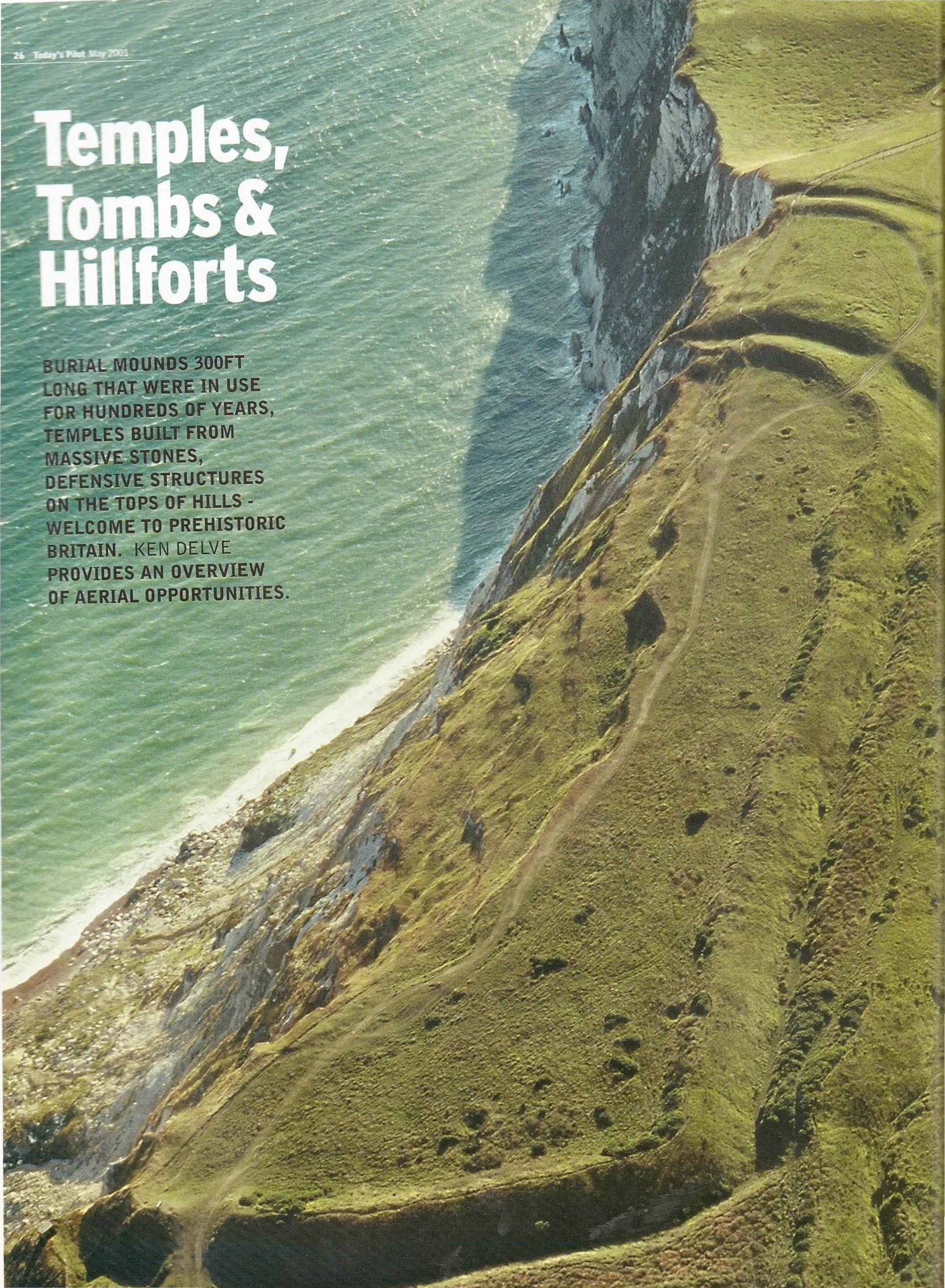


# Temples, Tombs & Hillforts

BURIAL MOUNDS 300FT LONG THAT WERE IN USE FOR HUNDREDS OF YEARS, TEMPLES BUILT FROM MASSIVE STONES, DEFENSIVE STRUCTURES ON THE TOPS OF HILLS - WELCOME TO PREHISTORIC BRITAIN. KEN DELVE PROVIDES AN OVERVIEW OF AERIAL OPPORTUNITIES.





## BRITISH PREHISTORY

DATE	PERIOD
MESOLITHIC	8,000-4,000BC
NEOLITHIC	4,000-2,300BC
EARLY BRONZE AGE	2,300-1,700BC
MIDDLE/LATE	
BRONZE AGE	1,700-500BC
IRON AGE	500BC-43AD
(ROMAN)	43AD-6th Century)
Dates are approximate!	

time now to step back a few thousand years and look at the earliest periods of British history to leave a visible trace on the landscape. All we can do in an article of this length, especially when looking at a period covering 5,000 years or more, is to provide a brief overview of each subject, concentrating on those monuments which can be seen from the air. For those of you who want more information, a reading list is provided at the end of the article. Before we start, the 'standard' warnings - do look out of the window and enjoy the landscape as

In the last part of 'Britain from the Air' (*Today's Pilot March*) we looked at the World War Two airfields of East Anglia. It's

marks, the former relating to buried ditches and other 'sunken' features and the latter to buried walls or other areas of less soil cover. The principle is very simple. If you have a ditch cut, for example, into the chalk subsoil there will be a greater depth of soil over the ditch. Any crop - and cereal crops tend to be the most revealing - planted in the field will grow better over the ditch as it will provide the plants with more soil (and moisture). This provides two ways in which the ditch will show from the air; firstly, the crop will grow taller and so there will be a slight shadow cast. However, of more significance is the colour of the crop. It will ripen later and so will remain darker for longer and it is the distinctive dark feature that is so easy to spot during the summer period (July/August). In part, the intensity and



**Above •** There are three long barrows in the Long Bredy area on the Dorset Ridgeway: the biggest is 645ft long. (Francesca Radcliffe/Dalgleish Images)

**Left •** Part of Flower's Barrow hillfort has vanished into the sea but it is still very impressive from the air. (Francesca Radcliffe/Dalgleish Images)

you look for these site types, and by all means take photographs, BUT remember that flying the aircraft is your first priority, so keep the lookout going. Don't go blundering into controlled airspace - keep an eye on your navigation. As we have discussed in the past, flying height is a matter of personal choice, although some sites will be better from lower down - 1,000ft (305m) or so. The time of year is also a factor as vanished sites will show up as marks in the crops or soil at certain times; the major extant sites will be visible all year. It is probably worth having a quick word about soil and crop marks.

## NOW YOU SEE IT, NOW YOU DON'T

So what makes a buried archaeological feature become visible? The two main types of feature are crop marks and soil marks. Crop marks are exactly that - marks in the crop! They can be either positive crop marks or negative crop

duration of the crop marks depends on the moisture levels in the soil; in a very dry summer, such as 1976, more features show up than in a wetter summer. You may fly over the same field for a number of years and see nothing, but in a very dry summer all of a sudden the field will appear full of archaeology!

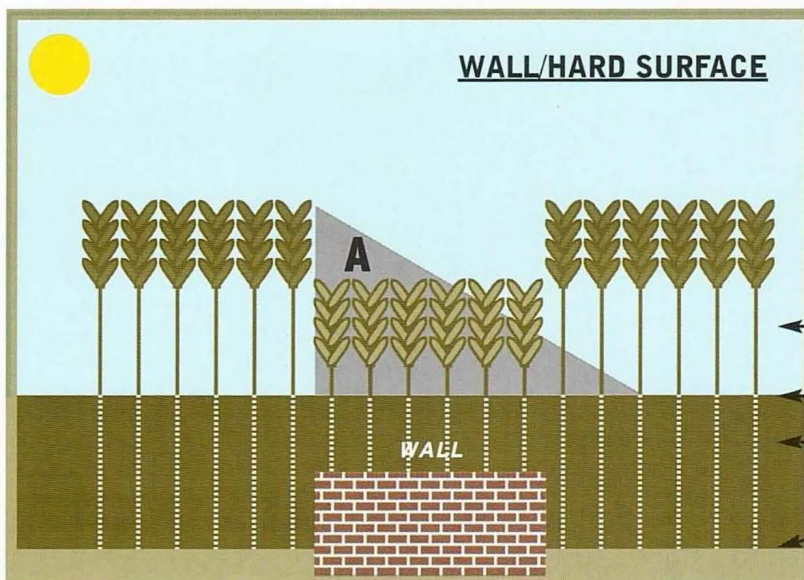
If ditches and pits have a positive effect on the crop then areas of less soil, such as over buried walls, will have a negative effect on it. In this instance the crop will not grow as tall, a shadow will still be present, and it will ripen earlier as there is less soil/moisture for the roots - it will therefore show as a lighter area of crop. Figures 1 and 2 give a visual summary of these basic principles. Additionally, low sun angles are good for highlighting shallow earthworks and a light covering of snow can have a similar effect.

These concepts will hold good for future 'Britain from the Air' articles as we move through British history.





Above • West Kennett long barrow. Although this is the most impressive long barrow in Britain, it is still not all that dramatic from the air, though a ground visit is well worth while. The large stones are a blocking façade covering the entrance to the tomb chambers, but there is a path into the chambers themselves. (Ken Delve Collection)



## Crop Marks

WALL/HARD SURFACE

Crop grows less well, ripens sooner (light mark) over wall.

GROWING CROP

LAND SURFACE

SOIL

OLD LAND SURFACE



## TEMPLES AND TOMBS

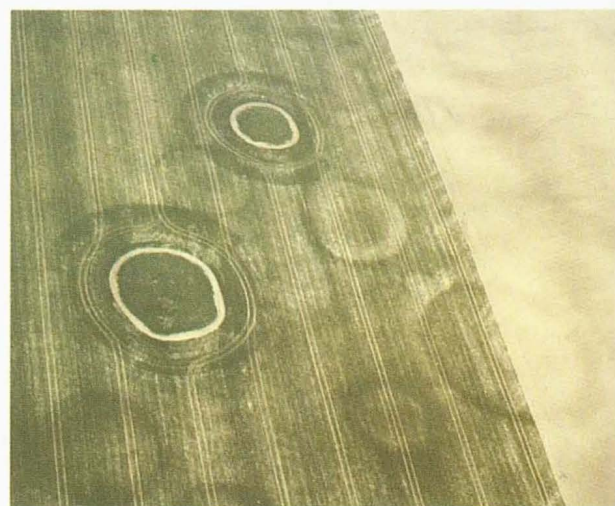
The earliest occupation of the British Isles by early man in the Paleolithic (Old Stone Age) period has left no trace for us as aerial archaeologists; indeed, the common finds are restricted to stone (flint) tools. You could argue that as occupation took place in certain caves, then these are visible from the air. The same is true of the next period, the Mesolithic (Middle Stone Age) when the people of Britain were still essentially hunter-gatherers, moving their 'houses' from place to place following food sources. Although we have found a number of sites from this period, again these are not suitable for aerial archaeology. It is only in the next period, the Neolithic (New Stone Age), from around 4,000BC, that we have significant archaeology which can still be seen from the air. Oh, and before we move on to our first farmers, it is worth mentioning one significant date - 6,000BC(ish) when Britain became an island, the flooding of that area of land joining it to Europe forming the English Channel.

The Neolithic is the period of the first

monuments that have survived thousands of years. By having a settled agricultural base the Neolithic people were able to devote more time and effort to something other than simple survival. As far as archaeology is concerned, this is seen in the monuments they have left on the landscape - most connected with death and ritual.

## FROM THE AIR, THE BEST 'HUNTING GROUND' FOR THE CLASSIC TYPE OF LONG BARROW IS WILTSHIRE AND OTHER SOUTHERN COUNTIES SUCH AS DORSET.

Collective burial in chambered tombs was the basic funeral rite for these people and whilst there are significant regional variations of tomb type throughout the UK, we should bear in mind that this period covered 2,000 years. For most of the British Isles, the general tomb type was the long earth barrow covering stone-built chambers for the actual burials. As always in archaeology, this is a simplistic view and there is great variation of construction and appearance: though



would advise you to refer to the reading list.

A basic long barrow now appears as a grassy mound up to 300ft (91m) long and perhaps 30ft (9m) wide, although it has to be said that there are not large numbers of these surviving as standing monuments to be seen from the air. If you could have been flying in the area shortly after the barrow had been finished, the view would have been very different: rubble from the ditches, perhaps brilliant white chalk, would have covered the barrow and been visible from a long way away. Most of the upstanding tombs are concentrated on land which has not been intensively cultivated over the past few thousand years, a point which holds good for most earthwork-type monuments. Aerial photography, crop and soil marks, and fieldwork has revealed such monuments in parts of the country such as East Anglia. From the air, the best 'hunting ground' for the classic type of long barrow is Wiltshire and other southern counties such as Dorset. One of the best examples is at West Kennett in Wiltshire, part of a group of monuments including Avebury and

Above left • Soil mark of the massive henge monument at Mount Pleasant, Dorset. As with many of these monuments, there are different phases of building: the most obvious is the 370m x 340m egg-shaped earthwork enclosure. One of the most interesting parts of the site is the smaller circular feature in the SW quadrant, a ditch surrounding a series of five concentric post-hole circles, details of which were only evident on excavation. (Francesca Radcliffe/Dalgleish Images)

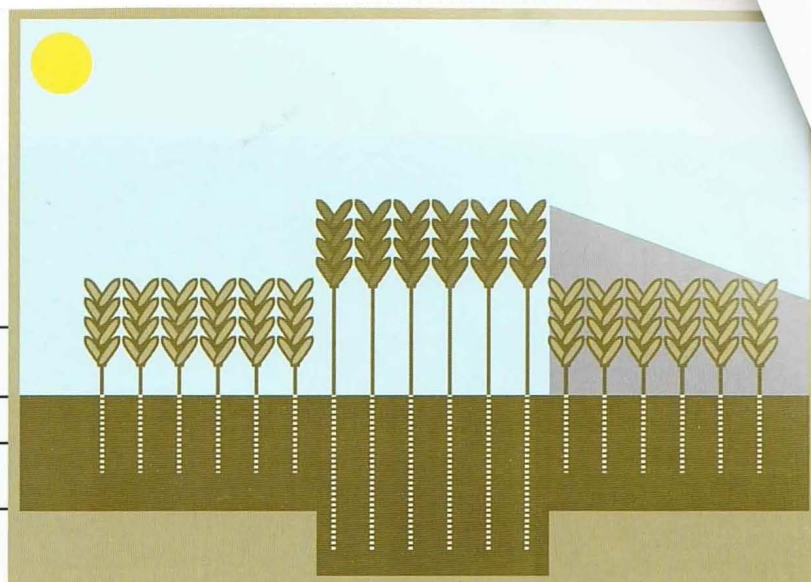
Above • These barrows on Wyke Down are excellent examples of both crop and soil marks. The barrows to the right of the picture are half crop and half soil mark, but still very clear. (Francesca Radcliffe/Dalgleish Images)



# Crop Marks

## DITCH/PIT

Crop grows better, ripens later (dark mark) over ditch.



30  
Today's Pilot May 2001

FROM THE AIR  
BRITAIN

Above • In Derbyshire is a henge monument with an internal stone circle, the stones of the latter now all lying flat on the ground. (Ken Delve Collection)

Left • Now you see it, now you don't - crop and soil marks.

## READING LIST

A few suggestions from an almost endless list of books:

INTRODUCTION TO BRITISH PREHISTORY,  
J V S Megaw and D D A Simpson, Leeds University Press 1979.  
THE OXFORD ILLUSTRATED PREHISTORY OF EUROPE,  
ed B Cunliffe, Oxford University Press 1994.  
FARMERS, TEMPLES AND TOMBS, G Barclay, Canongate 1998.  
IRON AGE BRITAIN, B Cunliffe, Batsford 1995.  
HILLFORTS OF THE IRON AGE IN ENGLAND & WALES,  
J Forde-Johnston, Liverpool University Press 1976.



Above • Stone circle at New Copsice. The majority of stone circles in the UK are small and hence not easy to see from the air unless you know exactly where to look - studying a 1:50,000 Landranger map will provide this information. (Francesca Radcliffe/Dalgleish Images)

from the aerial point of view it is in a busy airspace area. Avebury sits just to the south of the RAF Lyneham CTR (surface to 3,500ft [1,066m]) and you would need to talk to them if you were operating near Avebury - especially as it is easy to become side-tracked whilst following monuments. In addition to the military traffic in this area, Hercules from Lyneham and various Army Air Corps helicopters use the training ranges to the south, and there are also a few microlight sites about.

Long barrows are, in truth, not all that impressive from 1,000ft (305m) up, and to get a feel for this type of monument you really need to crawl inside one such as West Kennett! The basic concept behind collective tombs such as this appears to have been ancestor worship. The evidence for this is based on evidence from the tombs themselves and from parallels with similar prehistoric cultures that have been studied over the last 200 years, the Eskimo, Red Indian and Aborigine cultures often being used for this purpose. A generally accepted view is that bodies were exposed on platforms outside the tomb in order for them to de-flesh, before the skeleton was placed in the tomb. The

skull and long bones of the leg appear to have been the area of main interest and the suggestion is that these were used in ceremonies, the nature of which we cannot really guess. A burial mound like West Kennett was perhaps in use for as long as 1,500 years before it was finally sealed using massive stones. As mentioned above, there was great regional variation in the way our Neolithic ancestors carried out burial rites.

**A GENERALLY ACCEPTED VIEW IS THAT BODIES WERE EXPOSED ON PLATFORMS OUTSIDE THE TOMB IN ORDER FOR THEM TO DE-FLESH, BEFORE THE SKELETON WAS PLACED IN THE TOMB.**

We are not sure how the burial mounds related to the other main ceremonial monument of this period - the henge. Mention 'henge' and the mind immediately leaps to Stonehenge, probably the best known of all the prehistoric sites in Europe. However, for our Neolithic people the fully developed stage of Stonehenge was not even a twinkle in their eye - it comes a few hundred years later, in the

Bronze Age (of which more later). A far more appropriate site is that of Avebury, also in Wiltshire and, to my mind, far more impressive than Stonehenge.

From the aerial observation perspective, henge monuments are few and far between, but those such as Avebury are worth a look, with more being discovered year by year, often due to aerial archaeology. They are all pretty similar in principle: an outer bank with an inner ditch (a good clue that they are not defensive), with or without a stone setting on the inside. Although henge monuments are found throughout the UK, from Cornwall to the Orkney Islands, there are a number of significant concentrations: Salisbury, Avon, Mendips, Thames, and Ripon area and the Moray Firth region. Most of these henges are fairly small and so from the air you have to know what you are looking for, but as some of the major ones are marked on tourist maps a spot of route preparation will help. As to their use and even their exact appearance, the archaeologists continue to change their views. The general view is that they were involved in some type of ritual (great word to use when you don't truly



## BRITAIN FROM THE AIR



Above left • Culliford Tree group of barrows. (Francesca Radcliffe/Dalgleish Images)  
Left and right • Cow Castle on Exmoor is not particularly distinctive from the ground, but from the air the single bank enclosing the top of the hill is very evident. (Ken Delve Collection)



know what's going on), perhaps in conjunction with the bones (skulls and long bones) from tombs and perhaps in various fertility rituals (bring on the virgins!)

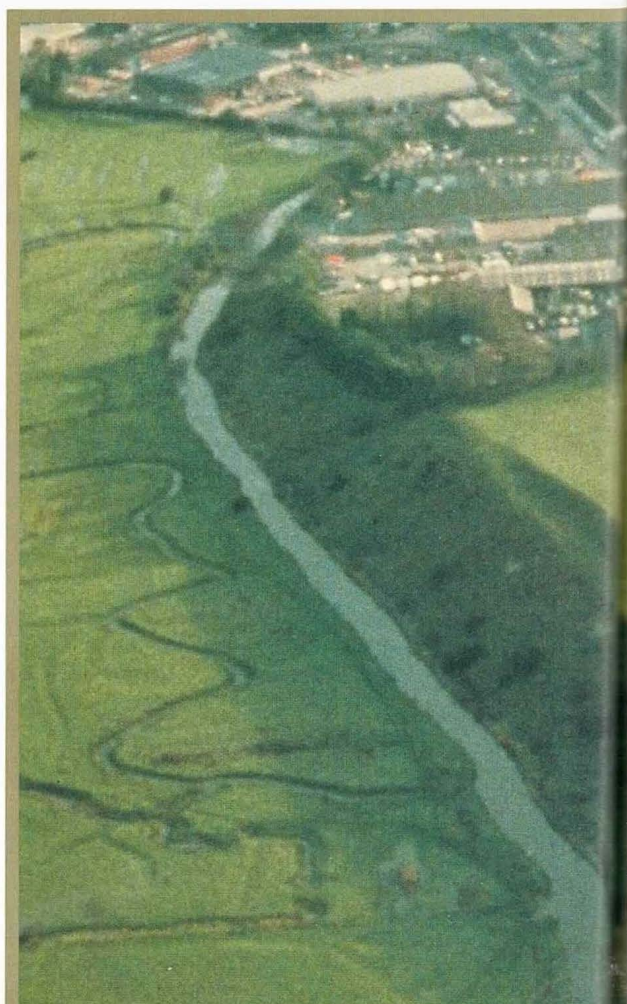
### STONE ME!

The final group of ritual monuments is the standing stone/stone row/stone circle. These monuments range from single standing stones, perhaps less than 2ft (0.6m) tall, in the middle of fields to impressive rows of stones or major circles. With a few exceptions, single standing stones are difficult to spot from the air and the same is true of most stone rows - there are very few stone rows around like the impressive series at Carnac in Brittany. Map study will give you reference to such monuments, the 1:50,000 scale maps being particularly good for this, so if you are really keen to find such monuments, this is your best bet. Stone circles are a much better bet as around 1,000 of this type of monument have been discovered in the UK, though most are small in terms of appearance from the air (even Stonehenge can look pretty insignificant from the air) and so are not always that easy to find. As with many other prehistoric monuments, stone circles survive best in remote areas - a distribution map reveals that

Middle Ages as the Church attempted to stamp out pagan practices which still survived around them. In other cases farmers destroyed stones because they were in the way or because the stones could be put to better use as gate-posts. Dartmoor, Cumbria and NE Scotland are good locations for stone circle spotting.

### BIGGER TEMPLES

With the discussion of stone circles we have also crossed periods into the next prehistoric period - the Bronze Age, the earliest part of which dates from around 2,000BC. Ritual monuments are the most distinctive remnants of the Bronze Age, with 'temples' (like Stonehenge) and tombs littering the countryside. The major change from the Neolithic is that the commonest tomb type is the round barrow rather than the long barrow; furthermore, these barrows now occur in groups (cemeteries) rather than singly, with fewer burials, commonly a single main burial. In some parts of the UK - Salisbury Plain is a particularly good region - impressive groups of barrows may be seen from the air. This type of monument is also fairly distinctive as a crop or soil mark. The ritual behind this type of burial, and indeed the cultural rationale for changing from





Left • The hillfort at Hod Hill may not be one of the most imposing in Dorset but it is one of the most interesting, not least because the Romans built a fort of their own in the corner.  
(Francesca Radcliffe/Dalgleish Images)

Right • 1/4 mill VFR chart of the Salisbury plain area: Stonehenge is at Point A and Avebury at Point B.  
(Courtesy of CAA charts)

Below • Poundbury was built in two distinct phases, a single bank and ditch being strengthened by reconstructing the original bank and ditch and adding a second set on the outside.  
(Francesca Radcliffe/Dalgleish Images)



Stone circles have already been covered above but before leaving the Bronze Age, a few words should be said about Stonehenge, a unique stone monument in the British Isles. For those of you who have only seen Stonehenge in photographs or on TV - be prepared for a spot of disappointment! In real life it is not as large as you might believe - impressive, yes, especially when you look at the 'technology' but from the ground (now that you cannot actually get inside the circle), and even more so from the air, it is smaller than you might think. Stonehenge is on the edge of the Boscombe Down MATZ and one of the Salisbury Plain danger areas (D125) but you can overfly it if you talk to Boscombe. The Danger Area Crossing Service (DACS) is available for the Salisbury ranges and the initial contact is 'Salisbury Ops' on 122.75 (for full availability details refer to UK AIP ENR 5.1). The area around the monument is impressive, as other than for roads and tank tracks it has not been too badly disturbed by modern landscape changes. There is a good selection of Bronze Age round





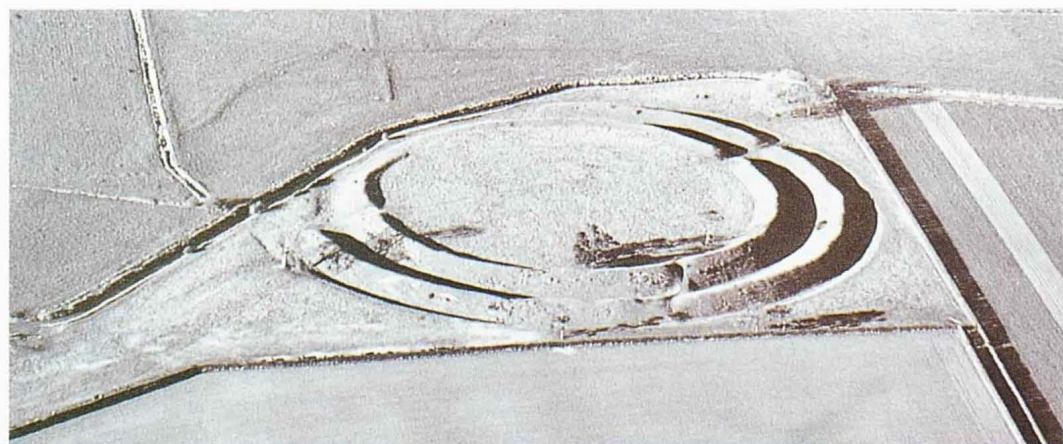
## BRITAIN FROM THE AIR

barrow cemeteries and linear earthworks such as the Cursus.

The final type of prehistoric monument to mention is the White Horse figure, although there is still much debate amongst archaeologists as to the date and significance of these monuments. Surviving examples of this type of site are pretty much confined to the Wessex area where they are cut into the chalk - the reason why these 'White Horse' figures are white! The most enigmatic of the chalk figures is the Cerne Abbas Giant - with or without the appropriately-sized male appendage (phallus to you) which may or may not have been added/removed by the Victorians. As part of a mini aerial tour of this most interesting of prehistoric regions, he is well worth a fly-by.

### TAKE TO THE HILLS!

The impression used to be that the Bronze Age was a time of peaceful farming communities in touch with the gods (and goddesses) of nature through their tombs, temples and rituals. This was reinforced by the appearance in the next period, the Iron Age, of a the defensive works known as hillforts. As usual, the picture is a bit more complex than this and some of these hillforts have their origin in the Bronze Age. Nevertheless, the general picture is true and our Iron Age period is one in which tribal societies become dominant, with inter-tribal warfare part of that scenario - hence the need for these fortified sites. There is a wide variation in hillfort type, ranging from a simple



**Above • Not all hillforts are built on hills. This lowland fort with its very clear double bank and ditch is at Wharram St Mary in Norfolk (about as flat as you can get!) (Ken Delve Collection)**

single bank and ditch to the massive multiple banks and ditches of sites such as Maiden Castle in Dorset. These sites tend to show up very well from the air and they are not just confined to the hilly parts of the UK, although there are obviously more there than elsewhere! The distribution pattern of forts includes some parts of the UK where they seem to be on almost every hill, especially when they occur at a tribal boundary. Dorset is particularly good hillfort country, with a large number of well-preserved sites. In the lowland areas of eastern England, forts built either on low hills, or even in flat areas, still survive. Examples can be seen at Wandlebury in Cambridgeshire, believed to be a boundary fort between the Iceni and the Trinovantes, and Wharram St Mary in Norfolk. The arable nature of this part of the UK means that a number of sites have been ploughed away and survive only as soil marks or crop marks. East Anglia also preserves another type of Iron Age monument, the linear dyke. This appears to be connected with the Belgae, the last group of Iron Age people to settle Britain, and with a change of military

technology, the use of the war chariot. A reasonable number of these dykes survive as earthworks.

Although many of these defensive structures include evidence of settlement, the vast majority of the Iron Age population would have lived in isolated farmsteads. These farms do not survive as monuments except as quite distinctive crop/soil marks of round-houses, the usual type of house, and enclosures. If you want to take a look at one of these farmsteads on the ground, the best place to visit is the experimental site of the Butser Iron Age Farm in Hampshire, although other round-houses have been reconstructed at various open-air museums.

The Iron Age continues into the 1st Century AD, though as far as Britain is concerned, the major change is the arrival of the Roman legions in AD 43. The answer to the question 'What have the Romans done for us?' will have to wait until a future article.

**Below • Maiden Castle is, without doubt, the most impressive of Britain's hillforts - with its multiple banks and ditches, the sheer scale of this monument is awesome. What you cannot see from an aerial view is the dense occupation that once filled the interior. Roundhouses and storage structures were discovered when the site was excavated, along with evidence of the attack on the site by the Roman army. (Francesca Radcliffe/Dalgleish Images)**

**In the next part of 'BRITAIN FROM THE AIR' we will return to airfields.**

