







St. Cott, whick y. org. uk

Questions & Answers



Contents

Introduction	2 - 3
The World's Leading Drink	4 - 7
The History of Scotch Whisky	8 - 10
Making Scotch Whisky	11 - 19
The Importance of Blending	20 - 22
Scotch Whisky and the World	23 - 24
Sale and Distribution	25 - 27
Scotch Whisky and the Consumer	28 - 34
Definitions	35 - 40
Scotch Whisky and the Environment	41
Scotch Whisky and Health	42 - 43
Drinks made with Scotch Whisky	44 - 47
Information about Scotch Whisky	48
Indox	40 52

Introduction

Scotland is the home of Scotch Whisky and host to the greatest concentration of distilleries in the world. There are around 100, making Malt Whisky by the centuries-old Pot Still method or Grain Whisky in the Coffey or Patent Still which has been in use since 1831.

Few products are so closely linked with the environment, culture and people of their country of origin as Scotch Whisky.

Scotch Malt Whisky is usually classified in one of five main categories
- Highland, Lowland, Speyside, Islay, and Campbeltown - according to the location of the distillery in which the spirit is made.

While many Malt Whisky distilleries bottle some of their production for sale as Single Malt - the product of one distillery, most of the Scotch Whisky consumed today is Blended Scotch Whisky. This means that it is a blend of as many as 50 different Malt and Grain Whiskies, all produced in the distilleries shown on the map and blended skilfully to maintain consistent quality and flavour.

Scotch Whisky is Scotland's leading indigenous product, and is of major importance to the economy not only of Scotland, but of the United Kingdom as a whole. Sold around the world for more than 100 years, Scotch Whisky is now established as the leading international spirit drink, making it one of Britain's most important exports.

There are, however, many aspects of Scotch Whisky distilling and blending that are not generally understood. The Scotch Whisky Association

has therefore produced this handy reference book to provide answers to the many questions which frequently arise.

To prepare this book, the Association has had the assistance of many people in the Scotch Whisky industry, all expert in their own fields, to whom it is indebted.

There is often confusion, for example, over the length of time that Scotch is matured. Most whiskies mature far longer than the legal minimum of three years, and the maturation period varies for different whiskies.

The age statement on a bottle reflects the amount of time the youngest whisky in that bottle has spent maturing in a cask. The distiller, when making whisky, and the blender, when laying it down for maturation, are not aiming to satisfy immediate consumer demand. They must attempt to forecast likely demand ten years or more ahead. It is thus impossible to relate production figures in any one year with consumption figures for that same year.

Many distilleries welcome visits by members of the public. It is often necessary to make arrangements in advance, but many distilleries have extensive visitor facilities and do not require prior warning of a visit. A list of distilleries willing to accept visitors is available from:

The Scotch Whisky Association 20 Atholl Crescent, Edinburgh EH3 8HF

t: 0131-222 9200

e: contact@swa.org.uk w: scotch-whisky.org.uk

or 14 Cork Street, London W1S 3NS

t: 020 - 7629 4384

e: london.office@swa.org.uk

1 The World's Leading Drink

The World's Leading Drink

1 What is Scotch Whisky?

Scotch Whisky is a distilled spirit drink made in Scotland from cereals, water and yeast.

2 Is Scotch Whisky the world's leading spirit drink?

Yes. It is the leading international spirit drink.

3 When consumers ask for a Scotch, what exactly do they mean?

They usually mean a Blended Scotch Whisky, that is a blend of as many as 50 individual Scotch Malt and Scotch Grain Whiskies. The wide range of single whiskies available in Scotland ensures the continued high quality and consistency of brands of Blended Scotch Whisky and, year in year out, enables blenders to ensure that all their brands maintain their individual characteristics. Blended Scotch Whiskies accounts for around 90 per cent of all Scotch Whisky sold in world markets.

4 What is a single whisky?

It is the product of a single distillery. Most distilleries produce Scotch Whisky primarily for the purpose of blending, but many retain some of their production for sale as single whiskies. A Single Malt Scotch Whisky is the product of one Malt Whisky distillery and a Single Grain Scotch Whisky is the product of one Grain Whisky distillery.

5 What is the legal definition of Scotch Whisky?

Scotch Whisky has been defined in United Kingdom (UK) law since 1909 and recognised in European Community legislation since 1989. The current UK legislation relating specifically to Scotch Whisky is The Scotch Whisky Act 1988 and the Orders made under it, which came into effect in June 1990 and superseded that part of the Finance Act 1969, as subsequently amended, defining Scotch Whisky.



For the purposes of The Scotch Whisky Act 1988 "Scotch Whisky" means whisky:

- (a) which has been produced at a distillery in Scotland from water and malted barley (to which only whole grains of other cereals may be added) all of which have been:
 - (i) processed at that distillery into a mash;
 - (ii) converted to a fermentable substrate only by endogenous enzyme systems; and
 - (iii) fermented only by the addition of yeast;
- (b) which has been distilled at an alcoholic strength by volume of less than 94.8 per cent so that the distillate has an aroma and taste derived from the raw materials used in, and the method of, its production;
- (c) which has been matured in an excise warehouse in Scotland in oak casks of a capacity not exceeding 700 litres, the period of that maturation being not less than 3 years;
- (d) which retains the colour, aroma and taste derived from the raw materials used in, and the method of, its production and maturation; and
- (e) to which no substance other than water and spirit caramel has been added.

The Scotch Whisky Act 1988 prohibits the production in Scotland of whisky other than Scotch Whisky.

The Scotch Whisky Act 1988 and The European Spirit Drinks Regulation 1989 both specify a minimum alcoholic strength of 40 per cent by volume, which applies to all Scotch Whisky bottled and/or put up for sale within or exported from the EU.

6 What are the different categories of Scotch Whisky?

According to traditional practice, there are five categories of Scotch Whisky:

(a) Single Malt Scotch Whisky: A Scotch Whisky distilled at a single distillery (i) from water and malted barley without the addition of any other cereals, and (ii) by batch distillation in pot stills.

- (b) Single Grain Scotch Whisky: A Scotch Whisky distilled at a single distillery (i) from water and malted barley with or without whole grains of other malted or unmalted cereals, and (ii) which does not comply with the definition of Single Malt Scotch Whisky.
- (c) Blended Scotch Whisky: A blend of one or more Single Malt Scotch Whiskies with one or more Single Grain Scotch Whiskies.
- (d) Blended Malt Scotch Whisky: A blend of Single Malt Scotch Whiskies which have been distilled at more than one distillery.
- (e) Blended Grain Scotch Whisky: A blend of Single Grain Scotch Whiskies which have been distilled at more than one distillery.While these definitions have been governed by convention, the industry is seeking to include them in legislation.

7 What is a Blended Scotch Whisky?

It is when a number of distillates each of which separately is entitled to the description "Scotch Whisky" are combined together.

Blended Scotch Whisky (any combination of malt and grain whiskies), Blended Malt Scotch Whisky (a combination of Malt Whiskies from different malt whisky distilleries) and Blended Grain Scotch Whisky (a combination of Grain Whiskies from different grain whisky distilleries) are all available.

8 Which spelling is correct, Whisky or Whiskey?

Most well-known dictionaries give both spellings. The Oxford English Dictionary points out that 'in modern trade usage, Scotch Whisky and Irish Whiskey are thus distinguished in spelling'. American-made whiskey is usually spelt with an 'e', while Canadian and Japanese whisky do not.

9 What is the difference between Scotch, Irish, Rye and Bourbon Whiskies?

Scotch Whisky is whisky which has been distilled and matured in Scotland. Irish Whiskey means whiskey distilled and matured in Ireland. Whisky is distilled in Scotland from malted barley in Pot Stills and

from malted and unmalted barley or other cereals in

Patent Stills. Irish Whiskey distillers tend to favour three
distillations rather than two, as is generally used in Scotland for

Malt Whiskies, and the range of cereals used by Irish distillers is wider.

As regards Bourbon Whiskey, the United States Regulations provide:

- (i) that Bourbon Whiskey must be produced from a mash of not less than 51% corn grain;
- (ii) that the word 'Bourbon' shall not be used to describe any whiskey or whiskey-based distilled spirits not produced in the United States.

Rye Whiskey is produced both in the United States and Canada but the name has no geographical significance. In the United States, Rye Whiskey by definition must be produced from a grain mash of which not less than 51% is rye grain. In Canada, there is no similar restriction. The relevant Canadian Regulation states:

'Canadian Whisky (Canadian Rye Whisky, Rye Whisky) shall be whisky distilled in Canada, and shall possess the aroma, taste and character generally attributed to Canadian Whisky.'

Canadian Whisky is in fact often referred to simply as Rye Whisky or Rye.

10 What are spirits?

The term spirits describes the product of distillation, whatever the raw materials. Generally, the word refers to any volatile inflammable liquid obtained by distillation.

Spirits for human consumption, or potable spirits, are the distillates of alcoholic liquids, the alcohol in which has been formed by the fermentation of sugar as contained in grapejuice, sugar cane, etc., or in saccharified materials such as specially prepared cereals, e.g. malted barley.

The History of Scotch Whisky

11 What is the origin of the name 'whisky'?

The term 'whisky' comes from the Gaelic 'uisge beatha', or 'usquebaugh', meaning 'water of life'. Gaelic is that branch of Celtic spoken in the Highlands of Scotland.

12 When was Scotch Whisky first distilled?

Whisky has been distilled in Scotland for hundreds of years. There is some evidence to show that the art of distilling could have been brought to the country by Christian missionary monks, but it has never been proved that Highland farmers did not themselves discover how to distil spirits from their surplus barley.

The earliest historical reference to distilling in Scotland appears in the Scottish Exchequer Rolls for 1494, where there is an entry of 'eight bolls of malt to Friar John Cor wherewith to make aquavitae'. A boll was an old Scottish measure of not more than six bushels. (Six bushels is equivalent to 152.4 kilograms, enough barley to make around 1500 bottles)

When King James IV was in Inverness during September 1506, his Treasurer's Accounts had entries for the 15th and 17th of the month respectively: 'For aqua vite to the King. . .' and 'For ane flacat of aqua vite to the King. . .'. It is probable that the 'aqua vite' in this case was spirit for drinking.

The earliest reference to a distillery in the Acts of the Scottish Parliament appears to be in 1690, when mention is made of the famous Ferintosh distillery owned by Duncan Forbes of Culloden.

There is also a reference to distilling in a private house in the parish of Gamrie in Banffshire in 1614. This occurs in the Register of the Privy Council, where a man accused of the crime of breaking into a private house, combined with assault, was said to have knocked over some 'aquavitie'.



One of the earliest references to 'uiskie' occurs in the funeral account of a Highland laird about 1618.

An unpublished letter of February 1622, written by Sir Duncan Campbell of Glenorchy to the Earl of Mar, reported that certain officers sent to Glenorchy by the King had been given the best entertainment that the season and the country allowed. It stated: 'For they wantit not wine nor aquavite.' This 'aquavite' was no doubt locally distilled whisky.

Another writer affirms that aquavitae occasionally formed part of the rent paid for Highland farms, at any rate in Perthshire, but no actual date is given for this practice.

13 What is the history of charging duty on Scotch Whisky?

The Scots Parliament in 1644 passed an Excise Act fixing the duty at 2/8d (13p) per pint of aquavitae or other strong liquor - the Scots pint being approximately one third of a gallon. For the remainder of the 17th century various alterations were made to the types and amounts of duty collected.

After the Union of the Parliaments in 1707, English revenue staff crossed the border to begin their lengthy attempts to bring whisky production under control. Ninety years later the excise laws were in such a hopeless state of confusion that no two distilleries were taxed at the same rate. Illicit distilling flourished, the smugglers seeing no good reason for paying for the privilege of making their native drink.

After a lengthy Royal Commission, the Act of 1823 sanctioned legal distilling at a duty of 2/3d (12p) per gallon for stills with a capacity of more than 40 gallons. There was a licence fee of £10 annually and no stills under the legal limit were allowed. The first distillery came into 'official' existence in the following year and thereafter illicit distilling quickly faded away.

In 1840, the duty was 5d (2.5p) per bottle and by the beginning of the First World War it had almost quadrupled. In 1939, a typical bottle of Scotch Whisky cost 14/3d (72p) of which 9/7¹/2d (48p) was duty. In 1995, for the first time in one hundred years, the tax on Scotch Whisky was reduced. Duty fell from £5.77 to £5.54 a bottle (70cl). In 1996, the tax on Scotch Whisky was again reduced.

There has only been one duty rise since then, in January 1998. This long-term freeze reflects the government's view that the current high level of duty damages Scotch Whisky in a competitive marketplace.

Since 1973 the price of a bottle of whisky, including the Excise Duty, has been subject to a Value Added Tax.

MOVEMENT OF EXCISE DUTIES

The following table gives an indication of how the Excise Duty payable on a typical bottle of Scotch Whisky has increased. Figures for the earlier dates have been converted to decimal currency.

Date	Duty per bottle	Date	Duty per bottle
1900	£0.06 ^{1/} 2	1985	£4.73
1920	£0.42	1990	£5.21
1940	£0.57	1994	£5.77
1947	£1.11	1995	£5.54
1968	£2.20	1996	£5.32
1975	£2.57	1998	£5.48
1980	£3.56	2006	£5.48

Making Scotch Whisky

14 How is Scotch Whisky made?

There are two kinds of Scotch Whisky distilled: Malt Whisky which is made by the Pot Still process and Grain Whisky which is made by the Patent Still (or Coffey Still) process. Malt Whisky is made from malted barley only, while Grain Whisky is made from malted barley together with unmalted barley and other cereals.

MALT WHISKY

The Pot Still process by which Malt Whisky is made may be divided into four main stages: Malting, Mashing, Fermentation and Distillation.

(a) MALTING The barley is first screened to remove any foreign matter and then soaked for two or three days in tanks of water known as steeps. After this it is traditionally spread out on a concrete floor, known as the malting floor, and allowed to germinate. Germination may take from 5 to 8 days depending on the season of the year, the quality of the barley used and other factors. During germination the barley secretes the enzyme diastase which makes the starch in the barley soluble, thus preparing it for conversion into sugar. Throughout this period the barley must be turned at regular intervals to control the temperature and rate of germination. At the appropriate moment germination is stopped by drying the malted barley or 'green malt' in the malt kiln.

More usually today malting is carried out in Saladin boxes or in drum maltings, in both of which the process is controlled mechanically. Instead of germinating on the distillery floor, the grain is contained in large rectangular boxes (Saladin) or in large cylindrical drums. Temperature is controlled by blowing air at selected temperatures upwards through the germinating grain, which is turned mechanically. Today, most distilleries obtain their malt, made to their specific requirements, from centralised maltings which supply a number of distilleries, thereby enabling the malting process to be carried out more economically. A very few,

however, continue to use traditional floor maltings for some of their requirements.

- (b) MASHING The dried malt is ground in a mill and the grist, as it is now called, is mixed with hot water in a large circular vessel called a mash tun. The soluble starch is thus converted into a sugary liquid known as wort. This is drawn off from the mash tun and the solids remaining are removed for use as cattle food.
- (c) FERMENTATION After cooling, the wort is passed into large vessels (washbacks) holding anything from 9,000 to 45,000 litres of liquid where it is fermented by the addition of yeast. The living yeast attacks the sugar in the wort and converts it into crude alcohol. Fermentation

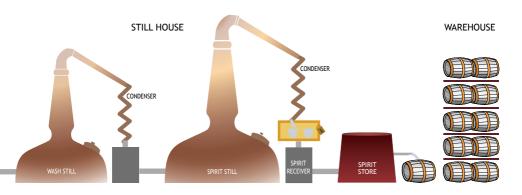


takes about 48 hours and produces a liquid known as wash, containing alcohol of low strength, some unfermentable matter and certain byproducts of fermentation.

(d) DISTILLATION Malt Whisky is distilled twice in large copper Pot Stills. The liquid wash is heated to a point at which the alcohol becomes vapour. This rises up the still and is passed into the cooling plant where it is condensed back into liquid. The cooling plant frequently takes the form of a coiled copper tube or worm that is kept in continuously running cold water.

The first distillation separates the alcohol from the fermented liquid and eliminates the residue of the yeast and unfermentable matter. This distillate, known as low wines, is then passed into another still where it is distilled a second time. The first runnings (foreshots) from this second distillation are not considered potable and it is only when the spirit reaches an acceptable standard that it is collected in the Spirit Receiver. Again, towards the end of the distillation, the spirit begins to fall off in strength and quality. It is then no longer collected as spirit but drawn off and kept, together with the foreshots, for redistillation with the next low wines.

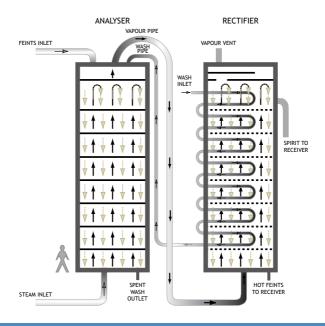
Pot Still distillation is a batch process.



GRAIN WHISKY

The Patent Still process by which Grain Whisky is made is continuous in operation and differs from the Pot Still process in five other ways.

- (a) The mash consists of a proportion of malted barley together with unmalted cereals.
- (b) Any unmalted cereals used are cooked under steam pressure in Converters for about $3^{1/2}$ hours. During this time the mixture of grain and water is agitated by stirrers inside the cooker.
- (c) The starch cells in the grain burst and when this liquid is transferred to the mash tun, with the malted barley, the diastase in the latter converts the starch into sugar.
- (d) The wort is collected at a specific gravity lower than in the case of the Pot Still process.
- (e) Distillation is carried out in a Patent or Coffey Still and the spirit collected at a much higher strength.



MATURATION

Both Malt and Grain Whisky must be matured after distillation has been completed. The new spirit is filled into casks of oak wood which, being permeable, allows air to pass in and evaporation takes place. By this means the harsher constituents in the new spirit are removed and it becomes in due course a mellow whisky. Malt Whisky which contains more flavour constituents takes longer to mature than Grain Whisky and is often left in the cask for 10 years or even longer.

The period of maturation for both Malt and Grain Whisky is also affected by the size of casks used, the strength at which the spirit is stored, and the temperature and humidity of the warehouse.

Newly distilled spirit is a colourless liquid. Scotch Whisky derives much of its colour from the casks in which it matures. The degree of colour will vary from one whisky to another. Whisky matured in former fresh oak sherry casks will usually be a darker colour than that which has been matured in refilled whisky casks. The blender aims at uniformity in his product and he may ensure consistency of colour between batches of mature spirit by adding, if necessary, a small amount of tasteless colouring caramel, which in the small quantities used has no effect on the taste or aroma of the whisky.

BLENDING

After maturation the different whiskies are blended together. (See Question 22 for a description of the blending process). The blend is then reduced to the strength required for bottling by the addition of soft water.

BOTTLING

The final stage in the production of Scotch Whisky is bottling and despatch. Most Scotch Whiskies are marketed at home and abroad in branded bottles.

In some instances, for commercial reasons, Scotch Whisky may be shipped overseas in bulk. When Blended Scotch Whisky is shipped abroad in bulk, either at original strength or suitably reduced, it is exported in glass lined stainless steel tanks. The bottling is then carried out by distributors or agents overseas.

15 What are the regions associated with Scotch Whisky making?

Malt Whiskies are divided into five groups according to the geographical location of the distilleries in which they are made. In line with traditional practice, the right to bear these names is limited to Scotch Whiskies wholly distilled in the region in question. The recognised regions are:

- (1) LOWLAND MALT WHISKIES, made south of an imaginary line drawn from Dundee in the east to Greenock in the west.
- (2) HIGHLAND MALT WHISKIES, made north of that line.
- (3) SPEYSIDE MALT WHISKIES, from the valley of the River Spey.

 Although these whiskies come from within the area designated as

 Highland Malt Whiskies, the concentration of distilleries and the specific climatic conditions produce a whisky of an identifiable character and require a separate classification.
- (4) ISLAY MALT WHISKIES, from the island of Islay.
- (5) CAMPBELTOWN MALT WHISKIES, made within the town boundaries of Campbeltown in Argyll.

Each group has its own clearly defined characteristics, ranging from the lighter Lowland Malt Whiskies to those distilled on Islay which are generally regarded as the heaviest Malt Whiskies.

Malt Whiskies, which differ considerably in flavour according to the distillery from which they come, have a more pronounced bouquet and flavour than Grain Whiskies. The production of Grain Whisky has not been so influenced by geographical factors and it may be distilled anywhere in Scotland.

16 What gives Scotch Whisky its distinctive flavour and aroma?

This is one of the mysteries of the industry and a secret which many imitators of Scotch Whisky have tried in vain to discover. Many theories and explanations have been put forward, but there is no universally accepted solution.

The distilling process itself is one factor. Scotch Whisky, after it has been distilled, contains not only ethyl alcohol and water but certain secondary constituents. The exact nature of these is not fully understood, but it is believed they include some of the essential oils from the malted barley and other cereals and substances that derive from peat. The amount of these secondary constituents retained in the spirit depends upon the shape of the still and the way it is operated, and also on the strength at which the spirit is drawn off. Grain Whisky, because of the process by which it is made, contains fewer secondary constituents than Malt Whisky and is accordingly milder in flavour and aroma.

The natural elements of water, peat and the Scottish climate all certainly have a profound effect on the flavour of Scotch Whisky. Water is probably the most important single factor and a source of good, soft water is essential to a distillery. Peat, which is used in the kiln or oven in which the malt is dried, also has an influence that can be detected in the 'peaty' or smoky flavour of many Scotch Whiskies. The Scottish climate is extremely important, particularly when the whisky is maturing. At this stage the soft air permeates the casks and works on the whisky, eliminating harsher constituents to produce a mellow whisky.

17 Why do whiskies produced in different distilleries vary in flavour?

This again is a question which it is very difficult to answer with certainty. While some believe water to be a decisive factor, adjoining distilleries which draw their water from different sources are known to produce whiskies that are quite dissimilar in flavour. The size and shape of the stills are important, as are the skill and experience of the

men who manage them. It is the objective of the distiller to produce a whisky whose flavour and character remain consistent at all times and in all circumstances. This is the true art of distilling, acquired only after many years and often handed down from one generation to the next.

18 How many distilleries are there?

There are around 100 Pot Still Malt distilleries and Grain or Patent Still distilleries in Scotland; but the number working can vary from year to year.

19 Is it possible to visit a whisky distillery?

Around 40 Scotch Whisky distilleries are open to the public. Some distilleries cater specifically for visitors, with custom-built visitor centres, museums or cafes. Others are lower key, but will be delighted to show you around if you make an appointment first. Some do charge a small entrance fee, but this can often be redeemed in the distillery shop at the end of the tour.

A 'Distilleries to Visit' guide is published annually and is available from The Scotch Whisky Association.

In addition, visit www.scotlandwhisky.com for more information on a range of Scotch Whisky 'embassies' - hotels, restaurants and bars - across Scotland, and how to visit Scotland and a Scotch Whisky distillery.

20 Can Scotch Whisky be made only in Scotland?

Yes. Many products which were originally manufactured only in a particular locality have lost their geographical significance and can now be manufactured anywhere. The word 'Scotch', however, as applied to whisky, has retained its geographical significance. This is widely recognised in law throughout the world. Thus, whisky may be described as Scotch Whisky only if it has been wholly distilled and matured in Scotland.

21 If you could duplicate exactly a Scotch Whisky distillery in, say, Brazil or Spain, could you produce Scotch?

No. For the reason given in the preceding answer, whisky can be called 'Scotch' only if it is distilled and matured in Scotland. Whisky produced in Brazil is 'Brazilian Whisky' or in Spain 'Spanish Whisky'. Attempts have been made to copy the unique flavour of Scotch Whisky in many parts of the world, but with no success whatsoever.

The Importance of Blending

The Importance of Blending

22 What is blending? What is its purpose?

A number of distilleries bottle and sell some of the whisky they distil for consumption as single or unblended whiskies. By far the greater part of their production, however, is used for the well-known Blended Scotch Whiskies that are sold all over the world.

Blending whisky is a considerable art acquired only after years of experience.

A blend will consist of anything from 15 to 50 different single whiskies, combined in the proportions of a formula that is the secret of the blending company concerned.

Whiskies from different distilleries have a character of their own and, just as people of different temperaments are often incompatible, so some whiskies will not blend happily with certain others. The Malts and Grains in a blend must therefore, be chosen to complement and enhance their respective flavours. The blender's task is to combine different single whiskies, to produce a blend which brings out the best qualities of each of its constituent parts.

The aim of the blender is first to produce a whisky of a definite and recognisable character. It is of the greatest importance that his blend should never vary from this standard, which his customers all over the world will have come to expect. His second aim is, therefore, to achieve consistency.

The blender must also decide when the different single whiskies are ready to be used in his blend. They are brought from the warehouse where they have been maturing to the blending hall, where they are mixed together in a blending vat. They are usually returned to cask and left to 'marry' for a period of months, before bottling. Some companies prefer to blend their Malts and Grains separately and only bring the two together before bottling.

Blended Scotch Whisky is a blend of Malt and Grain whiskies. Combining Malt Whisky with other malts is known as Blended Malt Scotch Whisky, and Grain with Grain is known as Blended Grain Scotch Whisky.

23 When was blending introduced?

Blending was pioneered by Andrew Usher in Edinburgh in the early 1860's. In the 19th century Malt Whisky was rarely left to mature for an adequate length of time. As a consequence, it was often a fiery drink, often regarded as too pungent for many palates. Grain Whisky had a much milder flavour, but was too light for many tastes. By combining Malt Whisky with Grain Whisky, a light, yet flavoursome whisky was created. This proved a turning point for the fortunes of Scotch Whisky. The introduction of Blended Scotch Whisky saw demand spread outside of Scotland, first to England and then throughout the world.

24 What is the percentage of Malt and Grain Whiskies in blended Scotch Whisky?

There is no fixed percentage and the proportion differs from one blender to another. No brand owner is willing to reveal the proportions of the different whiskies used, but the blender determines the proportion according to the character he is seeking for his blend. This character is determined not only by the proportions of Malt and Grain Whisky which the blend contains, but also by factors such as the ages of the individual whiskies and the manner in which they combine to bring out the finest qualities in each other.

25 What are premium and de luxe Blended Scotch Whiskies?

The terms 'premium' and 'de luxe' are not formally defined. A premium or de luxe Blended Scotch Whisky would normally contain a higher proportion of carefully selected older and, therefore, more expensive whiskies

26 When there is an age label on a bottle of Blended Scotch Whisky, does it refer to the average age of the whiskies in that blend?

No. The law requires that when the age is declared on a label, it must refer to the youngest whisky in the blend. For example, if a blend is described as an eight year old, the youngest whisky in that blend must have been matured for at least eight years.

27 Is it legal to sell whisky which is less than three years old for consumption in this country?

No. Although the spirit is distilled under the strict conditions applied to the production of Scotch Whisky, it is not entitled to be described as Scotch Whisky until it has matured for at least three years.

Scotch Whisky and the World

28 What is the proportion of home sales to exports?

Scotch Whisky is one of Britain's principal export products, contributing £2billion a year to the balance of trade. Exporting is nothing new to the industry and even at the end of the 19th century Scotch Whisky companies were marketing overseas. Today exports represent around 90 per cent of all Scotch Whisky sales.

29 How does consumption of Scotch Whisky in Scotland compare with that in the rest of Britain?

Customs and Excise monthly figures of releases from bond give no guide as to the amount of whisky consumed in Scotland itself, but trade sources report that between 15 and 20 per cent of Scotch Whisky sold in Britain is consumed in Scotland.

30 How important is Scotch Whisky as an export earner?

Scotch Whisky is one of the United Kingdom's top five export earners, and accounts for almost 25% of UK food and drink exports.

31 To how many countries is Scotch exported?

In recent years Scotch has been exported to about 200 different markets all over the world. The major markets are the European Union, USA, and Asia.

32 Is the European Union an important market for Scotch Whisky?

Sales to Member States other than the United Kingdom are worth almost 40 per cent of exports. If the United Kingdom is included, the EU accounts for over 50 per cent of the total sales of Scotch Whisky.

33 What are the total stocks of Scotch Whisky?

In 1939, the stocks of Scotch were 374 million litres of pure alcohol, but by 1945 they had fallen to less than 247 million litres. Since then they have risen in response to demand and by 2005 had risen to 2,900 million litres. Stocks of mature and maturing whisky are now sufficient to cover projected sales for around nine years.



34 Is there a large amount of money tied up in whisky stocks?

Financing stocks of maturing whisky is the most significant capital investment which Scotch Whisky companies have to undertake. The long period of maturation which Scotch Whisky must undergo poses a number of commercial problems. Not the least among these is the difficulty of forecasting accurately the demand for whisky several years ahead which blenders must do when deciding how much new whisky to buy and lay down in any one year.

Sale and Distribution

35 How is the alcoholic strength of Scotch Whisky measured?

In common with other EU countries, on 1 January 1980 Britain adopted the system of measurement recommended by the International Organisation of Legal Metrology, a body with most major nations among its members. The OIML system measures alcoholic strength as a percentage of alcohol by volume at a temperature of 20°C. It replaced the Sikes system of measuring the proof strength of spirits, which had been used in Britain for over 160 years.

36 What was meant by proof spirit?

The Customs and Excise Act of 1952 defined spirits of proof strength as follows:

'Spirits shall be deemed to be at proof if the volume of the ethyl alcohol contained therein made up to the volume of the spirits with distilled water has a weight equal to that of twelve-thirteenths of a volume of distilled water equal to the volume of the spirits, the volume of each liquid being computed as at fifty-one degrees Fahrenheit'.

In other words, proof spirit meant that the spirit at a temperature of 51°F, weighed exactly twelve-thirteenths of a volume of distilled water equal to the volume of the spirit. It was, in fact, a mixture of spirit and water of a strength of 57.1% of spirit by volume and 42.9% of water.

37 How was whisky tested for proof strength?

Spirit of proof strength was the technical standard by which strength was measured until 1 January 1980. Hundreds of years ago, spirit of this strength was proved when whisky and gunpowder were mixed and ignited. If the gunpowder flashed, then there was enough whisky in the mixture to permit ignition. Such whisky was held to have been 'proved'. If the spirit was weaker than this proof strength ignition did not take place. In the 1740s, the Customs and Excise and the London distillers began to use Clark's hydrometer, an instrument devised to measure

spirit strength. A more accurate version by Bartholomew Sikes was universally adopted under the Hydrometer Act 1818, and remained in standard use until 1980.

38 At what strength is Scotch Whisky sold?

By law Scotch Whisky must be bottled, sold in and exported from the EU at a minimum 40% alc vol. A strength of 43% alc vol is found in some export markets.

39 How does U.S. proof strength compare with British and European strengths?

Some U.S. proofs and their British and European equivalents are:

AMERICAN	BRITISH AND EUROPEAN
100° Proof	50% Alc. vol.
86° Proof	43% Alc. vol.
80° Proof	40% Alc. vol.

40 What sizes of casks are used for bulk whisky and what are their respective capacities?

TYPE	APPROXIMATE CONTENT IN LITRES
Butt	500
Hogshead	250 - 305
American Barrel	173 - 191
Quarter	127 - 159
Octave	45 - 68

41 What is the liquid content of the bottles most commonly used for Scotch Whisky sales in the home market?

TYPE	
Litre	100cl
Bottle	70cl
Half-bottle	35cl
Miniature	5cl

42 How soon after it is distilled is whisky usually sold?

The normal practice is for the blender to buy the whisky as soon as it is distilled. It is then kept under bond in warehouses at the distillery to mature until the blender requires it. By law whisky must mature for a minimum of three years, although in practice the minimum age is much greater. After blending, Scotch Whisky is usually returned to cask and left for a further period of several months to allow the constituent whiskies to 'marry'. It is then bottled for sale.

Scotch Whisky and the Consumer

43 Why is Scotch Whisky so expensive in Britain?

Taxation in the UK is extremely high, accounting for as much as 70% of the retail price of a typical bottle of standard Blended Scotch Whisky.

This includes Value Added Tax which is levied on the total retail price, including Excise Duty - a tax on a tax. The remainder of the retail price goes towards production and storage costs, transport, advertising, selling, administration expenses and wholesale and retail margins. The Government is thus by far the biggest beneficiary.

44 How does the rate of duty on Scotch Whisky compare with that on other alcoholic drinks?

The Excise Duty paid on mature spirits is the same, whether they are produced in this country or abroad. Scotch Whisky is not protected in any way against competition from spirits produced overseas, even those from countries which themselves discriminate against imports of Scotch Whisky.

At the same time, Scotch Whisky is now much more heavily taxed than most competing drinks. Scotch Whisky therefore faces discrimination when competing in the UK market against other alcoholic drinks.

UK Excise Duty has only been reduced on three occasions since the 19th century. The first cut was made in 1973. On that occasion, however, the rate was lowered only to compensate for the extra taxation which resulted from the introduction of Value Added Tax, and made no difference to the overall impost.

However, in 1995 there was the first true cut in the tax on Scotch Whisky for one hundred years. There was a further cut in 1996. In the following ten years with one exception UK duty on Scotch Whisky has been unchanged. Although this action has reduced the discrimination against Scotch Whisky slightly, it still carries a much greater tax burden than many of the drinks with which it competes.

45 Why are some whisky sales duty-free?

Whisky for consumption on board ships at sea has traditionally been treated as 'ship's stores'. Ship's stores means goods of any kind (whether dutiable or non-dutiable, and whether of British manufacture or imported) taken on board an 'outward-bound' ship for officers, crew and passengers during the voyage. Outward-bound means bound for 'an eventual destination outside the United Kingdom'. Ship's stores have from time immemorial been free of duty, just as goods exported as cargo to countries overseas are. The theory is that the stores are in effect exports, in that they are consumed outside United Kingdom territory, and that the Government cannot expect to collect the duty they would bear if consumed at home. Whisky after distillation is stored (without paying duty) in a bonded warehouse to mature, and whisky shipped as stores or exported goes direct from the bonded warehouse to the ship. HM ships are included in these regulations.

'Coasting ships' which ply from port to port round the coast, and vessels which ply on rivers or other inland waters are not outward-bound and do not get whisky or any other stores duty-free.

Since 1 July 1999 duty-free sales are not permitted for passengers travelling between EU Member States. However, an important duty-free market exists for travellers leaving the EU, and in other parts of the world.

46 How many brands of Scotch Whisky are there?

More than 2500 brands of Scotch Whisky are sold all over the world, of which as many as 200 are available in the home market. Many of them are sold only locally or to private clubs and individuals.

47 What are the best blends?

This is entirely a matter of taste. All the well-known brands on the market are blended by experts with many years' experience, and consumers can be confident that in choosing their favourite they are drinking a whisky consistently blended to bring out the best characteristics of the Malt and Grain Whiskies of which it is composed.

48 Some Scotch Whisky has a smoky flavour. What causes this?

The smoky flavour of certain Scotch Whiskies originates from the peat fire over which the green malt is dried, prior to grinding and mashing.

49 Is it possible to tell the difference between one brand of Scotch Whisky and another by smell alone?

Yes, it is possible to differentiate between different well-known established brands of Scotch Whisky by smell alone if one is sufficiently experienced. The blenders employed by the blending and bottling firms, who blend the different whiskies which go to make the familiar brands, are guided by smell alone in producing a uniform product over the years. For the drinker who is not a professional blender, the only thing is to go on experimenting until practice makes perfect!

50 How do I find out more information on a particular brand of Scotch Whisky?

Full contact details of Scotch Whisky companies and their brands are available on The Scotch Whisky Association website at www.scotch-whisky.org.uk.

51 How old should the best Scotch Whisky be?

It is not possible to lay down any precise age as being the best for a particular whisky. Generally speaking, Malt Whiskies require longer to mature fully than Grain Whiskies. UK and EU law insist that Scotch Whisky should be at least three years old. However, it is the practice of the trade to mature for substantially longer than the legal minimum. Malt Whiskies are normally matured for up to 10 years and sometimes even longer. When an age is quoted on a label, it is the age of the youngest whisky in the bottle that determines the age of the whisky, no matter how small the amount. It is never an average.

52 Does Scotch Whisky in a bottle lose its strength with age? Once bottled, whisky does not lose its strength.

53 Does Scotch Whisky improve in a bottle which is kept sealed?

No. There is no change in a whisky once it has been bottled and securely sealed. As oxygen in the air cannot get to the whisky, there is no further maturing.

54 How should I store my Scotch Whisky?

Unlike wine, Whisky does not mature in the bottle. So even if you keep a 12 year old bottle for 100 years, it will always remain a 12 year old whisky. As long as the bottle is kept out of direct sunlight, the Scotch will neither improve nor deteriorate, even if it is opened. Whisky that is stored at very low temperatures can become cloudy, but the cloudiness should disappear when the whisky is returned to room temperature.

55 At what temperature is whisky best served?

This is entirely a matter of personal choice and no rules, such as chilling for certain wines, can be laid down. In the United Kingdom it is usually served at room temperature, but in some overseas countries it is the convention to put ice in the glass.

56 Is the bouquet of Scotch Whisky improved by warming slightly?

The bouquet of Scotch Whisky cannot be improved by warming. The effect of such warming would only be to increase the rate of evaporation of the spirit, thus speeding up the release of the aroma.

57 What is the best shape of a whisky glass?

A tumbler-shaped glass or goblet is probably the most popular, particularly for drinking Scotch Whisky with ice and a mixer. Scotch Whisky does not require any specific shape to enhance its delights and no rigid convention has grown up in this connection.

Many Scotch Whisky lovers believe that a malt whisky is better enjoyed in a balloon shaped glass where the neck is narrower than the base, allowing the drinker to nose and enjoy the bouquet and character, before sipping his dram.

58 What is the measure at which Scotch Whisky is generally sold across the counter?

Since 1 January 1995 Scotch Whisky in the UK, together with gin, vodka and rum, has been sold in licensed premises in measures of either 25ml or 35ml. A notice in the bar must display which of these quantities is being served.

Previously, The Weights and Measures Act of 1963 allowed for three standard Imperial measures: one-quarter, one-fifth and one-sixth of a gill, equal respectively to one-and-a-quarter fluid ounces, one fluid ounce and five-sixths fluid ounce.

59 What information must by law be given on the label of a bottle of Scotch Whisky sold in the home market?

The liquid measure of the contents, e.g. 70cl, and the strength, e.g. 40% vol, must be stated on the label, together with the name and address of the bottler. From 1 January 2007 spirits must also carry a UK tax mark.

60 Is it injurious to drink whisky with oysters or other shellfish?

No. This is an ancient superstition for which there is no foundation. A personal experiment will furnish the proof.

61 What is the difference between Scotch Whisky and gin?

Both are potable spirits, but differ in their methods of manufacture and the ingredients used. Their characters, flavour and content of secondary constituents are very different.

The spirit base of gin is flavourless. It is first distilled in a Patent Still from a mash of cereals and is then rectified and the juniper and other flavouring materials are added. The rectified spirit may be redistilled with the flavouring materials or these materials may be distilled separately and added to the spirit afterwards.

The aroma and flavour of Scotch Whisky are inherent within the spirit itself and depend chiefly on the cereals, water and method of

distillation used. The secondary constituents are subsidiary, though important, products of the manufacturing process itself. They are native to the whisky and inseparable from it.

Unlike whisky, rectified spirits such as gin and vodka are not matured. They can be consumed immediately and usually reach the consumer in the form in which they left the still and without colour.

62 What is the alcoholic strength of Scotch Whisky?

When distilled it is usually reduced for filling into casks at a strength of 63.5 per cent of alcohol by volume.

By law the minimum bottling strength is 40 per cent alcohol by volume. In export markets some Scotch Whisky is sold at 43 per cent.

63 What are the usual bottling strengths of other alcoholic drinks?

Percentage of alcohol content by volume
Cognac, Rum 40
Vodka, Gin 37.5
Fortified wine 20
Champagne 13.1
Table Wines 9 to 13
Beer 3.13 to 5.18

64 How should Scotch Whisky be drunk?

This depends entirely on your individual taste and on the occasion. Scotch Whisky is a versatile drink, superb in its own right, or as a long mixed drink. Served on its own, or with a little water, it can also be a refreshing drink with ice and a mixer. Scotch Whisky presents a whole range of flavours which can be extended by the addition of soda or mineral water, lemonade, ginger ale or other mixers. Many cocktails contain Scotch Whisky and Section 11 details several examples. Blended Scotch is appreciated as a drink which can be served during a meal in place of wines, while Single Malt Scotch Whisky is popular as an after dinner drink.



The Scotch Whisky Association is unable to offer advice on the purchase or sale of Scotch Whisky, but it is important that potential investors understand the nature and risk of the whisky market before making decisions.

While new fillings and matured whisky are sometimes purchased as a form of speculation with the intention of reselling them at a profit, it should be emphasised that only an extremely small proportion of the whisky distilled in Scotland is bought and sold in this way. All the principal blending companies finance their own stocks of whisky, and buy mature whisky only on rare occasions when they happen to find themselves short of a particular type or make. There is no organised 'Whisky Exchange' as exists for other commodities, nor is there any officially recognised list of buying and selling prices for whisky of different types and ages.

It should be remembered that, whilst the cask matures in a warehouse, there will be annual storage and insurance charges, and evaporation will reduce the spirit in the cask. Bottling small quantities of whisky can be expensive, and of course there will also be Excise Duty and VAT to pay.

Investment for resale is expensive and highly speculateive and should not be entered into lightly.

66 Is there a collectors' market for Scotch?

Renowned for its quality, and with a wonderful range of whiskies available, it is not surprising that some people have become collectors of bottles of Scotch Whiskies.

The Scotch Whisky Association is not in a position to offer advice on the value, purchase or sale of a particular Scotch Whisky. However, one of the best known firms conducting auctions of unusual bottles and other artefacts is McTears t: 0141 810 2880.

Definitions

67 What is a single whisky?

A single whisky is the product of one particular distillery.

68 What is meant by saccharify?

To saccharify means to convert to sugar. In whisky distilling it refers to the process which takes place during the malting and mash tun stages by which enzymes in the malt, referred to as diastase, turn the starch in the cereals into sugar ready for the fermenting action of the yeast.

69 What is diastase?

When conditions of temperature and moisture favour germination, the embryo and associated parts of the barley grain secrete a mixture of enzymes commonly known as diastase. These act to modify and make soluble the starch in the barley, thus preparing it for conversion at a later stage to maltose.

70 What is wort?

Wort is the liquid drawn off the mash tun in which the malted and unmalted cereals have been mashed with warm water. Wort contains all the sugars of the malt and certain secondary constituents. After cooling, it is passed to the fermenting vats.

In Malt distilleries the cereals are all malted; in Grain distilleries a proportion only is malted, the remainder being unmalted. In some cases, Grain distilleries do not separate off wort, passing the complete mash to the fermentation vessels.

71 What is Wash?

The wort or mash technically becomes wash as soon as yeast is added to start fermentation. However, the term is usually used to refer to the liquid at the end of the fermentation. It is the wash which forms the raw material of the first distillation in the Pot Still process and of the only distillation in the Patent Still process.

72 What is the Pot Still distillation?

Malt Whisky is distilled twice - although a few distilleries may undertake a third distillation - in Pot Stills which resemble huge copper kettles. The spirit is driven off from the fermented liquid as a vapour and then condensed back to a liquid.

In the first distillation the fermented liquid, or wash, is put into the Wash Still, which is heated either directly by fire or by steam-heated coils. At this stage the wash contains yeast, crude alcohol, some unfermentable matter and the by-products of fermentation. During the process of boiling the wash, changes take place in its constituents which are vital to the flavour and character of the whisky.

As the wash boils, vapours pass up the neck of the still and then pass through a water-cooled condenser or a worm, a coiled copper pipe of decreasing diameter enclosed in a water jacket through which cold water circulates. This condenses the vapours and the resulting distillate, known as low wines, is collected for re-distilling. The liquor remaining in the Wash Still is known as pot ale or burnt ale and is usually treated and converted into distillers' solubles for animal feed.

The low wines are distilled again in the Spirit Still, similar in appearance and construction to the Wash Still but smaller because the bulk of liquid to be dealt with is less. Three fractions are obtained from the distillation in the Spirit Still. The first is termed foreshots, the second constitutes the potable spirit saved for maturation, and the third is called feints. The foreshots and feints are returned to the process and redistilled in the Spirit Still with the succeeding charge of low wines. The residue in the still, called spent lees, is run to waste.

In the case of the Spirit Still, the design of the still, the height of the head (or top) of the still and the angle of the wide-diameter pipe or lyne arm, connecting the head to the condensing unit, are all very important and have an effect on the distillate.

The Pot Still has changed little in general design over the centuries.

73 What is Patent Still distillation?

Unlike Malt Whisky, Grain Whisky is distilled in a continuous operation in a Patent Still. This is sometimes known as the Coffey Still, after Aeneas Coffey, who developed it in 1831.

Steam is fed into the base of the analyser and hot wash into the top. As the two meet on the surface of the perforated plates, the wash boils and a mixture of alcohol vapours and uncondensed steam rises to the top of the column. The spent wash runs down and is led off from the base.

The hot vapours enter the rectifier at the base and as they rise through the chambers they partially condense on the sections of a long coil through which wash is flowing. The spirit vapour condenses at the top of the rectifier and is run off through a water-cooled condenser to the spirit safe and on to the spirit receiver. Once the spirit begins to be collected it runs continuously until the end of distillation.

Because of the rectifying element present in this process the distillate is generally lighter in aroma than most Malt Whiskies. It consequently has a milder character and requires less time to mature.

74 What is the worm?

The worm and its surrounding bath of cold running water, or wormtub, form together the condenser unit of the Pot Still process of manufacture. The worm itself is a coiled copper tube of decreasing diameter attached by the lyne arm to the head of the Pot Still and kept continuously cold by running water. In it the vapours from the still condense. Fed by the still, it in turn feeds the receiving vessel with the condensed distillate.

In a number of distilleries the worm has been replaced by the more modern tubular condenser.

75 What are low wines?

This is the name given to the product of the first distillation in the Pot Still process of manufacture. It is the distillate derived from the wash and contains all the alcohol and secondary constituents and some water. It forms the raw material of the second distillation, which is carried out in the Spirit Still. The feints and foreshots are added to the low wines when the Spirit Still is charged.

76 What is pot ale?

Pot ale, alternatively burnt ale, is the liquor left in the Wash Still after the first distillation in the Pot Still process i.e. it is the residue of the wash after the extraction by distillation of the low wines.

77 What are foreshots?

Foreshots is the term applied to the first fraction of the distillate received during the distillation of the low wines in the Spirit Still used in the Pot Still process of manufacture. They form the first raw runnings of this second distillation and their collection is terminated by the judgment of the stillman. The following fraction of the distillate is the potable spirit. The foreshots are returned to the still, together with the feints.

78 What are feints?

Feints is the name given to the third fraction of the distillate received from the second distillation in the Pot Still process. They form the undesirable last runnings of the distillation. As noted above, they are returned with the foreshots to the Spirit Still when it is recharged with low wines.

The term is also applied to the first and last runnings from the Patent Still, in which process they are returned to the wash for re-distillation.

The feints and foreshots from the last distillation of the season are kept for adding to the first low wines of the succeeding season.

79 What are spent lees?

Spent lees are the residue in the Spirit Still after the distillation of the foreshots, potable spirits, and feints.

They are usually treated and run to waste.

80 What is draff?

Draff is the spent grain left in the mash tun after the liquor, wort, has been drawn off. It represents, as a rule, about 25 per cent of the malt and unmalted cereals, if any, put into the mash tun. Draff enjoys a large market as cattle food.

81 What are the principal by-products of Scotch Whisky?

The liquids and solids remaining after distillation are not wasted, nor are they allowed to pollute rivers or coastlines. In recent years the Scotch Whisky industry has invested heavily in developing methods of treating the residue of distillation so that it now makes an important contribution to the animal foodstuffs industry.

Most distilleries now possess by-products plants or, in the case of smaller distilleries in remote areas, send their waste material to the area plants which process it into dark grains. These are extremely rich in protein and are sold in pelletised form to farmers who use them to enrich cattle food.

Grain Whisky distilleries usually recover the carbon dioxide produced during the fermentation stage. This has several applications in industry and in the production of soft drinks.

82 What is meant by the term 'finishing'?

Scotch Whisky must be matured in oak casks for a minimum of three years. 'Finishing' is an extension of the maturation process, when the spirit is subsequently filled into empty casks that previously held other wines or spirits for a further relatively short period at the end of maturation.

The cask used for finishing must have been drained of any liquid prior to its use and any change in the spirit will therefore result from its interaction over time with the wood of the cask.

83 What is chill filtration?

Most consumers around the world want their Scotch Whisky to be clear and bright. However, whisky can become cloudy when cold water or ice is added. Chill filtering - a process which has been used in the industry for many years - is used in some brands to remove the solid particles that cause this effect in the whisky and which may lead to unnecessary consumer concern.

84 What is cask-strength whisky?

Water is normally added to Scotch Whisky to reduce the alcoholic strength of the spirit to no less than the minimum 40 per cent alcohol by volume before bottling. If the whisky is bottled at the alcoholic strength at which it comes from the cask, without the addition of water, it is known as 'cask-strength' whisky.

85 What is a 'mothballed' distillery?

From time to time, companies may decide to temporarily cease production at a specific distillery. The dormant distillery is said to be placed in mothballs and is kept in a condition that would allow production to re-start in the future should it be required.

86 What is meant by Under Bond and Duty Paid sales, respectively?

- (a) Sales Under Bond are sales on which the Excise Duty has not been paid. The goods are consigned to a bonded duty-free warehouse.
- (b) Sales Duty Paid are sales on which the Excise Duty has already been paid.

Scotch Whisky and the Environment

87 Can Scotch Whisky be described as a drink from nature?

Scotch Whisky is recognised as Scotland's national drink. It is also Scotland's natural drink.

The making of Scotch Whisky requires only materials which are provided by nature. Water, yeast and peat, plus barley for Malt Whisky and barley, maize and wheat for making Grain Whisky. The starch extracted from the cereals is mixed with clear pure water, water which has often run through ground made up of granite and peat. Peat also plays its part in the drying of the germinating barley - its smoke imparts flavour to the whisky. The yeast is added to bring about the fermentation.

Thus it can be seen that distillers and blenders of Scotch Whisky use their skill to combine materials, which nature has provided, into the world's noblest drink.

Scotch Whisky producers jealously guard the quality of their product and the environment which produces the essential ingredients. Most of the water used by the industry is returned to the river system, and the cereal is recycled as animal feed. Innovation has resulted in the industry being able to adopt the use of lightweight glass bottles, and to reduce its packaging needs. A brochure detailing some of the industry's environmental initiatives is available from The Scotch Whisky Association.

88 Are there organic Scotch Whiskies?

Scotch Whisky is defined in law and produced from simple natural raw materials - cereals, water and yeast - in accordance with traditional practice.

While it is possible to use organic-certified cereals in whisky production, provided the legal definition of Scotch Whisky is complied with, it should be remembered that no protein would carry over the distillation process.

Scotch Whisky and Health

89 Is alcohol good for health?

Scotch Whisky is a craft product made by longstanding traditional processes that have come to underpin its quality reputation. As a drink created only after years of maturation, Scotch is a drink to be sipped and savoured; to be enjoyed responsibly.

Enjoyed responsibly, alcohol encourages social interaction and relaxation. Research has also shown moderate alcohol consumption may confer health benefits for some people, for example protection from cardiovascular heart disease and against certain forms of stroke.

Conversely, the industry recognises misuse of alcohol can damage health in a number of ways, including increased risk of liver disease and heart problems, and may cause domestic and financial problems. Some people for health reasons should not drink at all. In addition, alcohol should be avoided before driving a car or operating machinery.

Anyone with questions or concerns about the health implications of consuming alcoholic drinks should contact their doctor.

90 Can whisky be consumed as part of a gluten-free diet?

Since malted barley and other cereals are used to make Scotch Whisky, it is not surprising those who suffer from Coeliac disease query whether whisky can be safely included in a gluten-free diet.

Proteins (including gluten), however, do not carry over the distillation process and are not present in the final product. Scotch can therefore be safely consumed as part of a gluten free diet. Those wishing further information should consult the Coeliac Society (www.coeliac.co.uk)

91 A standard measure of Scotch Whisky contains 55 calories.

Scotch contains no fat and no added carbohydrates (although there may be a very small carbohydrate level depending on the type of cask used and length of maturation).



92 What can be done to prevent the misuse of alcohol?

Everyone has a role to play in making responsible drinking choices.

Better awareness of what is safe to drink on a daily basis assists consumers make informed responsible decisions. The industry believes the best way of preventing misuse of alcohol is by education in sensible and moderate drinking and that this education should start at an early age.

Attempts to reduce alcohol related problems by imposing massive taxes on drink or introducing restrictions on its sale and availability only penalise the great majority who drink sensibly, without reaching the problem drinker, and create additional problems.

93 How does the Scotch Whisky industry help in prevention?

Scotch Whisky distillers are involved in a wide range of initiatives to encourage responsible enjoyment of their brands, including the use of unit labelling, responsibility messages on bottles and in adverts, and server training.

The industry has also developed its own Code of Practice setting out minimum standards for the marketing and promotion of Scotch Whisky brands in the UK. Covering all commercial communications, including advertising, promotional materials, sponsorship, and websites, the Code also has international reach setting out best practice for Scotch Whisky producers in export markets, where stricter national codes do not exist.

A brochure highlighting industry efforts to promote responsible alcohol consumption, and the Code of Practice for the Responsible Marketing and Promotion of Scotch Whisky, is available from The Scotch Whisky Association.

Drinks made with Scotch Whisky



Atholl Brose

Mix an equal quantity of honey (preferably heather honey) and fine oatmeal in a little cold water. Add the Scotch and stir until frothy. Bottle and keep for two days before serving. 50cl of whisky will be needed for 200g of honey and 200g of oatmeal.



Auld Alliance

Shake together:

25ml measure of Scotch Whisky juice of half a lemon 15ml of Cointreau a dash of sugar syrup ice

Pour into a highball glass, top with lemonade



Bitter 'n' Twisted

In a chilled cocktail glass mix: 25ml measure of Scotch Whisky a few drops of lemon juice 4 drops of Angostura bitters ginger ale to top up



Bobby Burns

25ml measure of Scotch Whisky 25ml Sweet Vermouth 1¹/₄ tsp Benedictine twist of Lemon Peel ice

Stir all the ingredients with ice and strain into a cocktail glass. Add a twist of lemon peel.

Citrus Twist

In a cocktail shaker combine, shake and serve:

25ml measure of Scotch Whisky juice of half a lemon juice of one orange ice



Clansman's Coffee

25ml measure of Scotch Whisky dash of Sambucca black coffee whipped cream



Wipe the rim of a goblet with a piece of lemon and dip it in brown sugar. Pour the spirits and coffee into the glass, add sugar to taste and float the whipped cream on top. Decorate with grated chocolate.

Green Mist

25ml measure of Scotch Whisky 1 measure of Creme de Menthe juice of a quarter of a lemon



Shake to ingredients, strain into a cocktail glass. Decorate with a slice of kiwi fruit and a sprig of mint.

Jock Collins

25ml measure of Scotch Whisky 5 - 6 dashes lemon juice sugar syrup soda



Pour into a large glass and fill with soda.



Red Scotch

Shake together:

25ml measure of Scotch Whisky tomato juice juice of half a lemon dash of Worcester sauce dash of Tabasco sauce pinch of salt

Fill a glass with ice and pour the mixture over and decorate with freshly ground black pepper



Rob Roy

25ml measure of Scotch Whisky small measure (5-10ml) Sweet Vermouth dash of Angostura Bitters garnish with cherry

Mix all ingredients with ice. Stir and strain into a chilled cocktail glass.



Scotch Paradise

Moisten the edge of a highball glass with sugar syrup.

Roll the glass in desiccated coconut to coat the outer edge.

Fill a cocktail shaker with ice and add:

a large (50ml) measure of Scotch Whisky a dash of coconut syrup top with milk (enough to fill the glass)

Shake well and pour into the glass

Scotch Whisky Toddy

Place a spoonful of sugar in a warm glass and add enough boiling water to dissolve the sugar and hot lemon juice.



Add a generous measure of Scotch and stir with a silver spoon; pour in more boiling water and top up with more whisky. Stir well.

Whisky Mac

Scotch and green-ginger wine to taste. They may be in equal proportions or two-thirds whisky and one-third green ginger wine.



Whisky Royale

25ml measure of Scotch Whisky dash of Apple Schnapps (or clear apple juice) ginger ale sliced green apple crushed ice



Half fill a chilled champagne flute with crushed ice. Pour in the Scotch Whisky and then the Apple Schnapps. Top up with Ginger Ale. Place a slice of green apple into the drink.

Whisky Sour

To a double Scotch add the juice of half a lemon and half a teaspoonful of sugar. Shake with ice and serve with a squirt of soda water.



Information About Scotch Whisky

Publications

Scotch Whisky - Questions and Answers - Also available in French, German, Italian and Spanish. (Mandarin being considered)

The World of Scotch Whisky - A coloured map of Scotland showing the location of distilleries and with information on the different categories of Scotch Whisky.

Distilleries to Visit - Identifying distilleries which welcome visitors.

Forbidden Fruits - Scotch Whisky Cocktails that dare to be different. Mix Scotch and fruit juice or milk, the results are delicious.

Statistical Review - A digest of industry statistics.

Factsheets - Giving information on industry issues.

Scotch at a Glance - A leaflet showing top export markets and quirky facts.

Matured to be Enjoyed Responsibily - A summary of industry initiatives that encourage responsible drinking, and discourage misuse of alcohol.

Code of Practice for the Responsible Marketing and Promotion of Scotch Whisky - Code governing the activities of SWA members.

Scotch Whisky - the original sustainable industry - Detailing some of the industry's environmental initiatives.

Films

Available on short loan or for sale.

Spirit of Scotland - Selected video or CD (10 minutes). A documentary film of the Scotch Whisky industry, available in English, French, Japanese and Spanish.

Colour Slide Sets

Twenty two 35 mm colour slides illustrating the distilling and blending process. Also available on CD. Available on short loan or for sale.

The above can be obtained from The Scotch Whisky Association

Index

Unless stated, references are to question numbers not to pages

Index		- differentiation by nose	49
macx		- number	
		Brazil, whisky produced in	21
A		Brightness of Scotch Whisky	83
Age of whisky, minimum required		Butt	40
for consumer sale in UK	5, 27, 42	By-products	
- best	5 l	-/ F:	
- label on blended whisky	26, 51		
Alcohol		C	
- good for health in moderation	89	Calories	91
Alcoholism		Campbelltown Malt Whisky	15
- can damage health	89	Canadian Whisky, different from Scoto	:h9
- education to prevent		- spelling	
- SWA initiatives to prevent		Casks, effect on maturation	
Alcoholic strengths of various		- impart colour to Scotch Whisky	
liquors	63	- sizes	
Analyser (Patent Still)		Cask strength	84
Aqua vitae early references		Cereals	
Aroma		Champagne, strength	
7 11 01114	5, 10, 17, 01	Chill filtration, description	
		·	03
В		Climate, Scottish, importance in	1.4
Barley		maturing	
- effect on whisky making	16	Code of Practice for Responsible Mar	
- malting		Coeliac disease	
- use in distilling		Coffey Still	14, /3
Bar measure of Scotch Whisky		See also 'Patent Still'	
Beer strength		Cognac, strength	
Blend 'best'		Collectors' Market	
Blended Scotch Whisky, see whiskie		Colour of Scotch Whisky, cause	14
Blending	23 DICHACA	Consumption of Scotch Whisky	
- individual character	าา	- comparison with exports	28
		- in Scotland, compared with rest of	
- introduction		UK	29
- malt/grain whisky ratio in		Cor, Friar John	12
- number of whiskies in blend		Customs Duty See 'Duty'	
- process			
- purpose		5	
- sense of smell in		D	
Bond meaning		Dark grains	81
Bonded Warehouse		Definitions of Scotch Whisky	
Bottle common size (home)		De luxe blended whisky	
- storing		Diastase	
- whisky unchanged in	52, 53	Distillation description	14
Bottling		- by Patent Still	
- process	14	- by Pot Still	14, 72
- strength of Scotch Whisky at	62	- strength of Scotch Whisky at	
Bouquet and warming		Distilleries, number	
Bourbon Whiskey, different from		- visiting	
Scotch Whisky	9	Distillery, mothballed	
Brands, 'best'		Draff	

Unless stated, references are to question numbers not to pages

Drinks made with Scotch Whisky	p44-47	Hogshead	40
Drying of green-malt		Home market	
Duty, comparison between rate on S	cotch Whisky	- compared with exports	28
and on other alcoholic drinks	44	- Scotland compared to UK	29
- history of charging		Hydrometer	37
- per bottle of Scotch Whisky		•	
Duty-free			
Duty Paid sales		1	55 //
F		Ice in whisky	55, 64
E	07	International Organisation of Legal	2.5
Environment		Metrology (OIML)	
Enzyme, diastase		Inverness, James IV buys aqua-vitae at	
European Spirit Drinks Regulation		Investment	65
Exchequer Rolls 1494	1 Z	Irish Whiskey, different from Scotch	0
Excise Duty, See 'Duty'	20	Whisky	
Exports		- spelling	
- importance of Scotch Whisky		Islay Malt Whisky	15
- proportion to home sales			
- markets		J	
- strength of Scotch Whisky		James IV, King, buys aqua-vitae at	
- to EU Member States	32	Inverness	12
		, 6	
F			
Feints	75. 78	K	
Ferintosh distillery		Kiln for drying green-malt	14
Fermentation, description			
Finishing, description		L	
Flavour of Scotch Whisky, etc		_	2/ []
		Label, age	
Foreshots		Legal definition	
Fortified wine, strength		Low Wines	٥
_		- definition Lowland Malt Whisky	
G			
Gaelic	11	Lyne Arm	/4
Gill			
Gin, contrasted with Scotch Whisky		M	
- strength		Maize	81
Glass, best shape for Scotch Whisky $\!\!$		Malt Whisky, See whiskies, Malt	
Gluten-free	90	Malting, description	14
Grain Whisky, See 'Whisky, Grain'		Manufacture of Scotch Whisky	
Green-malt		- description	14
Grinding of dried malt		- earliest reference	
Grist	14	Marrying of whiskies	22
		Mash tun	68, 70, 80
н		Mashing of ground malt (grist)	
	00	Materials for manufacture	14,81
Health, Scotch Whisky and	89	Maturation, beyond legal	,
Highland Malt Whisky, See also 'Whisky, Malt'	15	minimum	14, 42, 51
v v i iisky, i idil	1 ⊃		

Unless stated, references are to question numbers not to pages

- climatic factor	16	Rye Whiskey, different from Scotch	
- description	14	Whisky	9
- legal requirements	5, 26, 27, 42		
- strength of Scotch Whisky after	62		
McTears		S	
Measure of whisky, in bar		Saccharify, definition	10, 68
- in bottle (UK)		Sales, see Consumption	
Minimum age of Scotch Whisky		- Duty Paid', definition	
Mothballed distillery		- 'Under Bond' definition	86
,		Scotch, blended see whiskies Blended	
		Scotch, geographical significance	
N		5, 16	5, 20, 2 I
Nature	87	Scotch Whisky, See 'Whisky, Scotch'	
Nip, See 'Measure'		Scotch Whisky Act	5
		Scotch Whisky Association, The	
•		19, 50, 65, 66, 87, 93,	p3, p48
0		Scotlandwhisky.com	
Octave		Secondary constituents in whisky	
Organic Scotch Whisky		Shellfish and whisky	
Oysters and Whisky	60	Ship's Stores, duty-free	
		Sikes, Bartholomew and hydrometer	
P		Single Whiskies4, 6	6, 22, 67
•	12	'Smoky' flavour of Scotch Whisky	
Parliament, Scottish, Act of 1690		Spain, Whisky made in	
Patent Still		Spent Lees, definition	
Patent Still Whisky, See 'whiskies, Gr		Speyside Malt Whisky	
Peat, imparts flavour		Spirit, Proof, definition	
- use		Spirits, definition	
Pot Ale, definition			
Pot Still	14, 72	Spirit StillStarch, modified in malting	
Pot Still Whisky, See 'whiskies, Malt'			
Potable spirit		Steeps	
- production		Stocks of Scotch Whisky	55, 57
Price, high retail, reason for		Strength of Scotch Whisky at different	(2
Proof Spirit, definition		stages of manufacture	
- methods of testing for proof stren	gth37	- cask strength	
Proof, US, compared with British an	d European	- comparison with US proof	
strengths	39	- comparison with other alcoholic liquors	
Publications	p48	- for export	
		- method for measurement	
•		- minimum strength in UK	
Q		- regulations and stated strength	
Quarter Casks	40	- unchanged in bottle	
		Sugar, produced in malting and mashing	14, 68
R			
	244 47	т	
Recipes of Scotch Whisky drinks		•	
Rectification		Tax see 'Duty'	
Responsible Marketing - Code of Pr		Temperature for serving Scotch Whisky	
Rum, strength	63	Types of Scotch Whisky	15

U
Uisge beatha or usquebaugh I I
Under Bond sales, meaning86
USA
- Rye and Bourbon made in9
Usher, Andrew23
O31CI,7 (101CW25
V
Value Added Tax 13, 43, 44, 65
Visiting a Distillery
Vodka, strength
vodica, sti crigari
W
Wash, changes in
- definition71
- production
Wash Still
See also 'Pot Still'
Washback14
Water, importance of quality in
vvater, importance of quality in
distilling
Whiskey, Irish
See also 'Irish'
- spelling8
Whisky origin of nameII
- aroma
- by-products81
- characteristic flavour 15, 48, 61
- difference between Scotch Whisky and other
whiskies9
- Blended
- Grain (or Patent Still)
- Malt (or Pot Still)
- manufacture described
- percentage in blends24
- range of variety of flavours, etc 15, 16, 17
- range of variety of flavours, etc
- spelling8
Whisky, Scotch20
- categories6
- definition
- differences from gin61
- different from other whiskies9, 15
- does not change in bottle52, 53
- first distilled12
- main types15
- organic

- ways of drinking	64
- world's leading drink	
Wines, strengths	
Worm, description	
Wort, definition	70
- production	14
Υ	
Yeast	14, 87

Did you know?

Scotch Whisky accounts for more than 23% of UK food and drink exports.

Scotch Whisky is sold in 200 markets worldwide.

Scotch Whisky sells nearly four times its nearest rival whisky.

Scotch Whisky uses some 410,000 tonnes of barley and about 510,000 tonnes of other cereals each year.

10% of Scottish agriculture jobs depend upon the industry.

1 in 50 Scottish jobs rely on the Scotch Whisky industry.

Some 18.5 million casks lie maturing in warehouses in Scotland.

To be Scotch Whisky, the spirit must mature in oak casks in Scotland for at least 3 years.

Greeks drink more Scotch Whisky per person than any other country.

More Scotch is sold in one month in France than Cognac in a year.

There are five categories of Scotch Whisky: Single Malt Scotch Whisky, Single Grain Scotch Whisky, Blended Scotch Whisky (a mix of malt and grain whiskies), Blended Malt Scotch Whisky and Blended Grain Scotch Whisky.

Drinkers in the UK often choose to enjoy it with just a little water, but in Spain they mix it with cola, in Japan Scotch is enjoyed with lots of water and ice, and in China with cold green tea.

Scotch Whisky also goes well with food, including smoked salmon, beef and especially chocolate desserts.

20 Atholl Crescent, Edinburgh EH3 8HF t: 0131 - 222 9200 f: 0131 - 222 9237 e: contact@swa.org.uk w: scotch-whisky.org.uk