#### 8 Occupation and Use of a Marginal Landscape

#### 8.1 Core and periphery in Arisaig

In the introduction to this paper it was suggested that the existing archaeological record for Arisaig supports the identification of a core area of permanent settlement from as early as the Bronze Age, surrounded by peripheral areas of less-intensively exploited land. The data collected in the course of the A830 investigations support this model, with relevant evidence coming both from site-specific archaeological studies and the landscape-scale palaeoenvironmental study.

The site-specific data are limited in terms of the number of sites but are clear-cut. The proposed core area yielded a Bronze Age kerb cairn, the third or fourth recorded example from this area, neatly reinforcing the restricted distribution of this site type. The later history of the kerb cairn includes modification and disturbance resulting from agriculture and other activities, reflecting the dynamic nature of the landscape within an area of permanent settlement. The pollen evidence reflects higher levels of disturbance and impact on the woodland vegetation from the Bronze Age (Illus 20) with patchy regeneration during the Iron Age and beyond. This is likely to be reflecting a change in land use in both the core and peripheral areas.

The peripheral area yielded examples of shieling huts and shelters (with dates spanning the medieval and post-medieval periods) and minor, but poorly understood, sites of Bronze Age date. It also contained long open spaces with no structural evidence for human activity (if the 19th-century sites are put to one side for the moment) and this emphasizes the highly selective use of the landscape. There is a strong contrast between empty areas and selected sites to which people have repeatedly returned. At Sites 3-6, there is a relatively sheltered and welldrained hill slope with running water that has been occupied over at least the 1000 years of the medieval and post-medieval periods as well as in the Bronze Age. At Site 8, there is a structure that was re-built on at least three occasions over a period of a few centuries, each time taking advantage of a vertical rock face to provide both shelter and one side of a lean-to type of shelter. Again, there is evidence that this precise spot was also occupied in the Bronze Age.

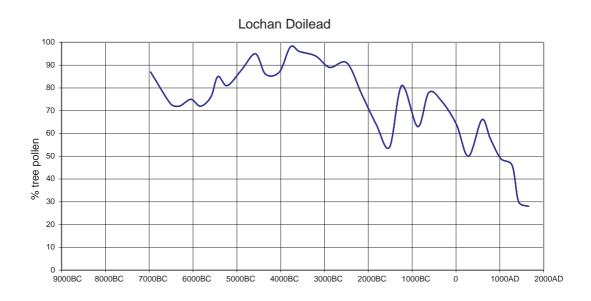
Repeated reuse of the same location presumably reflects the natural advantages of the site: for example water supply, drainage or shelter, which are all restricted commodities in this landscape. Most of the peripheral area is simply too rocky, too exposed or too wet to be occupied. Continuity of use may also reflect the influence of tradition where, once established, a site acquires strong social ties

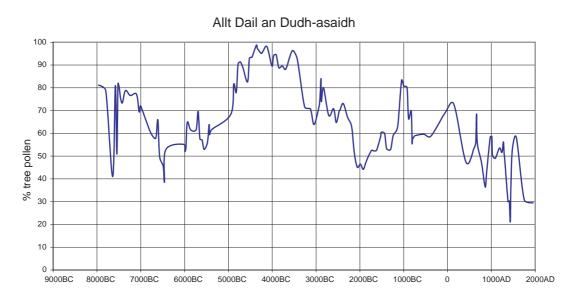
that ensure people keep returning to it despite other options being available. The land surrounding Sites 3–6 must be a candidate for a traditional shieling ground where these social ties operated. The repeated reuse of a few preferred sites has a major influence on archaeological visibility. Contrary to what might be expected in a landscape that has experienced low-intensity, extensive human land-use, archaeological sites are likely to be disturbed and obscured as sites are repeatedly reused. Effectively, they are isolated islands of highly intensive land-use with only the most recent structures visible on the surface. However, both the lack of any evidence in the archaeological record for Iron Age activity and the apparent change in woodland cover and disturbance levels in the pollen record perhaps reflect a cultural discontinuity at this time. Human activity is evident, but seems to have moved from the favoured Bronze Age sites in the peripheral areas, and was having an irregular impact on the woodland vegetation. Activities in the core area seem to have been modifying Bronze Age land-use practices, moving from burial to cultivation. Later in medieval times, the peripheral Bronze Age sites were again adopted. The pollen record reflects gradually intensifying land-use, resulting in an overall loss of woodland with irregular phases of regeneration during this time.

# 8.2 Site-based and landscape-scale evidence for human impact

The concentration of the site-based archaeological evidence into a few preferred locations in the peripheral area might give the impression that human impact was also restricted in its extent. But this is to confuse human impact with visible archaeological 'sites'; the key human impact in the peripheral areas has been the extensive modification of vegetation and, indirectly, of soils caused by the felling of trees and grazing of livestock. The rare archaeological sites are therefore of little value in gauging the nature and degree of human impact. In the present project there is no excavated evidence for human activity in the peripheral area before the Middle Bronze Age or for 2000 years before the medieval period, yet the pollen record from Allt Dail an Dubh-asaidh documented progressive removal of woodland from the late Neolithic period through to the present day without any significant reversals in this process. In fact, in the Arisaig area, no marked decline in woodland has ever taken place. This is unusual in Scotland and either reflects continuously low levels of occupation or use, or sustained







Illus 20 Changes in tree pollen percentages from Polnish, Lochan Doilead and Allt Dail an Dubh-asaidh









management of the woodland resource. This gradual decline in woodland, being punctuated with periods of removal and regeneration, could relate to the apparent change in land-use reflected in the archaeological record by a change from visible Bronze Age sites to currently invisible Iron Age ones.

It may be argued that the information obtained from the excavation of Sites 6 and 8 has contributed very little to an understanding of the nature of human activities in the past. For deposits where radiocarbon dates could be obtained, we can conclude that something happened at a particular time in the past, but the nature of that 'something' is impossible to define from the available evidence. The selective locations of these sites tells us about the ways in which people have 'read' and occupied their landscape but it is the peat-derived pollen and charcoal record that offers coherent data on the nature of human land-use and its changing impact through time. So, whilst it is satisfying as archaeologists to have detected the stacked sequences of occupation deposits in the shieling sites, we should recognize the limitations and high cost of excavation and be willing to invest sufficient resources in palaeoenvironmental approaches.

# 8.3 Evolution of the Arisaig landscape

The ultimate aim of this project has been to understand how the landscape of Arisaig evolved through time. The geographical limitations of the project were stated at the start of this paper and these can only be partially overcome through the use of data from other studies. Nevertheless, we believe that there is now sufficient data with which to propose a model of landscape evolution, if only to encourage critical testing by future researchers of its more speculative aspects. Three stages have been identified in the evolution of the landscape although they should probably be viewed as points along a continuum rather than persistent stages separated by relatively brief periods of transition (Illus 21a–c).

### 8.3.1 Stage 1: Early prehistory (7500–3550 BC), Illus 21a

We know from the published excavations at Kinloch on Rùm (Wickham-Jones 1990) and the more-recent work of the *Scotland's First Settlers Project* that the west coast of Scotland was populated by human communities from as early as 7500 BC. However, it

Illus 21 (left) Stages of landscape evolution near Arisaig: (a) early prehistory: 7500–3550 BC; (b) later prehistory: 3550 BC to AD 500; (c) medieval and later period: AD 500–1800 (from Ordnance Survey maps © Crown copyright)

appears that there was no appreciable impact on the natural landscape of Arisaig throughout the Mesolithic and early Neolithic periods up until approximately 3550 BC, and Illus 21a shows a complete cover of woodland without attempting to plot the variation that must have existed in its species composition because of topographical variation. Human communities in this period exploited natural woodland resources without significantly modifying them and there is no evidence for a conventional Mesolithic-Neolithic transition from mobile hunter-gatherer to sedentary farmer. The pollen evidence indicates that the woodlands probably were used for grazing, if not as sources of wood, although there is no direct evidence for woodland management in the archaeological or palynological record. In Arisaig, this may reflect the fact that the areas that were later preferred as small core areas of settled farmland were largely underwater during this period, which coincides with the mid-Holocene sea-level maximum (Shennan et al. 1995; Shennan et al. 2002). The coastline shown in Illus 21a probably existed between 5900 and 3200 BC. Farming has subsequently developed on patches of raised beach and coastal shell sand that are freely draining, less rocky and less acidic than the rest of the landscape, which appears never to have been suitable for cultivation. So, early in the Neolithic period, agriculture may not have been a viable option, although pastoral farming probably was and herds of animals were grazing in and around the woodlands.

#### 8.3.2 Stage 2: Later prehistory (3550 BC to AD 500), Illus 21b

Progressive differentiation of the landscape is **detectable** from 3550 BC and it is assumed that the core farming area of Arisaig began to develop from this time, exploiting the limited areas of freely draining raised beach at the head of Loch nan Ceall although direct archaeological evidence is lacking until late in the third millennium BC. Other areas of land that emerged as relative sea level fell, for example the Mointeach Mhór, were too wet and rapidly developed into extensive salt marshes, through alder carr to ling-dominated bog.

There is no archaeological evidence as yet that the coastal shell sands were exploited. There has been no attempt to date these deposits and it is possible that the on-shore movement of sand did not occur until late in prehistory and therefore the development of what are now favourable soils for agriculture was also late. Pollen data show that woodland remained extensive throughout later prehistory. Fluctuations in woodland cover during the Late Bronze Age and into the Iron Age reflect periods of loss and regeneration. Regeneration in the Iron Age appears patchy and irregular, suggesting land-use changed with the resulting impact on the fragmenting woodlands. It is assumed that significant clearings were restricted to the core settlement area, where agriculture is more

likely to have taken place. Woodland continued to be used for grazing.

#### 8.3.3 Stage 3: Medieval and later period (AD 500–1800), Illus 21c

In this third stage of landscape evolution, three distinct types of land-use can be defined. The core settlement areas, with significant patches of cultivated land, have expanded along the sandy soils of the coast to include settlements such as Traigh and Glenancross (both settlements recorded in early rentals of Arisaig), perhaps reflecting increasing human populations. Woodland has become moreor-less restricted to defined areas (such as the pollen site at Polnish) where it is protected from grazing and managed for sustained production of timber. Remaining areas are essentially open heath and bog utilized for extensive livestock grazing.

#### 8.3.4 Postscript: The recent past (AD 1800–1900)

One final point should be made in this brief landscape history. The archaeological record in Arisaig is dominated by the remains of settlement and agriculture dating to the 19th century. Evaluation of selected sites during this project yielded artefact assemblages that suggest much of this settlement dates from a short period in the early to mid-19th century, and OS mapping from the 1870s shows that buildings were already in ruins and cultivation rigs abandoned by this date. The detailed history of this period can be explored in contemporary documents and this major task lay outside the resources and ambitions of the present project. Suffice to say that this brief period (perhaps no more than 50 years) appears as a major discontinuity in an archaeological record that otherwise emphasizes continuity of land-use and landscape development. Settlements were built where none was before; land was cultivated for the first and probably only time. The origins of this anomalous period no doubt lie in the catastrophic social and economic upheaval that overtook the western Highlands in the aftermath of the Highland Clearances: an event that finally broke the continuity of several millennia of landscape evolution in Arisaig.

Given the magnitude and high visibility of this event, as reflected in archaeological sites, it is important that we note the failure of it to register in the available pollen records for Arisaig. There are a number of possible explanations for this apparent anomaly. Pollen from cereal and potato crops does not disperse far so the short-lived fields were probably not close enough to the pollen sites reported here to register. Similarly, the construction of new settlements would not in itself register in the wider vegetation record. It might be assumed that a significant increase in population would lead to impacts on

the surrounding landscape through increased demand for fuel (peat and wood) and for livestock grazing rights, but this is only an assumption. The absence of this effect may simply reflect the short-lived nature of the 19th-century events but it is also possible to interpret this as evidence that the pollen record is complacent in this regard. If a recent and

well-documented episode of major social and economic change does not register in the pollen record we must remain cautious in our use of this source of information about past landscapes. Pollen only provides a proxy record of past human activity and our interpretation of the data must always reflect this fact.