ANCIENT FARMING
Early ploughs or ards were very simple and produced little more than a groove in the soil. The ploughshare could be a stone bar with a pointed end or a wooden bar strengthened with an iron tip. Repeated ploughing of small fields on a slope resulted in gradual movement of soil to form banks or lynchets, and stones cleared off the arable fields were piled in heaps or added to the lynchets.

Farming began to be adopted in Scotland some six thousand years ago. It was an alternative to the older lifestyle of hunting, fishing and gathering wild foodstuffs, although the latter lifestyle continued in some areas alongside the new. Farming meant settling in one place at least as long as the soil remained fertile. Often woodland had to be cleared in order to make space for arable fields and to provide timber for building houses, and stone axes were an essential tool. Successful farming provided a surplus of food that could be stored, thereby freeing some members of the community for other work, such as building burial tombs and ceremonial monuments.

The nature of ancient farming varied according to local resources, and a balance could be achieved between cultivation, stock-breeding and the exploitation of natural resources such as fish, shellfish and deer. But the essential ingredients, which had to be imported into Scotland initially, were seed corn (barley and wheat) and domesticated animals (cattle and sheep). As the climate deteriorated towards the end of the 2nd millennium BC, wheat became a less viable option. Oats and rye were introduced in the 1st millennium BC, and domesticated pigs and chickens probably appeared then too.
A circular prehistoric house built of stones and turf survives today as a hut-circle, a low stony bank marking where the wall of the house stood. The upright stone probably marks one side of the doorway. Beyond the house are small clearance cairns along the low banks of a field-system. © Crown Copyright: RCAHMS. Licensor www.rcahms.gov.uk

Excavation can reveal the physical remains of crops and animals, and the landscape of today incorporates many traces of ancient farming. In rural areas that are marginal to modern farming, upstanding remains of farming settlements survive, with houses, enclosures and fields. In the fields of today’s farms, ploughing has usually obliterated earlier remains from view at ground level, but from the air they often show up as cropmarks, where richer soil in pits and ditches encourages stronger growth.

Early cultivation may leave no trace other than small piles of stones (clearance cairns) gathered from the fields, but sometimes repeated ploughing on a slope led to the formation of banks or lynchets round the fields. Abandoned ploughed fields can often be seen from the air and even on the ground as patches of roughly parallel narrow ridges and furrows (cord rig).

This reconstruction of a simple com-drying kiln shows how wooden slats were placed across the circular chamber, and a layer of straw prevented the grain from dropping through. The fire was set in the entrance flue so as not to set the wood and straw alight, and the heat was drawn up through the grain.

Seen from the air, snow has outlined a hut-circle together with field-banks and the narrow ridges of early rig-and-furrow cultivation. © Crown Copyright: RCAHMS. Licensor www.rcahms.gov.uk
The raised ridges helped the soil to warm up and the furrows helped to drain it. On hillsides, early rig-and-furrow ploughing could result in level swathes following the contours (cultivation terraces). Rig-and-furrow cultivation continued into more recent times, and in southern Scotland broad plough rigs of medieval date are common. In the Highlands and Islands, hand-dug ‘lazy-beds’ are characteristic of the 18th to the early 20th centuries.

Three horizontal, or Norse, mills at Huxter, Shetland. Small mills were built beside fast flowing burns. The water was diverted along a lade to pass through the lower chamber; where it powered a paddled wheel set horizontally. The wheel turned the upper stone of a pair of mill-stones in the chamber above. © RCAHMS. Reproduced courtesy of J R Hume. Licensor www.rcahms.gov.uk

In the damp Scottish climate, grain needed to be dried before it could be stored or ground. This was done in small batches in kilns partially dug into the ground and lined with stone. Throughout most of prehistory, grain was laboriously ground by hand on portable stone querns (and in remote areas the use of querns continued into recent times). From the 6th century AD the water-powered mill was adopted where there were suitable burns. Unlike later corn-mills with vertical wheels, these early mills had horizontal waterwheels, and the type continued in use into the 20th century in Shetland and the Outer Hebrides. There they were built of stone with wooden wheels, but in mainland Scotland many are likely to have been built entirely of timber, apart from the mill-stones.

Irregular enclosures bounded by banks or walls could function as stock pens or fields, or both, for the advantages of animal manure as a fertiliser was appreciated from early times. More important land boundaries took the form of stone walls, earthwork banks and ditches, and banks of earth and stone derived from quarry pits (lines of such pits show up from the air). In some areas, extensive systems of linear earthworks appear to have belonged to a cattle-ranching economy that developed towards the end of the 1st millennium BC. Ancient field-walls and boundaries are often preserved under peat, where they relate to farming in warmer and drier periods of the past before the peat began to form.

Showing up from the air as markings in a growing crop are enclosures and an angled alignment of dark dots. The ‘dots’ are large pits, now filled in, which were originally part of a major land boundary. © Crown Copyright: RCAHMS. Licensor www.rcahms.gov.uk
TIME-LINE

End of the last Ice Age
Wildlife colonises land
Mesolithic hunting settlers 12,500

Neolithic farming settlers 8500
Flint scatters
Shell mounds, rock shelters
Chambered tombs and houses
Cupmarked rocks
Stone circles, henges, and standing stones

Metal technology (gold, copper) 4000
Burial mounds and short cists
Hut-circles

Climate deteriorating
Fortifications begin 3000
Burnt mounds
Hillforts

Iron-working technology 2000
Cranngs
Duns, brochs, wheelhouses, and earth-houses

Roman army in Scotland 500

Waning of Roman influence 200
Roman camps, forts and roads, Antonine Wall
400

Introduction of Christianity 600
Long cist graves
Picts, Gaels, Britons and Anglians
Early Christian and Pictish carved stones, chapels
Start of the Viking Age 800
Pagan Viking graves and settlements

Emergence of Scottish nation 1000
Stone-built churches
1100

First burghs 1200
Mottes, abbeys, stone-built castles
1500

Reformation of the Church 1600
Tower-houses
Agricultural improvements & Industrial Revolution 1800
Deserted villages and farms
1900
Coal mines and heavy industries
2000
Gun batteries and airfields

FRONT COVER PHOTOGRAPH:
A prehistoric farming landscape seen from the air. The circles are the remains of round houses, and the little heaps are stones cleared off the fields. © Crown copyright: RCAHMS. Licensor www.rcahms.gov.uk
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The following leaflets are available from Historic Scotland:

- **Scheduled ancient monuments: a guide for owners, occupiers and land managers**
- **Managing Scotland’s archaeological heritage**
- **Grants for Ancient Monuments: a guide to grants available for the preservation, maintenance and management of ancient monuments**
- **Archaeology on farm and croft (produced jointly with Archaeology Scotland)**
- **Scotland’s listed buildings: a guide for owners and occupiers**
- **The carved stones of Scotland: a guide to helping in their protection**
- **Metal detecting - yes or no? Metal detecting, scheduled ancient monuments and the law**
- **A leaflet on Treasure Trove in Scotland** is available from the National Museums of Scotland, Edinburgh
- **A number of Historic Scotland Technical Advice Notes**, on topics such as the use of lime mortars, the conservation of thatching and stonecleaning, are available. Catalogue from and Orders to:

  Historic Scotland Conservation Group
  Tel: 0131 668 8638
  e-mail: hs.cgpublications@scotland.gsi.gov.uk

  This information leaflet is one of a series produced by Historic Scotland.

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