Ann Thomas

Corn drying Kiln
Dun Dubh
FORD

The KIST 61

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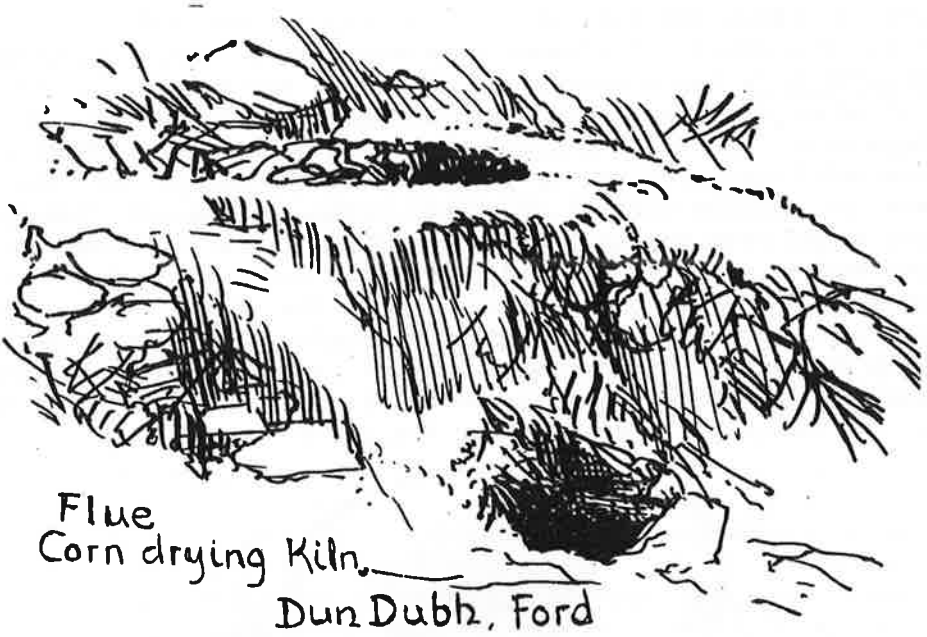
CORN DRYING KILNS

Anne M. Kahane

Among the important structures of any settlement with arable land would have been a kiln to dry off grain before grinding it. The climate of the West of Scotland meant that grain tended to ripen late and was thus apt to be damp when harvested; it was therefore necessary to dry it before use and storage. Normally the corn drying kiln was a cup-shaped stone construction built against a slope, one and a half to two metres wide at the top (though it could be very much larger) and tapering slightly down to a flat base; this was the heating chamber of the kiln, supplied with hot air entering by a duct or flue leading from a fire burning outside on the downhill side. Just below the top of the inside of the stone cup or basin ran a ledge to support the kiln floor of crossed sticks or wooden laths on which a layer of straw, or sometimes haircloth, could be laid, and on this the grain was spread to dry, being turned at intervals. According to I.F. Grant in Highland Folk Ways the drying process took twelve hours, but this would vary with quantity and conditions. In some parts of the country kilns for drying the grain were attached to or built into storage barns; these barns had the additional advantage of being warm dry meeting-places when the weather was inclement, and also of providing extra space for surplus guests. (According again to I.F. Grant, Angus Og the last Lord of the Isles caused mortal offence to Mackenzie of Kintail by accommodating him and his followers in the kiln barn). There are fine examples in Orkney and Shetland, and one nearer our part of the world on the Garvellach Islands;but the only possible example we have found on mainland Mid Argyll so far - and that only last year - is in the lower of the two settlements at Garbhault near Stroneskar. How the grain on the drying kiln was protected from our generous rainfall is still a mystery to me. We can find no evidence for, or even mention of, a protective screen and can only wonder how people found enough dry days to keep their families supplied. Of course a temporary removable 'umbrella' arrangement would leave no trace; but it is still surprising.

Although important pieces of equipment these kilns were not large, so once a settlement was abandoned, or a particular kiln went out of use, they very soon became overgrown and even

Corn-drying kiln
Mealdarroch
East Loch Tarbert



completely obscured by vegetation, so are often impossible to identify now - unlike the massive upstanding lime kilns (see Kist 41). However, conscientious walking about and judicious probing about a deserted settlement will often reveal the remains of its corn drying kiln. [A small note: when the benefits of liming acid soil became well known some corn drying kilns were converted to lime burning on a very small scale, the flue entrance to the heating chamber being used for raking out the burnt lime. In fact, some corn drying kilns, for example that at Mealdarroch, are wrongly identified on O.S. maps as lime kilns. See Kist 46 pp.13-18]. As kilns were sometimes liable to catch fire they are often sited beside burns or near some source of water.

One of the questions still to be resolved at Auchindrain Museum is what the inhabitants used to dry their grain once the flue of their kiln was covered by the construction of Building K, the 'Wool and Bull House'.

Another piece of equipment associated with the process of grain preparation and frequently found in deserted settlements is a 'knocking stone', a small circular basin ground out of a large boulder, or occasionally out of a nearby rock surface,

used to catch the ears of corn as they are knocked off the head of a sheaf. Professor Alexander Fenton's book Scottish Country Life has a photograph of such a stone in use on the island of Foula in 1902, the operator shown beating the sheaf head over the knocking stone with a large mallet. The basins are not large, and it may puzzle us to understand how there was not a large scatter of wasted grain; but expert feeding of the sheaf head across the basin combined with practised use of the mallet may have avoided this. The grain of course would have had to be scooped out by hand as the stones are too heavy to tip up and the rock surface unmovable. There is an easily seen example of a knocking stone now placed against the churchyard wall in Kilmartin between the two benches. It was found in the village and relocated a few years ago.

A Selection of Local Corn Drying Kilns

1. West Barravullin, probably 2 kilns, NM 816 077
2. Finchairn, NM 902 033
3. Dun Dubh, p.51 in Allan Begg's Kilmartin Parish, NM 864 041
4. Echle, p.52 in Allan Begg's Kilmartin Parish,NM 866 043
5. Upper (old) Monydrain, 3 examples, NR 865 896 (approx.)
6. Scotnish, 3 examples, NR 778 900
7. Mealldarroch, E. Loch Tarbert, NR 679 682
8. Auchindrain Museum, Building K
9. Tarbert,2 on l.bank of burn above 4th green on golf course

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BRACKEN

L. Rymer

[This article is taken and abbreviated, by permission of Dr Rymer, from his unpublished Ph.D.thesis The Palaeoecology and Historical Ecology of the Parish of North Knapdale. The Society's library has a copy in which the full version and complete details of all references can be found. Ed.]

Bracken, Pteridium, recorded in deposits from well over two million years ago, is one of the most important weeds in Britain. Under suitable conditions it forms a complete cover, which with the thick layer of litter covering the ground during the winter months is able to exclude all competitors, so that areas covered with bracken are next to useless for grazing. It can grow on a very wide range of soils, though under tree cover it cannot achieve the dominance it exhibits elsewhere. Forest clearance from Neolithic times can be shown by pollen diagrams to lead to increase in Pteridium, which may be short term if forest regeneration follows; but on poorer soils the effect may be long-lasting. As the woodland is opened out the bracken is able to spread and increase in density; as the forest regenerates the bracken is brought under control by the increased shade.

Certainly by mediaeval times bracken was both common and a weed. In 1373 it could be written "Ferne is an erbe that is comoun to know for he grows in all places"; and in 1697 "this so common and known annoyance" and in 1726 "undoubtedly one of the worst weeds".

Fraser Darling in 1955 wrote " We may say quite definitely that unbalanced grazing with a high preponderance of sheep furthers the spread of bracken...When the grazing was predominately by cattle, and very little bracken was to be seen, it was certainly kept in check by their grazing habits, their heaviness and capacity to break growing stems". I am not sure what evidence leads to the conclusion that "very little bracken was to be seen" before the great arrival of the sheep that began in the 1750s. Bracken played an important role in the Highland economy at this time, and it would have been in the interest of the local population to ensure a sufficient supply for their needs. Indeed for some of the Western Islands there is a possibility that bracken patches were actually

planted,and that protective regulations as to their subsequent treatment were laid down in the lease.

Although it is impossible to date accurately the spread of bracken, it is certain that it occurred. A very familiar sight in Scotland is that of bracken growing over old lazy beds, the relics of former cultivation. This distribution suggests that an important factor in its spread was the abandonment of arable land that accompanied the depopulation of the Highlands, a partial consequence of the coming of the sheep; another aspect is that bracken was no longer purposefully cut. Cutting might discourage the spread of bracken in two ways: in midsummer repeated cutting would reduce the vigour of the plant and eventually lead to its eradication; even cutting towards the end of the season would reduce the amount of accumulated litter and make the plant more susceptible to frost. The practice of muirburn, the burning of uneaten herbage to provide new shoots for both sheep and game,might produce high temperatures that would destroy rank heather,but the deep rhizomes of bracken are protected from the fire, so that Pteridium can easily invade the burnt area. Rabbits have been considered to confer a great advantage on Pteridium by eating its competitors and may play a role in bracken invasion in Scotland. Apart from a single warren in Loch Awe (belonging to the Dukes of Argyll) rabbits were not introduced into Argyll, which by 1974 contained about one quarter of all the bracken in Scotland, until 1854. Twenty years later they were being described as vermin in the leases of the Knapdale farms.

The spread of bracken in the early years of the twentieth century would have been aggravated by the conditions of diminished labour during and after the First World War; by the tendency for people to live in villages rather than on isolated farms; and by mild weather. But changes in our economy have altered our relationship with the plant so that an understanding of its recent history is dependent on our appreciation of its past role in our society.

The importance of bracken to man is demonstrated by the ancient privilege of Fern bounds, greenhue, or fernigo and the rules which once governed the dates on which bracken could be harvested. In some areas it was even the practice to set out, by agreement among commoners, the parcels of land on which bracken could be cut. The allotments were then carefully measured out, and rigidly adhered to. These rules were not intended to eradicate the bracken, quite the reverse. In

1544,for example,it was decreed that the tenants of Pennington Manor, Furness, must not cut any bracken upon the moor yearly before 29 September, but after that date every one of them was to have daily one mower or four reapers, under pain for every forfeiture of 12d, a considerable sum of money in those days. Cutting for eradication has to take place in midsummer, and this was expressly forbidden. As late as the 1960s the commoners of Goathland received £750 from the Air Ministry as compensation for the acquisition of common rights to cut ten acres of bracken a year. In the Pipe Roll of East Wretham, Norfolk, 1288-9,there is the entry "De Fuger vend 5s", that is bracken had been sold for five shillings, the same price that could be obtained for two quarters of rye. Celia Fiennes in 1695 describes Cannock Chase:"In Kank wood...is also great quantetys of ferne, which tho' it overuns their ground and so spoils the grass where its much, yet the usefullness of it renders it necessary to be preserved". In November 1742 John Cockburn of Ormistoun ordered his gardener to carry "Farnes" to his town house and stack them up as dry as possible. The most striking example I know of, however, comes from Knapdale. According to the "Decreet of Sale of the Lands of Kilmorie... in favour of Sir Archibald Campbell, 1776", the rents of the farms in this area, which were paid partly in kind, included "sixteen cart loads of pulled fern" from each tenant,the ferns being deliverable, on the tenant's expense, at the mansion house at Fernoch, for the use of the biggings of the same. I imagine that many hill farmers today wish they were allowed to pay their rent in bracken!

Bracken as a source of potash

Potash is the term originally applied to the alkaline substance obtained by lixiviating the ashes of terrestrial vegetables and evaporating the solution; chemically it is a crude form of potassium carbonate; the word was also used to refer to the plant ashes before lixiviation. The cleansing properties of wood ashes have been known from very early times,and the early Greeks and Romans knew how to prepare potassium carbonate from them; it can lay claim to being one of the earliest industrial chemicals, finding applications in the manufacture of soap and glass, in dyeing, bleaching and wool scouring. Bracken, having a high potassium content, producing a large proportion of ash per unit dry weight, and being in plentiful supply, would seem to be the obvious plant to use. Although the percentage of potash is highest in the young fronds, the bracken harvest

should take place in July or August in order to obtain the greatest yield of potash per acre. It was recommended in 1917 that harvesting should begin when some of the pinnules begin to wither, and when the green begins to give place to a yellowish colour in the stems. Under the favourable conditions of Dundonald Glen and Shewalton Moss in Ayrshire at that time about four acres of fully stocked bracken land yielded one ton of ash; at Cleavance, an area of shallow soil in an exposed position on the side of a hill, seven acres was required to produce one ton of ash.

The technology of burning bracken seems to have been very simple. One of the most detailed descriptions is given by James Dunbar (1736):

"Take a piece of burning Peat-Coal, about the Bigness of your Fist,and lay on it a handful or Two of dry Breckens by Degrees and you will soon have a Fire; continue thus till you lay on a Cart-Load or Two, but you must take Care they do not Flame;... When your Fire is near burnt down, you must steer it up from the Bottom till that which lyes in the Heart...be burnt black, then steer them up frequently till they turn white; afterwards you may augment the Fire upon the same Heap, and burn on as long as you have Day-Light; if the Wind blows too much, make a Sconce of Breckens to the Windward, to prevent the Ashes blowing away: If there come a deal of Rain, you must house or hut them with the Ash-Board; if it be small Rain or flying Showers throw Breckens on the Fire, which will defend it; if you burn more than one Day house every Day's burning at Night; and, being all in a Heap, they will burn themselves for some Days, till all turn white, and be sure they will be turned twice or thrice a Day, from the Bottom to the Top, and they will be whiter; then, when they are cold, sift and barrel them".

It is remarkable how similar this is to the method recommended in 1917; the main difference is that the writer then replaces the "Ash-Board" by corrugated sheet-iron or tarpaulins, and suggests that the base of the fire should first be hollowed out.

The 18th and early 19th centuries saw a period of rapid industrial expansion which greatly increased the demand for industrial chemicals. It was also a time of political unrest which, especially in the case of the American War of Independence and the Napoleonic Wars, meant that much less alkali could be imported from abroad. This led to a great deal of experimentation on methods of producing alkali, and was the

stimulus for the development of the kelp industry. At least three works were written in Scotland at this time that deal with the production of potash from bracken, mainly for the bleaching industry; the Irish were said to be making great use of bracken ash in bleaching fields. It was regarded as a very favourable source of potash, especially as fern ashes could be made for only 1½d per lb, as women could manage bracken. In 1736 ashes were selling at eight shillings the boll in Scotland and four shillings the bushel in London; bracken ash was sold in Glencoe for seven shillings a barrel. The island of Jura in 1772 was manufacturing about £100 worth of bracken ash a year, according to Pennant. If we suppose a price of 2d per lb then 12,000 lbs of ash were being manufactured there each year; so on Jura at least 100 acres of bracken were being made into potash each year, quite apart from what was cut for thatch, litter etc.

In the period immediately preceding the First World War the potash fertilizer used in Britain was almost entirely imported from Germany. The beginnings of hostilities cut off this supply, and in 1917 the Board of Agriculture for Scotland produced a leaflet entitled Bracken as a Source of Potash. As a secondary aim of the utilisation of Pteridium the pamphlet cites the eventual eradication of bracken. In 1917 a ton of ash could be sold for £25, leaving a good margin of profit, even after deducting the cost of manufacture, and quite apart from the enhanced value of the land.

Potash in Glass Manufacture

Potash glass, in contrast to soda glass, did not become common until the end of the 10th century when the European glass makers began utilising the ashes of bracken and other land plants on a large scale. Ashes of bracken were especially esteemed for glass making, and in England "they were said to be used exclusively". In France potash glass went by the name 'verre fougère' and the place name 'Fougères' (bracken) is associated with districts in which glass making is known to have occurred. In 1466 the Abbess of St. Croix of Poitiers received one gross of glasses in return for leasing the rights of gathering fern to the glass works of La Ferrière.

It seems that several sources of potash were used, even at a single site; the ashes of the wood used in firing the furnace, for example, might have been used along with bracken ash; a 12th or 13th century note remarks that purple or flesh-coloured glass can be produced by using ashes of the beech tree.

Clear colourless glass was especially valued, and could be made most easily with bracken. The use of bracken in the glass industry was well known, as is shown by the reference in Chaucer's Squiere's Tale, written in about 1388:

"But natheless somme seyden that it was
Wonder to make of fern asshen glass
And yet nis glass nat lyk asshen of fern".

In 1701 James Montgomery "... stated that for the previous ten months he and his partners had been erecting glass works in Glasgow at a large outlay...He had discovered that fern ashes ...were a most useful material in glass-making, and ferns abounded near Glasgow". As late as 1772 crofters in the Western Isles were able to make "a very considerable profit" from the sale of fern ashes to the glass manufacturers. I have no evidence that this use of bracken ash continued into the 19th century, but the shortage of alkali brought about by the Napoleonic Wars might have encouraged its use.

Potash for Soap and Bleaching

The use of bracken ash in soap appears in various 15th century recipes, and it continued into the 17th century. In November 1634 Patrick Mauld of Panmure was granted a patent, for 31 years, for "the sole and full licence to make and cause to be made...soap for washing of clothes" in Scotland. The King, considering that there were certain ingredients necessary for the making of soap which it might be as well to obtain from within the Kingdom, also gave Mauld sole licence "to make potasses...of all sorts of ferns and other vegetable things whatsoever, fit for the purpose".

Often, however, bracken ashes were used by themselves. This was cheaper, and seems to have been especially effective for the washing of cloth. Celia Fiennes describes, in 1695, how at Wolseley they burnt all their fern in July, made the ashes up into little balls and kept them to bleach cloth. In Kank Wood they would roll the ashes up in balls "and so sell them or use them all the year for washing or scouring, and send much up to London,the ashe balls being easily sent about". The use of bracken ash to wash linen was of importance in some parts of Scotland, and in Wales "the fern-ash balls were made for sale in the market"; the price varied according to season from 3d to 8d per dozen. In the 1830s women in the Forest of Dean went "day after day into the woods to cut, and then burn the green fern to make ley to put into hard water to wash our clothes and the clothes of the aristocracy". The ash balls

were sold "by the dozens to the shops in Gloucester". In 1837 fern ashes were no longer used commercially in Scotland, but it is likely that they were still manufactured and used locally to offset the cost of soap.

Bracken as a Fuel

As almost any dried plant material can be used as fuel the fact that bracken is often singled out for mention may be more a reflection of its abundance than of any peculiar properties it may possess. It is a light and quick-burning fuel and it affords a very violent heat;it was used for burning limestone for heating ovens, and in baking and brewing; it was also used in brick-making. The use of bracken as a fuel was of little ecological consequence, because for this purpose it was not cut until very late in the season.

Bracken as Thatch

The use of bracken as thatch is a well-known and old-established practice. Pennant in 1776 said that the general thatch on Skye was fern. He thought it would last "above twenty years", which agrees with Smith's statement in 1805 that a good coat of bracken, well put on, would last 15 to 20 years. Under particularly favourable conditions a bracken thatch need not be replaced for 30 years (Campbell, 1831). Only a heather thatch will last longer. However, with the short leases so prevalent in the Highlands at that time, thatch would seldom have been well put on. The minister of Edderachylis complained that the houses required a new cover every year to render them watertight. Campbell's emphasis that the need "to secure the thatch from being blown off by the wind is a matter of greater importance than would appear to be attached to it, from the number of accidents of this kind that occur" also suggests that the thatch seldom survived to its potential lifespan. On Skye both the frond and rhizome were used in the thatch, but it was more usual to use only the fronds, and then with some branches removed. Detailed instructions for making a fern thatch are given by Campbell. He estimates that an average crofter's house in Scotland, 40 feet long, with a roof 13 feet high, would require 115½ square yards of thatch. In an area where fern was abundant an "active man" would be able to pull a cart load of fern a day, enough to thatch an area of about 6½ square yards. Considerable quantities of fern might be used up in this way, but as the thatching was not carried out until mid-September to October it would not lead to eradication of the bracken. The bracken might be laid over turves.

The use of bracken thatch was by no means confined to Scotland In Lancashire it was thought that "fern made the best thatch being naturally dry, and not apt to ferment like straw", and references to it could be quoted from most other counties.

Bracken as Litter

The harvesting of Pteridium for litter was a widespread practice and, in terms of the amount of bracken consumed, may have been the most important use to which the plant was put. Smith describes the harvesting of bracken for animal bedding in autumn and this seems to have been the standard practice; the effect of bracken litter on the composition and value of dung was considered to be in some respects preferable to straw.

Bracken was also used for 'carpeting' floors, and for bedding for humans. A bracken floor covering was used at Vindolanda on Hadrian's Wall; Palladius in 1440 wrote that maple, oak and ash flooring "endureth long" if well covered with fern. Until the middle of the 18th century the majority of the tenants in the parish of Fortingall "had no such things as beds", but heather or fern under them; in some parts of Scotland, after a wedding, the bride and groom were sent to sleep in the barn, fern and a couple of blankets being provided for a bed.

Bracken as Compost

Bracken was once in great regard as a compost; Francis Bacon (1627) thought that "brakes cast upon the Ground,in the beginning of Winter, will make it very Fruitful". It was recommended especially for potatoes -"fern buried beneath potato roots never fails to produce a good crop". In Sutherland cut fern was left to rot on the ground during winter; in some areas the cut green fern was gathered into heaps with thistles and "all sorts of green vegetables" and, after covering with earth, was allowed to rot out before being applied to the land. Accoring to John Smith (1805) the use of green fern for manure should take precedence over the cutting of ferns for litter. There is evidence that fern ashes were used as a fertilizer. It must not be forgotten that old fern thatch, enriched with soot, and bracken litter, enriched with dung and urine, would eventually find their way to the dung heap and so out to the fields. A midden from the Neolithic settlement of Skara Brae contains a great deal of Pteridium and other plant material, and may have been destined as compost.

Bracken as Food

Bread made out of the dried and powdered rhizomes was eaten by the Maoris of New Zealand in 19th century; a detailed account

is given by Hooker. In the 18th century fern rhizome was mixed with flour by the poor in Normandy as a "miserable necessity". In the winter of 1816 the poor workers in the town of Creusot made bread with ground dried bracken root mixed with a little bran. Bracken bread was eaten in any time of great famine. It would not be surprising if the same happened in Britain,though the only definite reference that I have comes from William Caxton (1480): "Poure peple made them brede of fern roots". During the First World War,when the food position in this country gave cause for anxiety, an investigation into the food value of bracken rhizomes,for both humans and animals,was initiated in Scotland, and similar research was being carried out in other countries, "including enemy countries".

Benjamin Clarke (1857) investigated the use of young and tender bracken fronds, blanched, as a food. He distributed parcels of fronds as samples of a new, unnamed, vegetable, to various unsuspecting"...parties who have,all of them,in return sent back written acknowledgements...stating that it was equal or superior to others named by them". He recommended Pteridium fronds as a substitute for asparagus - as did others; this is not simply a result of the insensitive English palate, for in France bracken fronds were considered edible "generally eaten in the guise of asparagus". In Japan bracken fronds, sometimes with a soy sauce, are widely served as an appetizer.

Fern fronds are recorded as winter fodder for rabbits in warrens, and, cut up and boiled, as food for pigs; in Wales fronds were chopped up when dry, mixed with straw or hay, and given in winter to the horses and mules kept for working on tram roads. The feeding of cut fronds to stock is also recorded from Scotland, but, especially when mature, the fronds appear to be poisonous, and cases of cattle being killed by bracken are well known. Pigs are reputed to be "very fond" of bracken rhizomes, and on small fields , by rooting for and eating them, help to eradicate the plant.

Bracken in Medicine

The Garden of Health of 1579 gives 21 recipes for using bracken. "Burnings, Cattell galled, Festers, Gnats, Horsesicke, Kanker, Miltpaine, Mother suffocat, Nosebleeding, Purgation, Sinewes griefes, Skin off, Sores, Wormes, Wounds can all be cured by the use of bracken, and it even "maketh women barren" if you know how to use it correctly. Most authors agree that the rhizome is effective against worms; it is administered as a powder obtained by drying it in an oven;

it could then be dissolved in wine. The rhizome could also be"bruised and boyled in Mede or honeyed water, and drunk". It appears to have been employed in many and varied forms to treat a range of ailments.

Miscellaneous Uses of Bracken

The rhizomes were stated to be used "in Siberia and other places" as a substitute for hops in the brewing of beer; and "much used abroad in preparing chamois and kid leathers"; but this information,appearing in exactly the same words in a series of authors, is vague as regards detail.

Other uses are better documented, but of uncertain importance. The fronds were, and still are, used to protect plants from frost. Another well-established horticultural use was in packing and storing of fruit. One French name for bracken is "fougère à cerises",an allusion to its use in packing cherries for market. It was said to keep the fruit in excellent condition, but might serve other purposes: a diary entry of 1552 mentions a man convicted of selling "potts of Straberries, the whych the pott was not alff fulle, but fylled with farne".

The rhizome can be used to dye wool yellow. Smoke from burning bracken "driveth away Serpents, Gnats and other noisome creatures that much molest [those[that lye in bed at night time with their faces uncovered"; it is also effective against midges! Fresh green fronds boiled up in an old pot produce a liquid which kills greenfly.

Folklore of Bracken

There are many legends concerning bracken, which has always been considered a sacred plant in the Scottish Highlands, and there are various European traditions connected with ferns and "fern-seed", too many to list here; its ability to confer invisibility is the superstition best known.

I cannot finish this account of the ethnobotany of bracken without quoting a letter found in a volume of miscellaneous collections by Dr Richard Pococke, in the British Museum. It was written by Philip Herbert, third Earl of Pembroke, then Lord Chamberlain, and addressed to "My very loving friend, the High Sheriff of the County of Stafford":

"Sr. -His Majesty taking notice of an opinion entertained in Staffordshire that the burning of Ferne doth draw down rain, and being desirous that the country and himself may enjoy fair weather as long as he remains in those parts, His Majesty hath commanded me to write unto you, to cause all burning of Ferne to bee forborne, until His Majesty be passed the country.

Wherein not doubting but the consideration of their own interest, as well as of his Majesty's, will invite the country to a ready observance of this His Majesty's command, I rest,

Your very loving friend, Pembroke and Montgomery.

Belvoir, 1 August, 1636".

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A JOB DESCRIPTION

DUTIES OF INVERARAY TOWN OFFICER 1908

1. To ring the town bell morning and evening on week days, and for burgh courts and meetings of the Council and on the rare occasions of solemnity or rejoicing, as also if required for meetings of the Justiciary Court and Sheriff Court.
2. Lamp-lighting, according to custom, and timely extinguishing, keeping lamps clean and burners in good condition, and make himself familiar with the keeping in order of Incandescent burners.
3. Scavenging - To keep roads and side streets and public places clean (going over them twice daily during the five months from May to September inclusive) between Rhunacraig Point and the turn in the road above the flower garden fence, and the Pier and Wharf and Shore as well. To destroy or remove refuse and stray papers and materials, and give constant attention to the public water closets.
4. Act as halberdier on occasion. To distribute notices of the Council and Town Council Election Bills. Perform the duties of Handbell ringer at charges sanctioned by the Council.
5. Take an interest in the property and effects of the Burgh and prevent injury thereto, note any misuse thereof and of the streets, and check minor offences, and do all odd work necessary to keep everything in efficient repair and order.
6. The above is given as an indication of what is required; but it is specially to be observed that the Officer will give his whole time to the service of the town, and that he will do any other work which may appear to the Council to be desirable and which the Council or any of their Committees may require him to perform.

TOWN CLERK'S OFFICE - 7th APRIL 1908

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CHEESE

In response to the article on cheese presses in Kist 60 the Archivist for Argyll and Bute, Murdo MacDonald, has sent the following note and a copy of a 19th century document.

The document seems to originate from a competition held in Inveraray on 15th October 1832 for dairymaids to produce "best imitations of English Cheese" with prizes by the Highland Society and the County of Argyll(i.e.the Commissioners of Supply) The cheeses specified for imitation are North Wiltshire,Double Gloucester, Stilton, but other cheeses apparently submitted were Ches-shire, Apple Pine, and Dunlop. Entries came from farms in Cowal, Kintyre, and Lorn, as well as Mid Argyll. This appears to have been an attempt to improve the standard of cheese making.

I Jean Kerr Dairymaid at Duntroon Castle declare that the Cheese herewith produced - made in imitation of the Double Gloucester - is a fair average sample of the kind now entered by me in Competition for the prize given by the Highland Society of Scotland and by the County of Argyll; and that not lefs than One Cwt (112 libr of 16 oz) of the same kind have been made by me during this Season and can be shown if neceſsary.

Jean Kerr

At Duntroon Castle the 15th October 1832 Appeared Jean Kerr Dairymaid Duntroon Who being Solemnly Sworn declares to the truth of the circumstances narrated above

Sworn by Neill Malcolm Jr

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SOME NOTES ON BLOOMERIES IN ARGYLL

William Laing

I was very interested to read the article entitled "A Bloomery at Point of Knap" in Kist 60. Many years ago I was studying the beginnings of the iron industry in Scotland

and this introduced me to the bloomeries and charcoal furnaces that were the only native sources of iron in Scotland before the development of the coke based processes, which started in Carron near Falkirk about 1759. My eye was also caught by the reference to Point of Knap. I have never set foot there, but have identified the Point on several occasions when making for either Crinan or Loch Sween or the delightful anchorage on Eilean Mor in the MacCormaig islands. Point of Knap is well recorded in the established pilot books of the area:earlier editions of the Admiralty pilot book of the West Coast of Scotland (see, for example, opposite p.167 of the 10th edition, 1958) have a delightful sketch of the coast from the MacCormaig islands to the entrance to Loch Caolisport, and one can readily pick out the exit of the SW trending valley, just west of the Point, to which D.A.McCallum refers when describing the Knap bloomery site.

There is in the Proceedings of the Society of Antiquaries of Scotland vol.XXI pp.89-131, 1886/7, an account of the bloomeries and charcoal iron furnaces of Scotland. The author, W.Ivison MacAdam, writes about the pre-Carron production of iron in Scotland which used native charcoal and iron ore, the latter mainly bog iron ore found close to the site. He makes the point that the large scale furnace operations are reasonably well documented, by means of charters and acts of Parliament. They were commissioned as early as 1607, in the case of Sir George Hay's operation at Letterewe on the north side of Loch Maree, and some continued until the mid 19th century, as at Furnace on Loch Fyne. Based on the use of charcoal, they were latterly using high quality haematite iron ore which was mainly imported from the northwest of England; but in a few cases, such as the furnace at Abernethy on Speyside, use was made of similar native ore from remote sites such as the Lecht near Tomintoul. These furnaces were very inefficient and were rendered totally obsolete with the introduction of coke-based processes, starting with that at Carron, where it was also demonstrated that the locally abundant sedimentary ironstones could be converted to basic iron. From that point on the Scottish iron industry developed very rapidly, using ironstone and coke as raw materials, and new continental smelting techniques.

The many small iron slag deposits that are to be found in remote areas of Scotland, especially on the west coast,and the well documented fact that so many were a source of hard core for road making and have therefore been removed, indicate that

small scale production of iron in Scotland had been pursued since early times on a proliferation of sites,one of which was at Point of Knap. MacAdam noted that there was a very large variation in the iron content of the slag,which suggested that there had been improvements in efficiency over time. Early sites, located on open hillsides or in elevated valleys, made use of the prevailing wind as at Point of Knap; on some sites located in valleys there was also an artificial watercourse by which a flow of water was brought from an elevated source to a point above and close to the bloomery and then dropped vertically through a device that entrapped and compressed air, then discharged it into the base of the bloomery.

The basic design of these bloomeries consisted of a hollow 'beehive' construction, made from clay, with a small aperture at the top,and with an entry port or ports at the base,through which a flow of air at either atmospheric pressure or enhanced pressure could be introduced. Charcoal was placed in the base and ignited; more charcoal was introduced, and the passage of air would create a high temperature mass; small lumps of iron ore would then be introduced at the top, and smelted in the heat; this process would be continued until a bloom of iron was created at the base; on cooling down, the bloom of crude iron and the residual slag could be removed. Depending on the scale of the operation, the 'beehive' construction, if small, would be completely broken down to remove the bloom, or, if large, a small opening could be made at the base to remove the bloom and slag, and then resealed. Disposal of the slag was labour-intensive and unproductive, and so the heaps remain.

The charcoal required could be made from either local wood or from a dense black type of peat. The techniques of charcoal production were well established, and were used on a small scale within the kitchen areas of simple dwelling houses, in the form of a right cylindrical hole in the floor, capped by a stone slab with a small central hole. Wood or peat was put in the hole in the floor, some burning embers from the kitchen fire introduced,and the whole mass combusted in a slow process governed by the restricted entry of air via an adjustable plug in the small hole in the capstone. MacAdam reports that, although this process had been abandoned by the latter half of the 19th century, many kitchens still retained the capstone embedded in the kitchen floor. The charcoal produced by this process was primarily for local smithy work, and presumably the residual heat was the basis of simple central heating!

MacAdam gives a list of bloomery sites in Scotland recorded at the time of writing (1866). Argyll is well represented with 17 sites, but Point of Knap is not recorded. The sites are well scattered, from Skipness to Benmore (in Cowal), and from around Loch Goil to Bunawe near Taynuilt; but there is a close group in the Stralachlan area - Easarchan, Garvalhill, Drumdarroch, Leanach, Leak, Easmore and Feoline are concentrated over about 5 to 6 miles, between Lephinmore and Struchur, some on the east shore of Loch Fyne and others inland near a small valley parallel to the shore. This valley, which now incorporates the north end of the B8000 road, is, like the loch shore, in line with the south to southwest prevailing wind; two other sites are recorded at Strachurbeg and Phuill at Strachur, seemingly an extension of the Stralachan group in a more northerly direction, and would suggest that the early Argyll ironmasters made use of a phenomenon well known to yachtsmen, that in Loch Fyne the wind is nearly always up or down the loch! If it has not already been done, this group might be worth serious examination in order to record more details and to pinpoint the source of the iron ore used. It is possible that these sites on the east side of Loch Fyne might show the development of better smelting techniques and expertise, a further reason, in addition to the copious supply of oak wood, why not one but two large scale iron furnaces, using imported ore, were established on the opposite side of the loch in the mid 18th century, at Furnace and Goatfield.

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EARLY IRONMAKING IN SCOTLAND

[These notes were appended by D.A.McCallum to his report on the bloomery at Point of Knap, in Kist 60. Ed.]

In 1153, in the reign of David I, according to Fordoun, Scotland produced a great deal of iron, although thereafter the art seems to have been lost as most of the iron was imported until the 16th century when power blast became more general. In 1456 works were located in south west Perthshire and north east Dunbartonshire, at Loch Katrine and Forth respectively,continuing for 60 years; at this time there was an iron market at Aberfoyle. The source of the iron ore is not given except that it was brought in horse panniers and the made iron taken back thereby. It appears to have been all

malleable iron, forged from the spongy mass,not melted or cast iron. This came later with the use of bellows for blast.

In 1510 iron was produced in Sutherlandshire. Between 1542 and 1560 a company is said to have made iron at Poolewe, Ross-shire, and this district became famous for iron in the 17th century. In 1545-1560 there was an important works and a spot where iron was made at Tornashee in Urquhart, Inverness-shire. In 1581 an iron mine was worked in Forfarshire.

By the close of the 16th century there was a great decrease in iron making. Indeed in 1612 it is regretted that "making of iron had fallen into disuse" though in 1607 Sir George Hay at Loch Maree commenced his famous iron works which carried on for 60 years; the blast was obtained by water power and the ore was brought from the south (presumably Cumberland). These works were closed down in 1688 by the Government because they had made cannon for the Rebellion.

Only three distinct sets of works are of any real note:

1. 1456-1513: Upper Loch Katrine district in SW Perthshire; NE Dunbartonshire; NW Stirlingshire
2. 1510-1662: Sutherlandshire
3. 1607-1668: Loch Maree, West Ross-shire

The following is a list of the more historical Scottish early Blast Furnaces where the iron was made with wood charcoal and the air obtained by means of water power driven bellows:

1. Fasagh. Loch Maree, 1600-1607
2. Letterewe. Loch Maree, 1610-1641
3. Talladale. Loch Maree, 1610-1641 (about)
4. Red Smiddy. Loch Maree, 1610-1641 (about)
5. Tollie Bay. Loch Maree, 1610-1641 (about)
6. Arkaig River. Lochaber, 1630-?
7. Achnacarry. Lochaber ?- 1654

   An English firm set up a works without permission which was destroyed by Cameron of Lochiel in 1654.

8. Loch Loyal. (iron smelted from local bog ore) 1662-?
9. Glenbuck. Ayrshire, 1715-1730

   Iron works set up by Lord Cathcart.

10. Glenkinglas, Ardchattan, Argyll. before 1727-1731

    A work was set up by Irish Capitalists and later taken over by the York Building Company.

11. Invergarry, Inverness-shire. 1729-1736

    A Lancashire group, the Black-Barrow Company, smelted English Hematite Ore.

12. Bonawe, Argyll. 1753-1874

A Lancashire Company - Newlands Company - Harrison Ainslie and Company of Ulverston set up works and worked English ore. The Parish of Muckcairn records state that a Lancashire company erected a furnace for casting pig iron and obtained the lease of several farms for rearing wood and grazing work horses.

13. Goatfield or Cralecken, Argyll, 1775-1813

Duddon Company from Lancashire made iron.

14. Innerleckan, near Inveraray, Argyll, 1813- ?

There are also references to iron smelting in Islay but no details.

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CAISTEAL NA NIGHINN RUAIDHE
(The Castle of the Red-haired Girl)

Mary McGrigor

The road from Dalavich on the north shore of Loch Awe which crosses the hill to Kilmelford is now a "scenic" route. Before the end of the 19th century however, when passengers, carts and cattle were ferried to and fro across Loch Awe, it was a main way to the coast. From Loch Awe the road climbs up beside the river Avich and then follows the north shore of Loch Avich. The glen being long and narrow was a perfect place for an ambush,and was guarded in early times by drystone-built duns; one was sited at Duninveran (now Lochavich House) and the other near Maolachy to the west of Loch Avich.

The castle on an island at the west end of Loch Avich, on the other hand,is constructed by the Norman method of double walls with rubble infill and cemented with lime, which arrived in the late 11th century. The island resembles an hourglass in shape , with a natural harbour at the narrow centre; there may have been a causeway out from the loch shore. The castle may have been built by the MacDougalls who prior to 1308 held predominance in Lorn. The first existing records however refer to a family called MacCaurre. Alastair Campbell of Airds in A History of Clan Campbell vol.I pp.48-49 writes that Dougall Campbell of Craignish married Brigid, daughter and heiress of Dugal MacCaurre, Taoiseach of Loch Avich, and acquired her lands together with Caisteal na Nighinn Ruaidhe

on Loch Avich. Dougall Campbell died in 1220 so it is possible that the castle was built, or at least started before that time. It greatly resembles Fincharn, castle of the Lords of Glassary on the south side of Loch Awe, which may also be of 13th century date.

Caisteal na Nighinn Ruaidhe, built as a rectangular hall-house, stood at least three storeys high. A doorway on the south-east wall gave access to a basement, the main entrance probably being on the other side. The first floor,containing the great hall was heated from a fire-place in the south-east wall. Some warmth from the massive chimney would have reached the bedrooms above, and both floors had the convenience of latrines which emptied into the loch. There was probably an attic as was usual in buildings of this time, and the roof was more than likely thatched; slates were expensive, therefore straw or heather frequently sufficed. A surrounding curtain wall, built for protection, supported lean-to constructions wherein dwelt the chief's retinue numbering perhaps fifty men. Sentries were always on the watch for sign of an enemy's approach, cattle thieves in particular being always on the prowl. Both sides of the glen were within arrow-shot from the parapet walk around the walls.

The fact of Caisteal na Nighinn Ruaidhe being within a few miles of the place named Cruachan (rallying cry of Clan Campbell) indicates that the Campbells held land on the north shore of Loch Awe; also the old road called the Streng of Lorn where Sir Colin Campbell was killed beside the burn called the Allt an Ath' Dheirg (Stream of the Red Ford) by a party of MacDougalls in 1296, runs west from the foot of Loch Avich.

The Campbells, as is well known, came to prominence when Sir Colin's son Neil supported Robert the Bruce in Scotland's Wars of Independence. The mighty fortress of Innis Chonnell, believed to have been built by one of the MacDougall Lords of Lorn, was granted by King Robert after his victory to Sir Colin Campbell (son of Sir Neil) in 1315. Christian, daughter and heiress of Dougall Campbell of Craignish, lost much of her property to Sir Colin's grandson, Colin Iongantach (the Wonderful), as he was called, in 1361.

"In 1414 Sir Duncan Campbell of Loch Awe gave four pennylands of Loch Avich, together with certain other properties, to Ronald Campbell of Craignish, his kinsman. By the terms of this charter Ronald was to become constable of the castles of Craignish and Loch Avich on behalf of Sir Duncan and his heirs,

provided that he built up and roofed the two castles". This suggests that Caisteal na Nighinn Ruaidhe required repair. The building is now so ruinous that it is impossible to prove at what period further work, if any, was done. Nonetheless the Campbells of Craignish continued to hold Loch Avich until the 16th century and an office of sergeantry until the 18th.

So much for the known facts. But how did the castle get its name?

According to the family history of the Campbells of Craignish, Bridget, who married Dugald MacCaurre, was the red-haired girl. But a local legend, told by Lord Archibald Campbell in his Records of Argyll, reveals a tragic tale, which may relate to the original building or to its restoration at a later date.

The story runs that two men, father and son, came from Edinburgh to build the castle. The son fell in love with a red-haired servant girl who warned him that the laird would kill both him and his father because he could not pay their bill. Next morning the father went out and stood gazing at the walls of the castle. The laird, appearing, asked him what he was doing, and was told "I am looking at a stone that has been placed askew. It will bring down the whole castle unless it is removed". "Then take it out!" came the prompt reply; but the builder said that he could not do so except with a special hammer which he had left behind in Edinburgh. "Well, send a man to fetch it!" ordered the laird; but the builder said it was so valuable that his wife would not give it to anyone except the laird's own son. This agreed, the builder sent the young man off with a letter to his wife which read:"I have sent you the little hammer, and do not part with it until the big hammer goes home". "Quite right" said the wife, when she read this, and she promptly put the laird's son into prison, and kept him there until her husband and son had both safely returned.

The laird, guessing what had happened when his son did not appear, dragged the red-haired girl to the top of the castle and threw her to her death on the rocks below.

"The dwellers in the castle had no rest or peace after this, for on dark and stormy nights torches were seen on the battlements where no light should have been. And a long ghastly scream rang out, followed by a deathly silence.

When the moon is full they are seen and heard to this day".

Thus, according to this story, did Caisteal na Nighinn

Ruaidhe gain its name.

My sincere thanks to Tony Dalton, of Maolochy, Lochavich, for his help and information on Casteal na Nighinn Ruaidhe.

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BOOK REVIEWS

GRANNY'S FIRESIDE TALES OF LOCHFYNESIDE AND GLENARAY: by Mary MacNaughton. Edited by Archie and David MacNaughton. Published by Argyll and Bute Library Service. £6.95

This little book is a reminder of a way of life that has now gone. Mary was from a crofting and farming background and one of a family of ten. Her early days were spent firstly in the little fishing village of Kenmore near Inveraray and later on the hill farm of Stronmagachan in Glen Aray until her marriage took her across Loch Fyne to Ardachuple, a farm near Colintraive, where she and her husband brought up a family of five sons. Her fertile mind absorbed the atmosphere of life in the early days of the last century; and as a young girl she listened to the tales told both round the fireside and in the fank and farmyard; these became the basis of the stories which she was later to record in her writings, some of which were published in the Oban Times.

Because so much local history is lost in the mists of time, this book is a treasure beyond price; in the world of today, where the art of storytelling has almost disappeared we have so much to learn from the past. Names of places, fields, hills and lochs are remembered and revived, old customs and traditions come to life, songs and poems are brought again to our memory, and for that we owe a great debt of gratitude to Mary MacNaughton and to her family, particularly to her son and grandson who honoured her wish to see her writings published.

By an amazing coincidence some of her unpublished stories, sent to the Oban Times but apparently mislaid, found their way into the hands of a gentleman who, aware of their local appeal but unaware of the identity of the writer, decided they should come back to Inveraray; and so they were handed back to Mary's family.

It is sad to relate that Mary's son Archie, who with his son David was instrumental in securing the printing of her

work, died only three weeks after the launch of the book. To his widow Barbara and his family go our sincere condolences, and the gratitude of all who read this lasting tribute to a great old lady.

Rae MacGregor

A HISTORY OF SOUTH KNAPDALE CHURCH AND PARISH. Bruce Weir. £1.50 at the Argyll Book Centre and Kilmartin House Museum.

Do not be deceived by the slimness of this booklet. It is packed with information, clearly and elegantly written and immaculately presented. It contains not only ecclesiastical history but social and economic history as well, from the 6th century to the present day. To be heartily recommended.

A.O.M.C.

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FUNGUS FORAY IN EREDINE WOODS

Lynne Farrell

Our Society does not normally have an expedition in October but this was a most welcome innovation. On the 21st, by kind permission of Mr and Mrs Goel of Eredine House, about thirty members and friends, led by Peter Simson, foraged through the conifers on the Point and the beech avenue nearby. Despite the heavy rain-battering which had damaged some of the larger specimens a good variety of fungi were found, many edible. There were good quantities of Chanterelle, Cantharellus cibarius, mainly in the patches where rhododendrons had recently been cleared. A magnificent clump of Hen of the woods, Grifola frondosa, was growing on a very old oak stump. Other species included Jelly Babies, Leotia lubrica, Yellow brain fungus, Tremella mesenterica, Wax caps, Hygrocybe spp., The Blusher, Amanita rubescens, a Hedgehog fungus, Hydnum rupandum, Fairy Club, Ramarina stricta, Sulphur Tuft, Hypholoma fasciculare, Birch polypore, Piptoporus betulinus, Tremellodon, Pseudohydnum gelatinum, a Puffball, Lycoperdon vellereus, Fly Agaric, Amanita muscari, Honey fungus, Armillaria mellea, Birch Boletus, Boletus scaber, Angel's Wings, Laccaria laccata and Laccaria

amesthestina, Cantharellus tubiformis, a Paxillus sp., and several Russula and Cortinarius species.

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FUNGI - NAMES, BOOKS AND IDENTIFICATION

Peter Simson

All living things which have been described by biologists are given scientific names which in theory are internationally recognised, and show what they are related to. Unfortunately, mycologists often change their minds about the relationships between fungi; it is quite common for a type of fungus to be given a totally different scientific name in different books, so when you are trying to identify a fungus, be aware of this possibility! Some books do give alternative names: look at them! In fact, when a fungus has a common name it is likely that this will be more consistent than the scientific name.

Another point about identification: there are a very large number of fungi in this country, and the observer's guides contain only a selection. (That by Roger Phillips is the most comprehensive). You should be able to get the genus for most specimens, but it is possible that the species may not be in your particular guide.

Finally, the important question of edibility: the books do agree on the most deadly species (who would dare to disagree?) but there are cases where there are inconsistencies between books. A glaring example is Paxillus Involutus or Brown Roll Rim, a common woodland species, which used to be described as edible, but in more recent books is said to contain a cumulative poison, i.e. if you were to eat it on a number of occasions a poison in the fungus would accumulate in your body to dangerous levels.

Some books you may find useful:

Identification

Roger Phillips. Mushrooms & Other Fungi of Great Britain and Europe 1981/1984. MacMillan ISBN O 330 26441. Photographs; quite comprehensive.

Thomas Laessoe & Anna del Conte. The Mushroom Book 1996. Dorling Kindersley ISBN O 513 02589. Photographs + paintings of clumps in situ; less comprehensive but easier to follow; recipes.

Harding, Lyon, Tomblin. How to Identify Edible Mushrooms 1996. Harper Collins ISBN 0 00 2199984 X. Paintings; concentrates on edibles; toxicity; illustrates confusing species.
David Pegler & Brian Spooner. The Mushroom Identifier 1992. Quantum ISBN 1 85627 949 9. Photographs, rather small; by habitat; lists similar confusing species.

Cooking and Recipes

Dave Shorten. Guide for the Kitchen Collector, Preservation & Cooking of Fungi 1994. British Mycological Society. No frills but authoritative; reviews of other books.
Jane Grigson. The Mushroom Feast 1975. Penguin; many, mainly continental recipes.
Roger Phillips. Wild Food 1983. ISBN 0 330 28069 4; recipes include many fungi; well produced.
Richard Mabey. Food for Free 1972. Collins; the original!
L.Cameron. The Wild Foods of Great Britain 1917/1977; short fungus section; curiosity value more than practical.

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SUMMER EXPEDITIONS 2000

April 29th. Kilmichael of Inverlussa

On our previous visit we saw in the churchyard, among the many 17th century and later slabs and stones the much weathered top portion of an 8th or 9th century cross slab. Thanks to the efforts of the Society, mainly in the person of Anne Kahane, this stone has been conserved by Historic Scotland and placed in the safe shelter of the church, with an explanatory plaque alongside. It was a great satisfaction to see it there. After inspecting the other stones in the churchyard a visit was made to the old chapel site some 400m. up the hill. There was not time to visit the limekiln as planned.

10th May. Ardifuir

An outing restricted to 20 members, made by kind permission of Mr Robin Malcolm. The well-preserved atypical dun with its large size, walls some 3m high, guard chamber, intramural chamber and staircase is impressive; strange that its site seems so open to attack. We saw a number of cup- and cup-and-ring marked outcrops, and several members reached the hilltop dun.

20th May. Dalavich Woods

A morning of torrential rain meant that only a small group of intrepid members took part in this walk; the rain ceased, and

we thoroughly enjoyed this pleasant and varied stroll on the Forestry Walk; there are good information boards, and an information centre halfway round; but we had John Halliday to tell us so much more about the environment and its management!

17th June. The Garvellochs

Two parties of twelve each were taken out to the islands in the Gemini, skipper Mike Murray, leaving Crinan at 9.45 and 11 a.m respectively. Each party had 3 hours on the island to follow their interests - archaeological, botanical, or geological: the early Christian beehive cells, the reputed grave of St. Columba's mother,the deserted settlement; the spring flora of the Islands; the rock formations. The weather was not good, but not really bad. Mike's commentary on the 'voyage' added considerably to our interest and enjoyment.

22nd July. Brainport Bay

A pleasant lochside path leads from Minard near the car park to the site of the solar alignment - the back platform, observation boulders and sighting position, causeway and terraces, and the pointer stones, the series plain to see from the back platform, aligned apparently on sunrise at the summer solstice. Cup and ring marks occur nearby. A deserted settlement which was occupied till the early years of the 19th century and a ferry site can be seen in the area.

16th September. Easdale

Because of a petrol strike this expedition was cancelled. It is on the Summer Programme for 2001.

21st October. Fungi Foray in Eredine Woods

For a full account see p.26

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SHOREWATCH

After Dr Simon Gilmour's lecture to the Society in November on Iron Age Argyll, he introduced us to SHOREWATCH, the project which he co-ordinates for the Council for Scottish Archaeology It may be of interest to readers of Kist, whether as individuals or as groups.

The aim is to provide long-term and continuous information on the rate of erosion (or other impact) and its effect on the coastal archaeological resource, at the same time providing enjoyment, interest and a real sense of contribution for the participants. It has long been known that local knowledge is critical in any understanding of long-term effects on archaeological monuments; this project hopes to recognise that expertise by providing the framework in which to work.

Local Societies and Young Archaeologist Club branches are particularly suited to this project, but anyone who is interested is encouraged to take part. It involves visiting a stretch of shoreline or known archaeological site on the coast to make an initial survey and record in summer; master forms and instructions are provided. The idea is then to revisit the site making observations as often as possible, but at least once before winter; a further visit after winter should provide a good indication of the processes at work on a single stretch; it is hoped that monitoring could be continued.

Assistance can be provided such as the loan of equipment (ranging poles, tape measures etc.), advice, expertise and visits where necessary, especially at the beginning when some participants may feel the need for some brief instruction on the recording of monuments or stretches of shore line. The techniques involved need not be complex or specialised: simple photographic records and tape measurements can suffice.

A comprehensive Project Resource Pack full of helpful information and instructions includes many specimen lists and forms for recording, which can be photocopied for use. The full pack itself can be photocopied if wished.

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Copies of The Kist can be obtained from the Membership and Publications Secretary, price £1, postage and packing extra.

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