# MALT WHISKY - AN INTRODUCTION TO THE SPIRIT OF SCOTLAND

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#### **Abstract**

The historical connection between malt, grain and blended whisky is used to introduce the making of malt whisky and outline the preparation of malt from barley, the processes of fermentation and distillation and the maturation of the strong spirit in oak casks. The geographical basis for the classification of malt whiskies is mentioned. Ten whiskies, ranging from the lightly flavoured Bladnoch to the heavily peated and phenolic Ardbeg, are discussed in terms of their individual characteristics and the distilleries which produced them.

## INTRODUCTION

An article on malt whisky might seem out of place in a publication devoted to a summer school on high energy physics but the malt whisky tasting held on 25<sup>th</sup> August at St. Andrews, although essentially a social event, was the occasion for some serious study of this fascinating subject and seemed to be enjoyed by all participants. The purpose of this article is to expand on the brief notes which were issued at the event.

Blended whisky has satisfied the world's demand for Scotch whisky since the turn of the century. Despite the overwhelming emphasis given to blended whisky, and its consequent impact upon world markets, there have always been people to whom the only true whisky was the original single malt, produced in the traditional way and, nowadays, increasing numbers of discriminating drinkers are exploring these single malt whiskies in much the same way that more people are learning about wine.

Blended whisky was introduced late in the 19<sup>th</sup> century, when industrial stills started to produce large quantities of cheap alcohol from fermented cereal mashes other than malt. The spirit produced had little character but was legally 'grain whisky'. Skilled blenders added malt whiskies to it to produce blended whisky, which was so successful that, not only is the word 'Scotch' use in most languages, but individual blends like Johnnie Walker, Haig and Chivas Regal are familiar throughout the world.

The traditional malt whisky of Scotland was prepared originally in farmhouses, crofts and castles from the simplest of local ingredients, barley and water. If a moist, sprouting barley seed is heated and dried over a fire, the tiny plant is killed but the sugars and other substances produced to feed it are left in the seed. The product of this cereal infanticide is malt, and its importance lies in the fact that the sugars can be fermented by the action of yeast and water, just as in the brewing of beer. A most important source of flavour in malt whiskies is the peat smoke from the fire used to dry the malted barley, the way in which the aromatic constituents of the 'peat reek' are incorporated into the drying malt being very reminiscent of the process of kippering. The amount of peat smoke used in the malting depends upon local tradition.

By the time that the weakly alcoholic solution produced by the fermentation has been distilled twice in simple copper stills - pot stills - it has turned into a colourless, pungent spirit containing about 70% alcohol. The slow magic which turns this fierce, raw spirit into mature, malt whisky takes

place in oak casks. (Old sherry casks are highly prized because of the special finish which they give to the mature whisky.) The law requires Scotch whisky to have been matured in the cask for a minimum period of three years, but malt whiskies have to be kept for much longer to develop their full character. The practice of allowing the whisky to mature is the only important feature which distinguishes the process used in distilleries from that of the ancient cottage industry, but it is of crucial importance in the development of flavour, aroma and body.

Until recently, there were more than 100 malt distilleries distributed all over Scotland from Wigtownshire to Wick and on the islands of Orkney, Jura, Mull, Skye and Islay. Malt whiskies are usually classified as Highland, Lowland and Islay malts, the Highland and Lowland areas lying north and south of a boundary joining Greenock and Dundee.

## **OLOWLAND MALTS**

Lowland malts are of a light character as no peat smoke is used in the malting process and they can be pleasant and flowery. At their best, they are excellent aperitifs. Bladnoch was made in the in the most southerly distillery in Scotland until the distillery was closed in 1993. Like a number of the earlier lowland whiskies, Bladnoch was triply distilled and it has a fresh, simple, slightly lemony taste and an aroma like that of cut grass.Rosebank, generally regarded as the best of all lowland malts, was made in Falkirk but, sadly, the distillery has been shut and the buildings converted to other purposes. At its best - probably 8 years old, the original standard age for bottling it - Rosebank demonstrates just how distinguished a lowland malt can be, while still retaining the essential features of lightness and floweriness.

#### 1HIGHLAND MALTS

The highland malts are so numerous and various that any small selection can give only a cursory introduction to their potential.

Balvenie is made in Dufftown, one of the important distillery towns north of the Grampians but, despite the fact that the distillery was built in 1892, the whisky has been available in bottles only since 1971. The distillery is operated owned by the Grant family and lies close to their much better known distillery, Glenfiddich. Although the two distilleries are so close, even sharing the same water supply, Balvenie is surprisingly different from its well known neighbour. Balvenie has a spicy and smoky taste but the smoky element is not dominant and the final taste strikes a splendid balance between smoke, honey, oak and fruit. Balvenie shows in a most enjoyable way all the important features of a good malt without any excessive dominance by any of them.

A much lamented victim of distillery closures is Glen Mhor, which was situated in Inverness but was wantonly demolished more than ten years ago. Glen Mhor has been described as the greatest after-dinner drink in existence. It is hard to discuss this whisky without straining the vocabulary: it is smooth, mellow, big and complex. Many brandies are unable to match the depth and subtlety of Glen Mhor.

Whiskies from any particular area often have certain generic characteristics but there are some whiskies which stand out as individuals having little in common with any others. One such individual is Old Pulteney, made at the most northerly distillery on the mainland at Wick. Old Pulteney seems to derive its considerable strength of taste from something other than peat. It matures rapidly for such a heavy style of whisky and is excellent as normally bottled at 8 years old. This is a whisky to enjoy before or after food. The taste is long and appetising with a faintly salty character. It is a plain, robust and satisfying whisky and deserves to be more widely known.

It is taking something of a liberty to include two Orcadian whiskies with the northern highlands, particularly as Orcadians have at least as much affinity with Scandinavia as with Scotland, but all systems of whisky classification are general and approximate and no one can dispute that Orkney lies well north of the Highland Boundary. The two malt whiskies produced in Orkney are

Highland Park and Scapa and although Highland Park is much the better known, Scapa is a whisky of real quality.

Highland Park occupies a site associated with whisky distilling since before 1790 and is one of the few remaining distilleries to carry on the traditional process of floor malting. Highland Park whisky brings to the nose to a decided suggestion of peat smoke but there is nothing heavy-handed about it and the overall impression of the taste is of substantial quality, good balance and depth.

Scapa distillery lies on the shore of Scapa Flow, that great stretch of sheltered water which provided the base for the British fleet in the two world wars. The distillery is in sight of Highland Park but is very different in character. Scapa has a rather flowery aroma, a slightly sweet initial taste and a long aftertaste. Scapa is a brisk sort of whisky but it is certainly not unsophisticated and is worthy of considerable study.

## **2ISLAY MALTS**

Islay Malts are sometimes considered as being all heavily peated and massive in taste. This is not the case and the eight whiskies of Islay are easily separated into three distinct groups, one of which contains Lagavulin, Laphroaig and Ardbeg, usually considered the archetypal heavy whiskies, a second group consisting of Bowmore, Caol Ila and Port Ellen, and a third group of two, Bruichaddich and Bunnahabhain, which have much more in common with whiskies from the northern highlands than with their close neighbours in Islay. The three different types were represented at the tasting by Bunnahabhain, Caol Ila and Ardbeg.

Bunnahabhain is made using malt which has no peat smoke used and the water comes from a deep borehole so it contains no trace of the extracts of peat which often colour and flavour water which has been obtained from surface supplies. To the nose, Bunnahabhain presents a fresh and attractive aroma, while the taste is nutty and spirituous but beautifully balanced. It has an almost oily texture which gives it a general sense of richness in the mouth. Like all good whisky it has a long, lingering aftertaste.

Caol Ila is produced in a distillery first built in 1846 but rebuilt in 1974. The distillery overlooks the Sound of Islay from where it takes its Gaelic name and has a magnificent view of the island of Jura. Caol Ila represents perfectly what is often regarded as a typical Islay whisky; smoky, peaty and spicy to the nose and with a slightly medicinal taste. All malt whisky is best drunk unchilled but whisky of this weight and character suffers particularly from being served cold.

Ardbeg Distillery has been closed for a number of years but was recently bought and reopened. This was very good news for the many enthusiasts who enjoy this powerful and unique drink. Ardbeg contains the highest concentration of polychlorinated phenolic compounds found in any whisky and this accounts for is decidedly medicinal taste and powerful assault on the taste buds. The distillery still uses the old floor malting process and is careful to prevent much air circulating in the kiln so that the malt is subjected to a huge concentration of peat smoke. Ardbeg is not to everybody's taste but, to those who enjoy it, it is an experience rather than just a drink and demands to be treated with respect.

Whether you enjoy the delicate and ethereal, the substantial and satisfying or sheer Wagnerian splendour, you should remember that malt whisky is a complex creature of spirits and volatiles and to chill it is to paralyse it. Keep it warm and it will sing for you.