

Mike Bedgood – Malt Whisky or “All for the sake of a wee dram”

Background



Being a Scot, I was aware from an early age that the national drink was not Irn-Bru but Whisky! However, after attending a number of tasting evenings on Malt Whisky at the Stonehouse Hotel in Yorkshire, I came to realise the number and variety of Malts and to understand the subtle differences in taste and aroma (aka the “nose”).

Malt whisky making is a batch process made from only three ingredients, malted barley, water and yeast. The type of barley is of particular importance and much of it is cultivated in whisky-producing areas for use in the whisky industry. The main type used is ‘Golden Promise’ although new types specially bred for the purpose, are replacing the older types.

Barley grows well in nitrogen-starved, infertile, soil making it perfect for brewing and distilling. The barley used for brewing/distilling has very different characteristics to that used for foodstuff. Once the barley has been harvested it is ready to start a very special process.

The basic process for producing Malt Whisky is the same the world over, whichever country or continent, and is briefly summarised in the following.

The Whisky Process

Note: a detailed process is given in the document on display.

Malting

- The barley grain is steeped in water which allows the grain to germinate
- The grain is regularly turned by hand on a malting floor or in revolving drums
- When the sugar level in the grain has reached an optimum, the process is halted by:

Kilning or Peating

- The bed of germinated grain is dried using hot air from a kiln, or sometimes may be fired with peat added to the fuel

- The amount of peat and its source gives the final whisky its characteristic taste

Milling

- To extract the fermentable sugars from the grain, it is crushed either by a mechanical hammer or by a roller mill
- The crushed barley grain is known as “grist”

Mashing

- All the fermentable materials are removed from the grist using the second ingredient, water
- The process is carried out in a Mash Tun to produce the “wort” which is then fermented

Fermentation

- This is when the third and final ingredient is added, yeast
- The yeast ferments the sugar-rich wort to produce alcohol and carbon dioxide
- In a vessel called a “washback”, fermentation takes between 36 and 72 hours, depending on temperature.
- At the end of the process the alcohol content of the “wash” is 8 to 10%

Distillation

- The principle of distillation is to strengthen a weak alcoholic liquid into a stronger one by the removal of water by heating
- Distillation is carried out in a pot still
- Each distillery has its own shape and personality of pot still, which is made of copper
- On heating the wash, the components with the lower boiling point (principally alcohols) start to boil. The vapour travels up the neck of the still into the “worm”, a water-cooled coiled copper pipe
- The vapours condense back to a liquid and are sent to a holding vessel via a “spirit safe”. This piece of equipment allows the destination of the distilled alcohol to be changed without compromising the security of the alcohol, which is controlled by HM Customs & Excise
- The distillation process is carried out at least twice, sometimes three times (at the Rosebank, Auchentoshan and Benrinnes distilleries), and the skill of the “Stillman” is to select only the finest part of the spirit as it leaves the condenser.



Maturation

- Takes place mainly in oak wooden casks previously used to mature Bourbon whisky, as US regulations only allow them to be used once
- The wood and former use of a cask influences the aroma and flavour of a malt whisky (e.g. sherry barrels)
- The location of the distillery warehouse is said to affect the flavour, and those by the sea are claimed to impart a salty character
- The breathing of the wooden cask causes the loss of up to 2% alcohol over time – called “the angel’s share”
- Only whisky matured for a minimum of 3 years in oak barrels can be called Scottish Malt Whisky, but many distilleries age the spirit for between 8 and 21 years, at a variety of alcoholic strengths from 40 to over 50%, as shown with these Brora malts of various ages

Bottling

- When the spirit has been matured for the required time, water is added to achieve the required alcoholic strength (e.g. 40%)
- Bottling can be carried out at the distillery or at a commercial facility



Scottish Malt Whiskys

Currently there are 95 active distilleries in six main areas: Highland, Speyside, Island, Islay, Lowland and Campbeltown.

There are 24 new distilleries from which whisky is or will soon be available, and some 30 distilleries are proposed. Sadly, there are 27 distilleries that are closed, mothballed, dismantled or demolished, from which whisky may still be available – at a price!

Each malt whisky has its own distinctive taste and nose, depending on its location in Scotland, the overall process and time of maturation.

Exploration of the various malts is great fun, taking one to distilleries in beautiful and often remote areas of Scotland.

A favourite of mine is the Talisker distillery on the Isle of Skye, situated on



a narrow sea inlet on the island, which I visited with Gordon Henshall and family to take a wee dram.

