishermen would also not paint their rudders white, as it attracted sharks. It was my understanding that if you were fishing on the snapper beds…if you painted your rudder white you were more prone to damage when trying to get the snapper in ... because the reflection of the rudder as it moved [if painted white] used to attract the sharks to the boats.

Another circumstance was detailed where fishermen at Port Welshpool supposedly increased their catch of barracouta by attaching a mirror to the bottom of their rudder, but this was a ruse designed to fool Gippsland fishermen who were unfamiliar with couta fishing techniques:

> When Jocka Todd and Smacka Jackson went down to Port Welshpool, they cleaned up. They told all the locals that they had put a mirror on the bottom of the rudder, and that

> this attracted the fish. Within weeks everyone there had a mirror on the bottom of their rudders, but they [the Queenscliff fishermen] had only been putting it over them. [HM]

Fishermen also gutted their fish out to sea, so as not to lead sharks back to shore around the piers. The Lorne Pier was apparently free of sharks until a fisherman broke the rule and gutted fish whilst tied up alongside, and there have been sharks there ever since [HM; PF]. One historical source supported these assertions (QS, 23/3/1907), where fishermen expressed concerns that sharks were intelligent enough to following net and line boats as they knew that fish would be caught near them. This observation has implications for expected archaeological remains for fishing sites, and might explain the lack of fish cleaning facilities in the Queenscliff area.

Sharks were obviously a constant tangible danger within the fishermen's world, and have also been incorporated into local lore in various forms. Although many tall fishermen's tales may abound, they appear to have a thread of credibility in most accounts given their similarities to other historical accounts, which were told and retold to the author on many occasions. These forms of folklore tales represent parables in which social history is recorded, but that also reinforce the underlying need for caution when dealing with sharks. Their significance therefore lies not so much in the facts of the past, as opposed to its' implications to that society, a notion which is consistent with Gazin-Schwartz and Holtorf's (1999:13) observations of folklore meaning**.** These forms of stories also provide insights into cognition and perceptions that are often not accessible elsewhere. The threat of shark attacks may also have produced tangible modification in vessel designs, albeit subtle avoidance of the use of certain colours.

5) Penny under Mast Steps

Other superstitions may have left more tangible evidence in the archaeological record. Hunt (1999:92) indicated that pennies were placed under the mast steps of some small boats in Lorne. Some locals [JB; PF] remembered this practice was undertaken by a number of boats in Queenscliff:

> It wasn't a penny, it was a shilling. Yes they all did it at Queenscliff when they built their boats. They got a shilling from the year that the boat was launched, and it stayed there until the boat was wrecked or sold. If a boat went elsewhere, and they pulled out the mast you would see the date that the boat had been launched from the date on the shilling. They stopped doing that about the start of the war, when masts were being replaced with motors, but until then all of the Queenscliff boats had it. We had no masts in the pilot service boats, so we didn't do it there. All the fishing boats had it. It goes right back to the start of building boats in Queenscliff. They always put shillings under the mast. [JB]

[HM] also recalled this practice, though never actually saw it:

> I have heard of people putting pennies under their masts, but we didn't do it here or at Lorne, not in my time. We had tabernacle in our boats, you know where you lower away the masts, so we couldn't have put a penny under there even if we tried. The older boats might have though. I have heard hearsay evidence of that happening here.

This custom has its roots in ancient times, where coins were always placed under the mast to appease the spirits of the deep, and to pay Charon the Ferryman, who in Greek legend ferried the souls of the dead across the Rover Styx to the underworld of Elysium (Jeans 2004:306). This tradition of votive coin offerings is evident in some of the earliest known shipwrecks, including the Blackfriar's Barge #1 in London (second century AD), and the first century BC Mediterranean wreck the *Chretienne* (Delgado 1997:64).

Hunt (1999:28, 33) recorded other examples of superstitions in the Lorne community, including swallows as harbingers of good luck, breaking mirrors and spilling salt was bad luck.

6) Seagulls on Masts

Many superstitions appear to have been introduced with the arrivals of immigrants:

> There was a fisherman down here after the war, who was from Scotland, and he was really superstitious. He was a sponsored fisherman, you know they get sponsored to come out here to work. When he got out in a boat and a seagull landed or sat on the mast he wouldn't go out, and refused to work. He was just a deckhand and the bloke who owned the boat would get wild with him. He was very superstitious, and we would all laugh at him. That was after the war (WWII) and he had been working over in Scotland on the trawlers there, and must have brought the beliefs with him from there. You would probably hear a lot more of that sort of thing if you went over there. [JB]

7) Drowning Men

In 1863, three Chinese fishers died after their brethren would not go to their assistance as they were superstitious about rendering assistance to drowning men (Simpkin n.d.:10). This belief was common amongst some mariners around this time (Jeans 2004: 326).

Appendix E-8: Fishing Marketing Companies, Associations and Transport

Fish Marketing Companies	Date
Lorimer and Company	ended 1859
Queenscliff Geelong and Ballarat Fish Company	1864
Tobias and Company	1866-1867
Queenscliff Fishing Company	1865-1878
Queenscliff Fishing Company (based in Geelong)	1878-1884+

Table E-8.1: Known fish marketing companies that operated in Queenscliff.

Fishers Associations (Local)		Fishers Associations (Statewide)	Date
Queenscliff United Fishermen's Association (UFA) - superceded by Victorian Fishermen's Association (VFA) in 1910	1864-1910		
Queenscliff Fishermen's Union (QFU)	1910-1930s	Victorian Fishermen's Association (VFA)	1910-1940s
Queenscliff Fishermen's Club (QFC)	1930s	Victorian Fishermen's League (VFL)	1920s
Victorian Professional Fishermen's League (VPFL)	1940s+	Victorian Professional Fishermen's League (VPFL)	1940s-
Queenscliff Fishermen's Cooperative Society (QFCS)	1949-1980		

Table E-8.2: Fishermen's Associations Engaged in Fish Marketing (Source: Raison 1987:7-8).

Transport	
Bay Steamer services, or a coach/cart service to access the Melbourne and Geelong Markets	pre 1879
Fishermen share responsibility to load 1-2 boats with days catch to deliver to markets	pre 1879
Train - louvered cars to Melbourne, Geelong, Ballarat, Bendigo, Portland	1879-1933
Ice imported to pack fish for market	1917
Truck - Alex Laker	1933
Ice works opens - Icey Jones Factory	1938

Table E-8.3: Known modes of fish market transport from Queenscliff.

The remoteness of Queenscliff from a major city was always a problem for fishermen, as the fish had to be transported to market before they spoiled. Prior to 1879, fish were transported to Geelong via a fish cart (Raison 1987:7). Before this time fishermen were also reliant on the regular Bay Steamer services, or a coach service to access the Melbourne and Geelong Markets. At one stage, the entire days catch would be loaded onto one or two couta boats and fishermen took turns to sail the catch up the bay to the market [CS; GW]. After a Melbourne trader began buying fish direct from the fishing boats at sea, at least four attempts were made to establish marketing companies at Queenscliff, including: Lorimer and Company (ended 1859 - GA 12/4/1859); Tobias and Company (1866-67 - GA 26/4/1867:3); Queenscliff Geelong and Ballarat Fish Company (1864), and the Queenscliff Fishing Company in1865, the latter of which lasted many years, and moved to Geelong in 1878 (Raison 1987:7).

In 1877, the construction of the Geelong to Queenscliff Railway in was approved by the Legislative Council (GA 13/9/1877:2). Although installed essentially for the convenience of the military, the train station was an integral component of the fishing landscape, as it opened markets in Melbourne, Ballarat, Bendigo and Portland. The introduction of regular local train services by 1879 dramatically changed the workload and viability of the Queenscliff fishing market, a situation that was repeated elsewhere around the entire state. However catches still spoiled enroute when trains were delayed. This situation led to the importation of ice for packing market consignments in 1917, and by 1938 a local iceworks was opened by Icey Jones for this purpose (Raison 1987:7, [LID]). The fish trains were recalled by [CS]: "When we got back to the piers, we would put the fish in crushed ice, and put them on the train in louvered carts for transport to Melbourne". In 1933, a local businessman (Alex Laker) contracted to take all fish to market using one of his two trucks, which ended the previous reliance on trains ([JP], Raison 1987:7-8).

The fishermen also began organizing the distribution of fish from a very early period. When an oversupply of fish at the Melbourne market in 1892 led to good fish being condemned for lack of demand, this generated concern to the local producers, who realised that they needed some mechanism to control fish supplies so as not to produce a glut (QS 10/12/1892). Fishermen imposed their own quota system which limited their daily catch:

> There were 30-40 couta boats in the early days. Twenty four of them were gaff rigged. There were usually 3 people onboard, a father and two sons. Boys 14-16 were allowed a quota of 3 boxes, and men could have 6 boxes a day. The quota was imposed by the fishermen to keep the price stable on the market. It was tough until after the war. [HM]

The Queenscliff United Fishermen's Association was founded in 1864 to protect fishing interests, and began marketing fish large quantities of fish in competition to other suppliers (GA 7/2/1866; Raison 1987:8). The organization was superceded around 1910 by the Victorian Fishermen's Association (VFA). Around this time the Queenscliff Fishermen's Union was founded into manage local procedures, and later became the Queenscliff Fishermen's Club in the 1930s. The VFA was superceded by the Victorian Professional Fishermen's League in the 1940s, and Queenscliff fishers assumed a greater role in this society. The formation of the Queenscliff Fishermen's Cooperative in 1949 allowed fishermen a degree of certainty regarding catch prices, as fish were now sold to the co-op at a daily fixed price, and fish could be held back to avoid a glut and low prices at markets (Raison 1987: 8; [JP]).

Appendix E-9: Boatbuilding in Queenscliff and Pt Lonsdale

1) Introduction

This appendix gives a chronological and geographical summary of boatbuilders in the Queenscliff and Pt Lonsdale area that is useful for understanding the progression of boatbuilding activities, both geographically and temporally. It also provides an overview of the personalities involved, and gives insight into the guild-like trade that saw each new boatbuilder first apprenticed to his predecessor. Significant boatbuilding sites are also outlined below.

2) Boatbuilders (Chronological)

A) Anders Hansen

Anders Peder Hansen emigrated from Denmark where he had a family history of boatbuilding. He learned the trade from the highly skilled craftsmen there, before migrating to Australia in 1890, where he began boatbuilding at Queenscliff. He worked as a boat builder with the Sea Pilots on the front beach in a shed formerly occupied by the Customs Shed (Raison 2002: 9-10), before establishing a boatbuilding business at the rear of the Vue Grand Hotel in the old Hall by the Sea building (at the corner of Learmonth and Hobsons Streets) where he built several large boats (QMM display; Ferrier 1981:1, Raison 2002:10; [PF]).

Hansen moved to Pt Lonsdale sometime between 1906 and 1912, where he established another boat building shed adjacent to the guesthouse *Elsinore* that was run by the Cooper family (his wife) on the corner of Kirk Road and Simpson St (Ferrier 1981:1; Raison 2002:10). Hansen was mentioned in QS 22/8/1908 when he launched new motor launch for Mr W. Murphy. Hansen transported his boats to Queenscliff on a purpose built boat jinker towed by George Werry, or launched them on the front beach at Point Lonsdale, where they were rowed to Queenscliff (Ferrier, 1981:8, Raison 2002:10). Hansen built the first boat with an engine in Victoria when he installed the motor from a lifeboat from the RMS Australia. Hansen's clients spread nationally, with regular clients from South Australia. He was famous for being able to build a clinker boat in one day, where he charged by the foot to build a boat. Hansen returned to Denmark in 1924, and his shed burned down in 1928(QMM display).

B) Mitchi Lacco

Mitchell Lacco, (colloquially known as Mitchi) was descended from a lighthouse crew family, and was born at McCrae in 1883. Mitchi served as an apprentice to Hansen at Point Lonsdale in the early 1900's. After marrying his wife, Lucy Marie, they had four children, three of whom also became boat builders (Ken, Alex and George). The Lacco family moved to Queenscliff from Rosebud in 1916, and established a sail making and boat building business at 31 Beach St, where the boats could be manhandled directly into Port Phillip Bay behind the allotment, which stood at the edge of the high tide mark. Larger boats were launched with the help of many assistants, who were rewarded for their efforts with a keg of beer (QMM display; Ferrier 1981:1, 5; Kerr 1985:62; Raison 2002:10).

Lacco and his daughters also operated a small sail making business in a small loft at the side of their house. Lacco worked closely with fishermen to improve the sail designs for the couta boats, and eventually replaced the dipping lug rig with gaff rigged sails which were easier to handle in windy conditions (Raison 2002:19).

When Peter Locke, who had been working for Lacco since 1924, took over the business in 1926, Lacco established another sail making and boat building enterprise at the south west corner of Hobson and Learmonth St, opposite the former premises of Anders Hansen. Lacco returned to Rosebud between 1928-34, where Lacco's son Ken began building shark boats with the Pompei Brothers Boat Builders at Mordialloc. Mitchi Lacco died in 1974 (QMM display; Ferrier 1981:1, 5, Kerr 1985:62, 64; Raison 2002:19).

C) Peter Locke

Born to a fishing family at St Leonards in 1900, Peter Locke worked for Mitchi Lacco, for two years before buying his original business in Beach St in 1926 (Kerr, 1985: 64). Part of Lacco's original boatshed was moved to the northern end of Beach St in 1935/36, where a large slipway was also constructed. The shed was either enlarged or a second shed constructed to build the Bass Strait Crayfishing boat (the *Hilda Norling*) in 1939/40 and was also used to build shark boats (QMM Display; Kerr nd: 48; Ferrier 1981:1; Raison 2002:19). The last boat was built at 31 Beach St in 1939 for N Zanoni (Ferrier 1981:7). Locke was joined by former house builders Bob and John Cayzer in 1934, and took on Bob's son Aston as an apprentice in 1938. Locke built over 109 boats until 1947, when he leased the business to the Cayzer Brothers to go shark and crayfishing until he retired in Melbourne. When he died in 1988, his ashes were scattered over the waters south of Shortlands Bluff (Raison 200:19; QMM Display).

D) Cayzer Brothers

Figure E-9. 1: Locke's/Cayzers Brother's boat shed dock/ slipway.

Figure E-9. 2: Cayzer Brothers (Photo: PH7026 QHM Collection).

John and Robert (Bob) Cayzer were born at Pt Lonsdale, and in their formative years were exposed to the activities of Anders Hansen, where Bob served as an apprentice. He also worked for Peter Locke at Queenscliff (Ferrier 1981:1). By the end of 1947 they had leased the building from Locke, and the business became known as Cayzer Brothers Boatbuilders, who bought the shed in 1957. The two brothers died in 1970 and 1972 respectively and were buried in Pt Lonsdale Cemetery (QMM Display, Ferrier 1981:1). [HM] also manufactured craypots at Cayzers boat shed for many years, and recalls the shed was originally manufactured by Mitch Lacco in 1916, and was subsequently moved to the site. He recalled:

> We used titree for making the craypots, and the teatree came from Rye. You would get 51 trees to a bundle from near the Yacht Club at Rye. I made the pots in Cayzers shed. It had an "L" shape at the end of the shed where we used to store the timber. There was big boat building here at one time. They made fishing boats, shark and couta boats early on. Peter Locke made many of them, and Mitzy Lacco built a shed in 1916 that was the original boat shed. [HM]

E) A&R Cayzer/ Cayzer Boats

Aston Cayzer, son of Bob, worked as an apprentice to Peter Locke prior to WWII, and following the war resumed boatbuilding with his father and uncle. Alan and Keith, sons of John, worked as apprentices in the business. By 1957, the business became known as A & R Cayzer, when Aston went into partnership with his father. Aston and his wife Joyce later established Cayzer Boats with his son Alan as a business partner in 1969, after the death of Bob Cayzer. The proposed widening of the road in 1981 saw the sheds relocated to the eastern corner of Larkin and Harbour St, where they were renovated and the business renamed Cayzer Boats. Over a forty year period, the Cayzer family had built 200 boats. Although Aston has retired, and Alan manages the Royal Geelong Yacht Club, Keith has a mobile boat building business (Raison 2002:19; QMM Display).

The site was subsequently purchased in 1987 by the shipping chandlers West Coast Marine Corporation, which was operated by Chris Dyer and Claire Grundy. Timber boat repairs were made available at the chandlery, and David Gough operated a fibreglass boatbuilding business on the premises (Raison 2002:19).

F) Gilcraft Boats

The founder of the company, Gil Allbutt, was born into a fishing family at Portarlington in 1931. By the age of 16 (1947), he had commenced an apprenticeship with Peter Locke, and continued work with the Cayzers until he established his own business in 1957 near the rear of the Vue Grand. He later transferred his premises to Roddrick Grove, and then to a large workshop on the corner of the Bellarine Highway and Ward St, where he built timber boats up to 40 ft. By 1974, he began producing the first of two series of fibreglass boats, (Gilcraft 20') and by the late seventies the Gilcraft 27' went into production. He built a range of vessels, including the Metani schooner and developed a fibreglass displacement pleasure fishing boat (QMM Display; Raison 2002:19).

G) Graeme Ruffin

Ruffin was born in 1943, and became an apprentice to A & R Cayzer in 1959. By 1963, he had had established his own business with two other boat builders at Leopold. Around 1970 he moved to Queenscliff and established a 80 x 50 ft boatshed adjacent to the boat harbour on the eastern boundary of the Port of Geelong Authority in Larkin Parade. He built scallop and couta boats, pleasure launches, yachts and pur seine skiffs, and employed up to 10 craftsmen. The shed was sold in 1976, when Ruffin moved to South Australia. The site was until recently occupied by Parks Victoria Offices (QMM Display).

H) Charles Zanoni/ James (Dugger) Warren

Charles Zanoni was born in Queenscliff to a fishing family, and like Dugger Warren, built boats in addition to being a professional fisherman. Warren introduced many new technical innovations into the industry, and was the first to install an echo sounder and radio direction (from an airplane)

finder into vessels in the area [LID]. He was also the first person to fish commercially for scallops in Port Phillip Bay (QMM Display, Raison 2002: 20). They built the vessel *Olympic* in the 1950s, and it was launched in 1956 between Bridge and Bay Streets. They launched it at right angles to the new bridge after they had dredged the area beside the bridge [AH; LZ].

I) Sea Pilots Boatbuilding

Many boat builders were also employed by the Port Phillip Sea Pilots to build and maintain whaleboats used to ferry pilots between the cruising vessels and client ships. These shipwrights included Anders Hansen, William Hill, Peter Menzies, Ernest Munns and Jack Beasley (Raison 2002:20).

J) Swan Bay (Near Nye Rd/ Yarram Creek)

A number of informants mentioned a one off construction of a boat/barge near the Nye Rd end of Swan Bay, but as this site was not inspected during fieldwork, its existence was not confirmed:

> There was big sheoak and little sheoak, where they moored the barges in Swan Bay for taking out the wattle bark. They used to go into the creek at Walpole. They would go in there and load up the barges with wood and bark. There was a sailing barge that was built on the banks of the creek, it was called the *Fidge*, and it was 50 ft long. It was located down the road just before the service station on the way to Portarlington. As you go round the bend before the farmhouse, Dunrobbins, it was just over the hill, and you would go down to the right. It is fenced off now and you'd have to get permission to go onto the land (North of Nye St). They built a barge there on the creek entrance. They got wattle bark out from there, and they would float the boats into the creek and pick up the bark. There are just a few sticks left there now. The barge would go ashore, and at low water a horse and cart were used to bring bark out and wattle tress for the bakeries at Melbourne. They would be loading while the tide was out, and the barge would sit there for three or four days until it was loaded up. [JB]
>
> There was once a 60ft boat built up there...this was a one off, but it shows how deep the water once was [CA].

3) Significant Boatbuilding/Boat Maintenance Locations

A) Slipways

I) Tobin's Jetty/ Swan Bay Slipway

Tobin's Jetty stood just in front of the present railway station, and its date of manufacture is uncertain (QS 24/12/1910). A new slip was being built at Swan Creek in 1912 to allow boats to be slipped and cleaned after the crane was removed from the old Pier (QS 25/5/1912), which fits the general location of this facility.

A slipway of unknown origin is located behind the Queenscliff Railway Station, and consists of parallel timber ways mounted on heavy timber piles. [LID] suggested that based on local speculation that the facility was used for launching an early lifeboat, but this would have presented problems when insufficient water would have been available for crossing the Queenscliff Bar, which would have slowed response lifesaving response times as the vessel would have been forced to row around the top of Swan Island to get to the heads. The facility may be associated with early craft moored in Swan Bay, or possibly with Anders Hansen's boatbuilding establishment at the top

of Learmonth St. However, the construction of the Railway in front of the facility, along with the installation of the low bridge to Swan Island either suggest that it was only used for slipping smaller vessels, or predates those facilities.

> There was a yacht club behind the Railway Station once. That was before my time. The Swan Bay Yachts used to use it, and they sailed in the bay there. Lewis Ferrier had a boat that he sailed, and he used it for that. Dr Germain, we used to call him the German, his son had one (boat) too. They had regattas there, and the slipway was put in for them. [HM]

> There was an old slipway that was behind the Railway Station. It was used to slip boats in Swan Bay until at least the 1930s. I can remember seeing boats pulled up there around that time. There were also three pipes that came out around that area, and one of these was close to this slip. You can still see the remains of the slip in that area…No, it's not the remains of the pipe outlet, its definitely part of the slipway. [CA]

This slipway may also be associated with Hansen's business, as it lies almost directly in line with the end of Learmonth St, and would have been the shortest direct route to the water. Further work is required to positively identify the origins of this structure.

Figure E-9. 3: Swan Ponds Slipway Remains, 2004.

II) Fishermen's Pier Slipway/ Crane on Fishermen's Pier

During the 1920s and 30s, a slipway was based on the extremity of the Fishermen's Pier, which was used to slip vessels for maintenance. The slipway was used in conjunction with a winch shed to haul small fishing craft onto the pier for maintenance and repairs. All boats were pulled out of the water and stored on the pier during rough weather, and a similar situation also occurred at the pier at Lorne.

Figure E-9. 4: Fishermen's Pier Slipway (Photo: PH3757, QHM Collection).

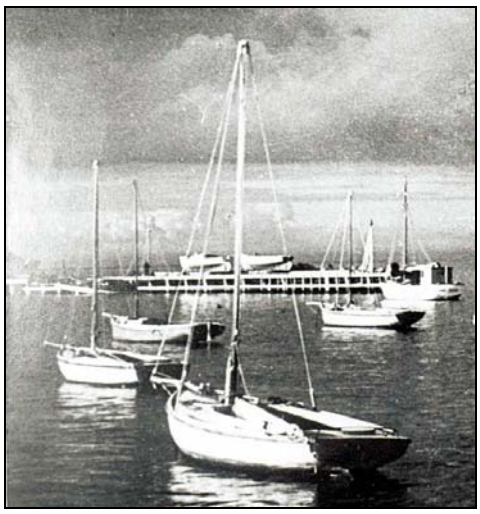

Figure E-9. 5: Fishermen's Pier Slipway (extreme left) and couta boat moorings c.1920 (Photo: PH4869, QHM Collection).

III) Fishermen's Basin Slipway

In 1964, a new slipway was built on the western end of the Fishermen's Harbour to replace the former facility that stood on the Fishermen's Wharf (Raison 1987:26).

Figure E-9. 6: Queenscliff Slipway.

Figure E-9. 7: Queenscliff Slipway Winch Shed. Note former Fisherman's Pier Barometer and Fishermen's Meeting Place Seat on right.

B) Careening Beaches

I) Swan Spit Beach

Many couta boats were careened by early fishermen along the shore of the Swan Spit beach. The boats were dragged ashore on greased rollers using block and tackle, were chocked on each side with timber lengths, and then antifouled and painted [CS; LID]. This practice was evident in lithographs as early as 1866 (see Figure 7.1).

> There was a big beach at Swan Island. The creek came out at the end of it near Swan Island. It was a very pretty beach. You would pull your boat up on the beach on rollers using a rigging block and tackle to paint and anti foul it. [CS]

II) Queenscliff Bight Careening Beach: Boat s Pulled onshore in Rough Weather Between Piers

Figure E-9. 8: Fishing Boats Ashore between the Piers, facing north (Photo PH2350, QHM Collection).

Figure E-9. 9: Fishing Boats Ashore between the Piers, facing north (Photo PH2350, QHM Collection).

Boats were pulled up on shore between the two piers in rough weather, and when boat maintenance was required.

> The wind was usually off the land in winter, but if it came onshore we would pull the boats up on shore. We usually kept the boats off shore on moorings if the wind was right. [HM]

C) Resource Locations

I) Military Sites Provide materials for Boatbuilding

Several Queenscliff fishermen indicated that various military sites provided materials for boatbuilding. After the South Channel Fort closed in the 1960s, fishermen would go over and take the jarrah supporting beams which were used as the keels for constructing their boats [CS; LID], a factor that probably led to the collapse of some of the underground sections of the fort (Kitson 1987: 5.4). The former entrance tunnel into Fort Queenscliff at the base of Shortlands Bluff, which was once lined with thick jarrah beams, also appears to have been mined for this resource [SH]. Kerr (1985:54) has recorded similar behaviour at Port Melbourne, where fishermen cut sections off the pier to form the stem and sternposts for their fishing boat.

Artillery sites also provided unexpected boons for fishermen. It was common knowledge in the community that shells had been fired at Duck Island for artillery practice [CS; HM; LID]:

> The fishermen used to go to Duck Island to get the rifling bands from the shells that they fired at there. They used them for the quarter bands on the backs of the couta boats, you know as a rubbing strake to protect the stern of the boat. They had a howitzer in Swan Bay that used to fire at the island. [HM]

> Fishermen used to salvage shells fired at Duck Island. They would remove the driving bands off the shells (copper rims around the iron shell), which were then flattened and straightened out and used as rubbing strakes/strips on the stern of couta boats to protect the vessel when it rubbed against the wharf [LID]

> In the south west corner of Swan Bay on the Portarlington Road the army had a howitzer that they used to fire at a target on Duck Island. They knocked over all the sheoaks that used to grow on the island, and there big holes on the island and dead rabbits everywhere. [CS]

The former shelling of Duck Island was still evident during fieldwork, where large craters up to 1.5m deep and 2.5m wide were found scattered around the island, along with shrapnel and artillery shells fragments.

II) Ancillary Materials for Boatbuilding

The Gasworks was also an important component of the fishermen's and boatbuilding landscape. Many fishermen recalled the use of tar during boatbuilding:

> When I was a kid, I was sent up to the gasworks at Queenscliff to get tar in a four gallon kerosene drum. We used to tar the yards with it, and used to tar the inside and outside of the boats before we put on the anti-fouling. It gave a good seal for the boats. We would throw beach sand on it after it was finished, and this was done every year. We used to get a sixpence for doing it [CS]

[HM] also recalled the use of tar to preserve craypots and buoy float lines

I used to make my own craypots. I would go to Port Melbourne and buy the old SEC lines (electrical power lines) for the craypots. I would use them for the frame of the pots and I would weave the cane around them. We had to stop using the SEC wires after they changed to aluminium lines, as they wouldn't last in the salt water. I used cane for the pots. I bought the cane, it was ti-tree sticks from Rye. You would buy it by the bundle from a bloke over there. One time Paddy and I went over there and cut our own. We used tar to tar the ti-tree, and we tarred the pot lines in the early days too. We used sisal for the ropes. [HM]

4) Boat Building Locations

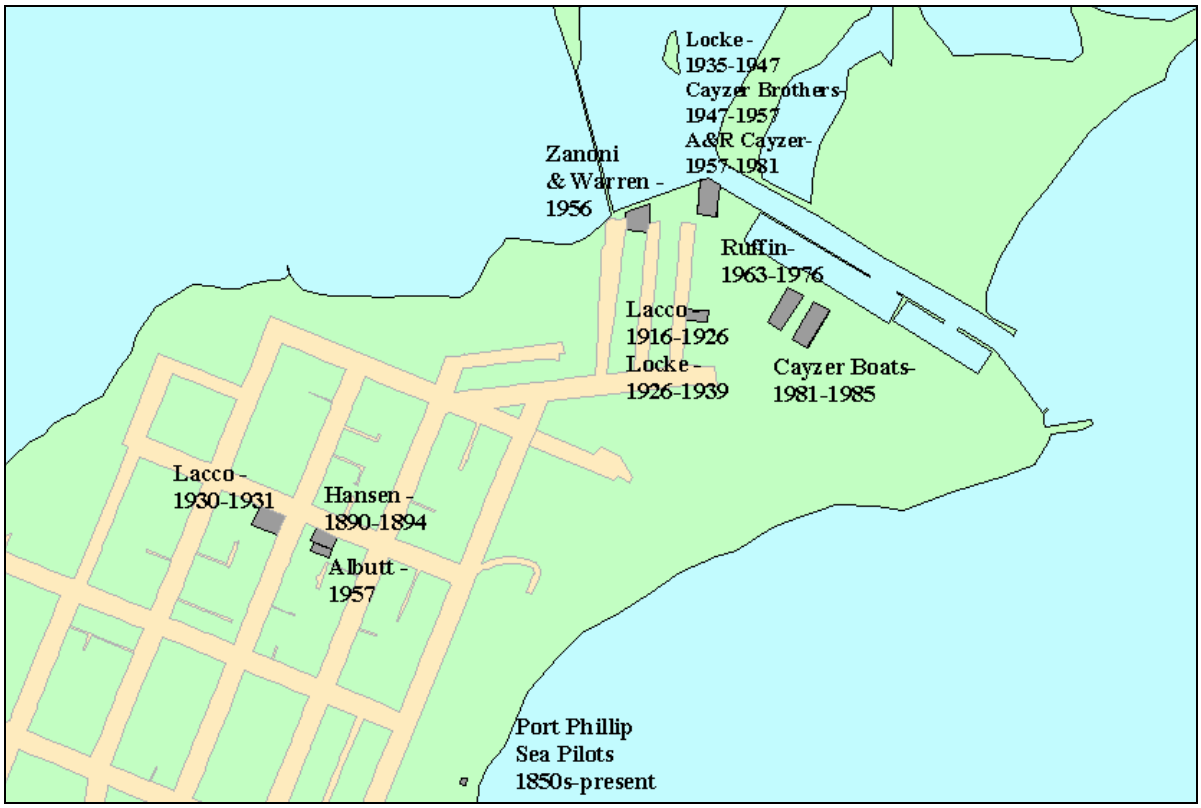

Figure E-9. 10: Boatbuilding locations in Queenscliff.

A) Corner Learmonth and Hobson St

Anders Peder Hansen emigrated from Denmark where he had a family history of boatbuilding. He learned the trade from the highly skilled craftsmen there, before migrating to Australia in 1890, where he began boatbuilding at Queenscliff. He worked as a boat builder with the Sea pilots on the front beach (F. Ferrier 1981:1) before establishing a boatbuilding business at the rear of the Vue Grand Hotel (at the corner of Learmonth and Hobsons Streets) where he built several large boats. When Peter Locke, who had been working for Lacco since 1926 took over his business in 1930, Lacco established another sail making and boat building enterprise at the corner of Hobson and Learmonth St, in the former premises of Anders Hansen. In 1931, the Lacco returned to Rosebud, where Laccos son Ken began building shark boats. Mitchi Lacco died in 1974. The founder of Gilcraft Boats, Gil Allbutt, was born into a fishing family at Portarlington in 1931. By the age of 16 (1947), he had commenced an apprenticeship with Peter Locke, and in 1957 opened his own business near the rear of the Vue Grand (QMM display).

B) Corner Kirk and Simpson St, Pt Lonsdale

When Anders Hansen moved to Pt Lonsdale in 1894, he established another boat building shed adjacent to the *Elsinore* guesthouse that was run by the Cooper family on the corner of Kirk Road and Simpson St. Hansen transported his boats to Queenscliff on a dray or launched them on the front beach at Point Lonsdale, where they were rowed to Queenscliff. Hansen's had clients spread nationally, with regular clients from South Australia. He was famous for being able to build a clinker boat in one day. Hansen returned to Denmark in 1924, and his shed burned down in 1928(QMM display).

C) 31 Beach St: Sail Loft

Mitch Lacco, (colloquially known as Mitchi) was descended from a lighthouse crew family, and was born at McCrae in 1883. After marrying his wife, Lucy Marie, they had four children, three of whom also became boat builders (Ken, Alex and George). The Lacco family moved to Queenscliff from Rosebud in 1910, and established a sail making and boat building business at 31 Beach St, where the boats could be launched directly into the water behind the allotment. Peter Locke worked for Mitchi Lacco, for four years before buying his original business at 31 Beach St in 1930. Part of Lacco's original boatshed was moved to the northern end of Beach St in 1935/36, where Locke built a large slipway. The last boat was built here in 1939 for N Zanoni (F.Ferrier, 1981: 7).

D) 1 Beach St

Part of Lacco's original boatshed was moved to the northern end of Beach St in 1935/36, where a large slipway was also constructed. The shed was enlarged to build a Bass Strait Crayfishing boat (the Hilda Norling) in 1939/40 (QMM Display; Kerr, nd: 48), and was also used to build shark boats. Locke built over 109 boats until 1947, when he leased the business to the Cayzer Brothers. He later went shark and crayfishing until he retired in Melbourne. When he died in 1988, his ashes were scattered over the waters south of Pt Lonsdale, and in their formative years were exposed to the activities of Anders Hansen, and joined Peter Locke at Queenscliff. By the end of 1947 they had leased the building from Locke, and the business became known as Cayzer Brothers Boatbuilders, who bought the shed in 1957. The two brothers died in 1970 and 1972 respectively and were buried in Pt Lonsdale Cemetery. Aston Cayzer, son of Bob, worked as an apprentice to Peter Locke prior to WWII, and following the war resumed boatbuilding with his father and uncle. Alan and Keith, sons of John, worked as apprentices in the Cayzer business. By 1957, the company became known as A & R Cayzer, when Aston went into partnership with his father. Aston and his wife later established Cayzer Boats with his son Alan as a business partner in 1969 (QMM Display).

E) Corner Larkin and Harbour St East

By 1981, the A & R Cayzer's shed (originally Lacco's shed from 31 Beach St) had been relocated from 1 Beach St to the eastern corner of Larkin and Harbour St, where Cayzer Boats operated until it was subsequently purchased in 1985 by West Coast Marine Corporation. Over a forty year period, the Cayzer family had built 200 boats. Although Aston has retired, and Alan once managed the Royal Geelong Yacht Club, Keith has a mobile boat building business (QMM Display).

F) Corner Larkin and Harbour St West

Ruffin was born in 1943, and became an apprentice to A & R Cayzer in 1959. By 1963, he had had established his own business with two other boat builders at Leopold. A few years later he moved to Queenscliff and established a 80 x 50 ft boatshed adjacent to the boat harbour. He

built scallop and couta boats, pleasure launches, yachts and pur seine skiffs, and employed up to 10 craftsmen. The shed was sold in 1976, when Ruffin moved to South Australia. The site is now occupied by Parks Victoria Offices (QMM Display).

G) Private Boatbuilding Charles Zanoni/ James (Dugger) Warren

Charles Zanoni was born in Queenscliff to a fishing family, and like Dugger Warren, built boats in addition to being a professional fisherman. Warren introduced many new technical innovations into the industry, and was the first to install an echo sounder and radio direction finder into vessels in the area. He was also the first person to fish commercially for scallops in Port Phillip Bay (QMM Display).

Boatbuilder	Location	Region	Date Begin	Date End	Apprentice to:
Anders Hansen	Port Phillip Sea Pilots,	Queenscliff Bight	1890	unknown	
	SE Cnr Learmonth and Hobsons St	Queenscliff	unknown	unknown	
	SE Cnr Kirk and Simpson St	Pt Lonsdale	1906-1912	1924	
Mitchi Lacco	Cnr Kirk and Simpson St	Pt Lonsdale	early 1900s		Anders Hansen
	31 Beach St	Queenscliff	1916	1926	
	SW corner Hobson and Beach St	Queenscliff	1926	1928	
Peter Locke	31 Beach St	Queenscliff	1924	1926	Mitchi Lacco
	31 Beach St	Queenscliff	1926	1939	
	1 Beach St	Queenscliff	1935/36	1947	
John and Bob Cayzer (Cayzer Borthers)	SE Cnr Kirk and Simpson St	Pt Lonsdale	1906-1912	1924	Anders Hansen - (Bob)
	1 Beach St	Queenscliff	1934	1947	worked with Peter Locke
	1 Beach St	Queenscliff	1947		
Aston Cayzer (A& R Cayzer/ Cayzer Boats)	1 Beach St	Queenscliff	1938		Peter Locke
	1 Beach St	Queenscliff	1947	1957	Cayzer Brothers
A& R Cayzer	1 Beach St	Queenscliff	1957	1969	
Cayzer Boats	1 Beach St	Queenscliff	1969	1981	
	E Cnr Larkin Parade and Harbour St	Queenscliff	1981	1987	

West Coast Chandlery	E Cnr Larkin Parade and Harbour St	Queenscliff	1987		
Gil Allbutt (Gilcraft Boats)	1 Beach St	Queenscliff	1947		Peter Locke
	1 Beach St	Queenscliff	1947	1957	worked with Cayzer Brothers
	SE Cnr Learmonth and Hobsons St	Queenscliff	1957		
Graeme Ruffin	1 Beach St	Queenscliff	1959	1963	A& R Cayzer
	W Cnr Larkin Parade and Harbour St	Queenscliff	1970	1976	
William Hill, Peter Menzies, Earnest Munns, Jack Beazley	Port Phillip Sea Pilots	Queenscliff			

Table E-9.1. Queenscliff and Pt Lonsdale boat builders.

5) Sailmakers Supplies/ Poverty Sails

Many sail-makers provided products for the Queenscliff fishermen in the 1920/30s, from as far afield as Melbourne and Geelong. Poverty sails were also available from the suppliers at half price, and carried advertisements for Fosters Lager, Canton Ale, Victorian Bitter and Velvet Soap ([CS; PF]; Raison 2002: 19).

6) Changing Boatbuilding Landscapes

The first boat builders in Queenscliff operated close to the open shoreline of Port Phillip Bay just above the high tide mark, and were forced to launch into exposed water over sand dunes. However as the port evolved with the opening of the Cut in the mid 1930s, boatbuilding facilities were moved closer to the sheltered waters of Swan Bay, where an outlet to the deep water was now available. In former times the only way to get in through the gap was to unload ballast on the dolphin and to sail in sideways across the bar [HM]. With the construction of the new harbour in the 1960s, along with two new slipways in the 1970s, boatbuilding activities moved closer to the centre the Queenscliff Harbour precinct. Eventually, as road transport networks improved, later boatbuilding, especially of smaller craft, decentralised outside the central borough region.

Appendix E-10: Potential and Actual Archaeological Signatures of Fishing Landscapes

Potential and Actual Archaeological Signatures of Fishing Landscapes																																							
Feature	**Artefact**	**Location**																																						
Fishing		**Mt Martha to Snapper Pt**	**Capel Sound/ Rye**	**Sorrento/ South Sand**	**Portsea**	**Triconderoga Bay**	**Pt Nepean/ Nepean Bay**	**The Rip**	**Pt Lonsdale**	**Lonsdale Bight**	**Shortlands Bluff/ Queenscliff**	**Queenscliff Bight**	**Popes Eye**	**Swan Ponds/ Creek/Cut**	**Swan Bay**	**Swan Island/ Stingaree bay**	**Duck Island**	**Swan Spit**	**St Leonards to Portarlington**	**Coles Channel**	**West Channel**	**Loelia Channel**	**Symonds Channel**	**Mud Islands**	**Pinnace Channel**	**South Channel**	**Geelong**	**Melbourne**	**Lorne**	**Westernport Bay (Hastings)**	**Port Albert**	**Port Fairy - Portland**
Fishing Communities	cottages (small) in backyards - rented out during summer										e h																												
	driftwood/ corrugated iron shacks in remoter locations/ flattened ground															a h								a h															
	drop-pit toilets										h					a h																							
	erosion control devices - groynes, stone seawalls & hulks- as result of above fishing harbour construction											a							a								a											
	exotic vegetation																a h							a h															
	fishing line tanning drum - former 44 gallon drum - heated on fire										h																												
	flattened areas of former house sites																a h							a h															
	foetus/ infant burials in dunes						h				h																												
	hotels - (preferred recreational) located close to fishing harbour (within sight of)										e h																	e h											
	houses (small) timber framed houses, few rooms										a e h																												
	huers hut - elevated positon overlooking bay				h																																		
	located close to most of facilities listed below																																						
	located close to wreck bell and lifeboat facilities										e h																										a h	e h	

	located on geograpically high land, especially if fishers arrived before/ at time of township				h		h																							
	located on geograpically low land on periphery of towns near beach/swamp, especially if fishers arrived after township founded	h		h							a			a	a	a		a				a h							
	looted shipwreck material near houses/ workplaces										h																			h
	looted shipwreck material in structural components of house/ structures/fences										h																			h
	looted shipwreck material near temp camps/ anchorages														a h		a					h								
	net storage sheds										a h																			
	net tanning tanks - concrete with corrugated iron formwork, or rectangular shallow concrete tanks										h																	a h		
	net tanning tanks - cut down corrugated iron water tanks										h																			
	seagrass as insulation in houses										a e h																	h		
	water procurement - timber barrel/ iron tank sunk into dune/ around spring										a																			
	wreck bell close to community			e h							e h																			e h
Fishers Anchorages	boat storage cave				a h																									
	close to fishing communities	a e h	a e h	a e h	a e h							a h		a e h	a e h	a h			a h				a h				a e h		a h			
	fishers basin (enclosed) - formed by two piers											a																a				
	erosion/ changes in coastal geomorphology											a			a			a													
	erosion control devices - groynes, breakwaters, seawalls, hulks											a		a					a												
	harbour - enclosed breakwater arms, narrow entrance	e h																									e h	e h				
	harbour - large breakwater arm, sheltered from SW																															e

	marble bottles with intact engine oil											a																		
	mooring chain											a																		
	ringbolts/ eyes embedded in natrual bedrock																							a h	a h					
	sheltered from prevailing winds (SW) by breakwater or headland	e		e	e							a		e	a h			a						e						
	sheltered using shipwreck hulk			a e														a												
	tie posts - iron or timber upright posts 10-15m apart perpendicualr to shore												a h	a h	a h	a h			a h			a h		a h	a h		a h	a h	a h	
	wrecks - fishing boats										a		a																	
-moorings	**ballast -** lead ingots				a																									
	ballast - pig iron/ fireplates										h																			
	curbing stones fitted with ringbolts																								a h					
	engine blocks											h		h																
	kerosene tins filled with concrete																	a h												
	oceanic mooring - two anchors at Bow, stern rope to pier																									h				
	sheltered mooring - one anchor on swivel										h																			
	train wheels											h		h																
	tie posts- iron/timber												a e	a				a						a			a	a		
-rat infestation	dead rats													h																
	rat traps													h																
Fish Landing/ Processing Locations	fish cleaning platform																											a		
	hard or fishers access road across swampy terrain								a h				a													a	a		
	iceroom - concrete underground bunker (usually in remoter areas)																									a				
	paddocking posts - substantial timber posts in shallow sheletered waters																											a		
	paddocking posts/stakes - lightweight timber shallow in sheltered waters					h		h		h				h														h		
	sheep shears										h		h		h												h	h		

Fisher Piers - Official	barometer									e																				
	boat accomodation on pier -usually associated with oceanic setting										h																e	e		
	crane for lifting cargo/boats	h		h							h		e				h							h		e	e	e	
	fish storage shed										a e						e													
	fish transport- louvered rail cars										h																			
	fishing co-operative (close to pier and transport)	e		h	h					e							e							e		e	e	e	
	iceworks - nearby										h																			
	landing stage - set at lower level to main pier										h													e h		e h	e h	e h	e h
	lifeboat shed										a e h																	h	e h
	louvered railway cars									h	h															h			
	pier - large robust/ substantial with breakwater planks	e		e	e						a e			a e h			e						e		e	e	e	
	railway track/ tramway on pier and nearby										a e																		
	sheds on pier - for rope, waiting, fish and buoys										a e																	e h	
	slipway & winch shed on pier										h																e		
	tramway line through back of houses to train station -									a h																			
	weather vane									e																			
Fisher Piers - Vernacular	rough/lightweight construction													a		a		a				a					a	a	
	hards, tieposts nearby													a h	a h	a h		a h				a		a			a	a	
Boatbuilding	boatbuilding yard								h		h	h		a e h	a h									a e h				a e h	
	careening beach										h				h															
	gasworks nearby (for tar)										h																			
	sail loft									e																				
	slipway - official: robust	h											a e h	a h										a e			e	e		
	slipway - vernacular: greased skids/ debris										h																			
	slipway- vernacular: lightweight construction										a		a																	
	timber beams stolen - collapsing military structures/ piers									a h													a h		h				

Fishing locations	anchors						a		a	a																				
	bottle and can scatters/ trails			a					a	a							a			a										
	craypot bases						h	a	h	h																				
	fishers camp (temp) nearby						h																a h					a	a	
	grapnels/ anchors						h	h	h	h																				
	hards/ roads													a															a	
	hooks								a h																					
	huers hut - set on high ground close to foreshore				h																									
	nets																			a										
	paddocking stakes (see above)																													
	scallop dredges		a																	a										
	sinkers (around rocky reefs) - snapper fishing								a		a									a										
	snapper long lines - linseed lin and looks		h																											
	vernacular transits markers: structures								h		h									h								h		
	vernacular transits markers: trees										h																	e		
Conflict Amongst Fishers	sinkers						h	h	h		h																			
Couta Boat Wrecks/ Capsizes	Ballast - pig iron and fireplates										h																			
	Ballast - Lead Ingots			a																										
Couta Boats	artillery shell copper alloy bands as rub rails										h				a															
Crayfishing	tarred ropes										h																			
	tarred ti-tree cane										h																			
	denudation of ti-tree stocks		h		a																									
	craypots							a																						
Recreational fishing									a		a						x	x												
	From pipes								h				h																	

CODES	archaeological	a
	extant	e
	historical	h

Appendix E-11: Fishing Children's Landscapes of Queenscliff

This section expands on Fishing Children's Landscape contained in Chapter Seven. As many children often played together, irrespective of social distinction, it proved difficult to separate the landscapes of fishing children from those of other social groups. For this reason, the joint landscapes of children in the district are presented here collectively. The only exception to this was where children were recruited to fish with their fathers, often when they were in their early teens. Additionally, the childhood landscapes covered here are biased towards the male perspective, as a result of the majority of interviewees were male.

1) Fishing with Fathers

Many fishermen used their children to assist with fishing activities, and given that many followed their fathers into the business, these formative years can be seen as a prelude to a fishing apprenticeship. Fisher's children were educated in the use of boats from a very young age to prepare them for a maritime career:

> I knew a lot about boats and boat handling from Dad and Granddad. I was always in boats with Grandad. To get to the boat, we would go out in the dinghy, and (we would) muck around on the pier and other boats. [JB]

Often children missed school to go fishing with their fathers:

> Oh Yeh, they went out fairly early, most kids were fishing by 14. Razzo Kiddi didn't get to school too much. He got as far as the 6th Grade. I can remember the schoolmaster shouting and waving at him as he went out in the boat when he was supposed to be at school….as soon as you could walk you went fishing with your father.. a lot of kids often didn't go to school in the early days because they were out fishing. [GW]

However, not all children had the strong stomach required for a life at sea, and one informant [JB] who admitted to the nickname Perko (due to seasickness) went on to join the Pilots service instead as a boatbuilder:

> .. .some kids were seasick all the time… Jack Beazley went out with his uncle, but got so seasick he had to give it up … they called him Purko! [GW]

Although fishing was physically demanding, children on the whole were treated well, but also expected to perform, with some exceptions:

> Walter Shapter was a cruel man. He often had the kids out fishing at night, up to their waists in cold water, and with no shoes. They were often cried because they were so cold. [JM]

> Their father [Sibba Shapter] made them get out [of the couta boat]) into the water without waders to push the boat through the shallows. The poor kids would often cry, their feet were so cold. [GW]

The initial excitement of fishing often became a mundane chore for many children, some of whom would go to extreme lengths to avoid it:

> The fishermen would go down to the shed of a morning before going out, and to see how the water was. If there had been a rough sea, the pier would be covered in kelp, and that usually meant it was too rough to fish. The boys would often put kelp on the pier to save having to go out fishing. [PF]

Children were often recruited to assist their fathers with the maintenance of fishing equipment. Boys were often involved in procuring bark (for) and tanning nets, and tarring fishing boats:

> When I was a kid (around1920s), I was sent up to the gasworks at Queenscliff to get tar in a four gallon kerosene drum. We used to tar the yards with it, and used to tar the inside and outside of the boats before we put on the anti-fouling. It gave a good seal for the boats. We would throw beach sand on it after it was finished, and this was done every year. We used to get a sixpence for doing it. The (fishing) nets used to be made of cotton. We had a concrete tank in our backyard and every year we would get bundles of bark and put them into the tank. We put in salt water for half an hour and the bark, which was for the tannin, for a couple of days, and then we'd take them out and dry them, and then put them back in salt water. We would get the bark from Swan Island and Swan Bay from the golden wattle trees. The kids would strip the trees and also fell the tree for timber. The nets would last up to 30 years when tanned [CS]

2) Rabbiting

Many fishermen and other community members recounted the importance of rabbitting as part of their childhood. [CS] described how he would often take his dogs and hunts rabbits at Swan Island, Duck (formerly Rabbit) Island and Lonsdale Lakes, and would use them for pet food. [GW] described similar tales, but he would sell his catch by the side of the road for pocket money. Rabbits had reached plague proportions in the area by 1912, and were denuding areas of Swan Island of all plant growth (QS 11/5/1912). Many fishermen stated that their families might have starved if rabbits had not been available to supplement their diet, a situation that was repeated in many other towns, especially during the depression and WWII (Hunt 1999:9, 29).

3) Swimming

Swimming was a popular past time in the area for youths. Many swimming holes existed, and swimming landscapes varied dependent on the available structures and dangers of the time. The area in front of the Doctors Jetty was reported by Bluelight (QS 19/8/1911) to have been a popular swimming area for boys around 1866, where they would throw apples into the water and race each other to retrieve them. Nude swimming was also undertaken around 1916 in the area below the bridge to Swan Island (Ferrier 1991:1). As late as the 1950s, young children swam between the tramway and coal exits from the Fishermens Pier, which provided a degree of shelter from the Bay currents and swell [LID].

4) Feather Boat Racing

Many informants described a childhood activity called feather boat racing. Curlew feathers gathered on the beach were often inserted into a timber plank (which had often been stolen from local fences), and tin for a keel and rudder to create a small boat which would be sailed for spontaneous competitions on Swan Bay (QS 24/12/1910, Ferrier 1981: 1, 1989:17; Thompson n.d.; [GW]). The boats were sailed either on Swan Ponds, or on Porters Pond; This pond once stood next to the old school building (near the old post office), and "played its little part for every boy of the Cliff in those days. Haven't some of you sailed boat on or waded through it or fallen into it…" in the 1860s (QS, 24/12/1910).

> I suppose I would like my ashes scattered on Swan Bay, because that's where we used to play when I was a kid. We mucked around a lot down there. We would get a fire going, and cook some stuff up, and once we tried to get over to Tip Island in a boat, but didn't make it as the boat got stuck. We used to live up near the Church of England there on the hill, and we played along the area straight down from there. There was always 20-30 kids down there, and we would have gang fights and that sort of thing. We used to race

> feather boats down there too. Just playing around. We would get chunkys, you know leatherjackets, and go spearing for flounder and flatheads. It was illegal to spear then, but kids did it anyway. It's a shame, they've taken all the joy out of fishing now. You need a licence to do anything now. We used to get a motorbike battery and go spearing at night. There was one bloke who was very good at spotting them through the water, and he could always see them even when we thought there was nothing there. Every now and then someone would stick a net in, and clean up the fish. [GW]

5) Swan Bay/ Lonsdale Bight

Swan Bay appears to have been a popular haunt for young boys. A early as the 1860s, young boys groped for shellfish and dragged nets in the channels behind the Railway Station, which they cooked onshore (Dod 1931:25). During the 1930s, youths would gather in this area to stage mock fights, hunt rabbits, go fishing, lights fires (to cook their catches), collect spent bullets and to cross the causeway to Tip Island to make sinkers ([CS; GW; HM; LID]; Thompson n.d.:6). Occasionally small dinghies would be "borrowed" to try to cross to Tip Island [GW], and many hours were spent rowing or sculling in Swan Bay whilst recreationally fishing (Ferrier 1991:2; Raison 2002:22). This area appears to have been the equivalent of a voyaging nursery akin to Irwin's (1992) concept, where budding fishermen learnt the skills that were to lead to their future careers.

[WN] maintained that the Lonsdale Bight bushland known as Lovers Walk was important to children who lived near the narrow neck area of Queenscliff:

> All the tracks you see here were only known to the local kids. They knew all the small trails through the bush in Lonsdale Bight, which the tourists didn't know about.

Other popular activities included kite flying, glass and ceramic marbles (obtained from soft drink bottles), cricket, hopscotch, and nuisance door knocking, where a string attached to a knocker was used to remotely knock on someone's door (Ferrier 1991:1).

6) Military Training:

At weekends older brothers often had military training at Swan Island (Ferrier 1991:2).

7) Pocket Money, Rewards and Economic Opportunities

Queenscliff youths displayed a flair for exploiting every economic opportunity possible from their maritime environment. Maritime Resources in particular were valuable sources of extra income.

A) Recreational Fishing

The former Swan Island Bridge was a popular fishing location for young boys, who often marked ownership of their favourite spot by carving their initials into the bridge. Many of the fish were often sold to the holiday makers (Ferrier 1989: 17, 1991:2; [CS]). The Swan Bay side of Queenscliff was another popular location, where gangs of youths would drag nets or spear flounder or flathead [CS; GW]. Shellfish were also important snacks, with perriwinkles were caught near the Queenscliff Point lighthouse (Ferrier 1991:2), and cockles taken near Langenby's Island in the Swan Ponds [CS]. Hunt (1999: 25) has reported similar practices from his childhood at Lorne where minnows (small fish) were fried up as snacks. Squid were sold to the Chinese living at Queenscliff Point, and would often fill them up with sand to increase their weight [CS].

B) Nautilus Shells

These shells were found along the seashore and also in Swan Bay, and were sold to tourists for 10/- each (Ferrier 1991:2). Nautillus shells were known to have a seven year cycle (Tate 1982: 183; [DB; GW; RB]).

> Nautilus shells come into the [Swan] Bay every seven years [DB].

> The Nautilus shells end up at Swan Bay….they come in a cycle of about every 7 years. [GW]

C) Seagull Trapping

Seagulls were often caught in rabbit traps on the beach and were sold to tourists for pets after their wings had been clipped (Ferrier 1989:18, 1991:2).

D) Beachcombing

Beachcombing was often a profitable affair, and was undertaken on the bathing beaches where lost jewellery and coins from tourists was often found. Additionally, the arrival of the Bay Steamers often heralded a bonanza of fruit that had been thrown overboard, which was eaten if it was not spoiled (Ferrier 1989:17, 1991:2).

E) *Bottles Recycling*

Young boys made extra pocket money collecting and selling empty bottles. The influx of thousands of tourists from the excursion steamers often presented very profitable opportunities, from the collection of beer and soft drink bottles (Ferrier, 1991:2). This practice was widespread in many tourism towns (e.g. Lorne - Hunt, 1999:10) and often proved a financial boon for local children.

F) Rabbiting

Many fishermen recounted the importance of rabbiting as part of their childhood. [CS] described how he would often take his dogs and hunts rabbits at Swan Island, Lonsdale Lakes, and Duck Island, and would use them for pet food. [CS] described similar tales, but he would sell his catch by the side of the road for pocket money. Rabbits had reached plague proportions in the area by 1912, and were denuding areas of Swan Island of all plant growth (QS 11/5/1912).

> We lived on the Flats. We would walk along the railway line and hunt rabbits. There were lots of rabbits there at one time. We would head home at 3pm. We got most of the rabbits from around Lake Victoria, and we fed the dogs with them. We also got rabbits at Swan Island. The best rabbits were salt fed, on the salt bush. We had big wadis [sticks] that we killed them with… Up past Swan Island is a place called Duck Island, which was once called Rabbit Island. As kids we would come across from Swan Island to Duck Island looking for black rabbits… [CS]

> My grandfather used to have ferrets for rabbiting. He caught rabbits within 5-10 miles of Queenscliff and sold then for 2/6. He used ferrets and nets to catch rabbits, and would put rabbits into boxes with sliding tops, and store them until he was ready to go home, when he killed them. He was reputed to supply the freshest rabbits around, as he would dong them on the head with a club killing them instantly and drained them, rather than breaking their necks which prolonged their deaths and made them tense up. Fishermen

> and families often survived on rabbits, and fish and picked coal up off the beach to burn. When I was a kid used to go out to islands to trap rabbits. I would build huts made from driftwood and tin along the foot of Swan Bay. One hut they built even had an old stove in it to cook any shellfish/ fish or rabbits they caught during the day
> [LID]

G) Bird Hunting

Quails were caught in Swan Bay, and duck hunting was carried out extensively on Swan Bay. Children often used a pellet gun to shoot birds, which were used to supplement meals at home [CS].

> We also used to hunt Quails in Swan Bay. The quails would fly across the straits into Swan Bay. They would fly into the head wind. [CS]

H) The Ice-cream Manufacturer

An ice-cream mixing plant was situated near the Esplanade Hotel in a two story shop in Symonds St, and in return for a turn at winding the ice-cream mixture, the boys were rewarded with ample ice-cream in return (Ferrier 1991:3).

I) Bird Nesting

This activity was popular with young boys, and was undertaken at least as early 1864 by Dod (1931:93) when large trees were still extant along the Railway line Hill and at the fort site. [CS] recalls bird nesting at Swan Island (probably for Orange Bellied Parrot's eggs). In some circles though, there was a social taboo on keeping birds eggs, and children were often prevented from keeping them in the house. Eggs were collected for hobby collections as described by [HM]:

> We used to go bird nesting along Swan Bay. We used the eggs for our collections, you know as a hobby. We used to blow the yolks out of them. We would make a hole in each end of the egg with a needle, and squirt out the yoke by blowing at the other end. We got all sorts of eggs for our collections. I could get down [from the tree] with two magpie eggs in my mouth. That was how we would carry them. We never thought twice about putting them in your mouth, you just did it. There are not as many birds around now. There were gull finches and Linnets around everywhere then, but you don't see them anymore. They were about the size of canaries, and the gull finches had maroon under their chin. They were easy to find as they lived in the Cyprus trees. [HM]

The eggs were gathered for a hobby collection, and Hunt (1999: 28) records that bird nesting was also popular in Lorne, and that some eggs were hatched by placing them under nesting chickens.

J) Orchards and Market Gardens

These places provided opportunities for children to supplement their often meager diets.
A Garden belonging to a Chinese (Known as One Eye) was a popular haunt for boys who stole radishes from there (close to the school building) in 1860s (QS 24/12/1910). An orchard behind the Nursing Home was regularly exploited by boys who threw stones to dislodge the fruit, and then rushed in to collect the spoils ([CS]; Ferrier 1991:3).

> We used to raid the fruit trees in the orchard behind the nursing home. They were big pear trees, and we would throw pieces of bluestone at the pears from outside, and then

charge in to pick up the pears afterwards. There were also pigs in town that were kept in a sty, and the kids would ride the pigs, and get covered in fleas. [CS]

K) Bullet Collection

Expended bullets from the firing range were often collected by children and used to make sinkers for fishing tackle. The lead from the bullet heads was collected from the various former rifle ranges around the town, including those at Swan Island and near the Butts in the south west corner of Swan Bay (Thompson n.d.:5; [LID]).

The kids would also shoot 22 rifles into the bank here, and would dig the bullets out to reload in shells later on. [LID]