

Fig. 1.1 (a) Location of county of Cornwall (in black) and (b) Helford River study area (hatched box), David Morfitt (henceforth DM) 2018.

I Introduction

There is serious danger that the bulk of the deciduous woods in East Cornwall will be replaced by forests of such trees as western hemlock – trees that have their own beauty as well as great economic value, but which would destroy the characteristic beauty of such places as the Glynn Valley, including the varied carpet of flowers that thrives under deciduous trees ...

The little oaks of Helford Estuary are an essential part of one of the most cherished scenes in the West Country; and they had a sound economic justification in the days when they were used for tin-smelting ...

W. Arnold Foster, *The Listener*, 5 August 1948

THE HELFORD RIVER IN CORNWALL is a place of wonder and delight: one of the very few places in England where *ancient woodland* meets the sea (Fig. 1.1, 1.2). This is oak country, and the oaks have that surprising variety of size and shape that only Cornwall and Devon oaks can offer. Smooth wooded hillsides, subtly mottled with the different greens or browns of individual oak trees, sweep down to high-water mark. The coast is a series of branching drowned valleys, submerged by rising sea level after the end of the last Ice Age. The last trees hang down over the low cliffs or, in the *pills* and little creeks, grow out horizontally for forty feet over the water. To the few people who set foot in the woods are revealed hillsides of bluebells, jungles of holly, sudden headlong ravines and bottomless swamps of golden saxifrage. Polypody fern grows far overhead in the crowns of giant corkscrew oaks ninety feet high. A few yards away, on the other side of a ridge, the oaks are so dwarf that a tall man looks out over their tops. Ribbons of woodland, dark and complicated and often impenetrable, run from the side-creeks up the valleys and far into the hills.

The apparently timeless qualities of this landscape were celebrated by Daphne du Maurier in *Frenchman's Creek*. In spring or winter, in places where the estuary is wooded on both sides, where seaweed catches in the boughs of living trees at high water, and where layers of great oaks



Fig. 1.2 ‘Where woods meet the sea...’
Merthen Wood West, May 2016 (photograph by S. Leatherdale).

lie on top of each other where they fell into the mud of the pills, one can imagine that just so did the Helford River look when Mesolithic men paddled upon it. This is probably true but much else has happened here, and the present scene is post-industrial as well as aboriginally rustic. Three centuries ago the Helford was a busy place and much less wooded; Frenchman’s Creek was bordered with heaths and fields, not with woodland. Such woods as existed were actively growing and being cut down. Ships unloaded at Gweek and Merthen Hole. The whole area reeked with charcoal-hearths and fumed with arsenic from tinworks.

In the twentieth century, residents and visitors feared that this much-loved scene would not last. It narrowly escaped two kinds of physical

destruction: in the 1930s from urbanisation à la Bournemouth and in the 1950s from modern forestry. Foster (above) only too accurately predicted the fate of most of the Glynn Valley (Cardinham) and other places in East Cornwall: his only error was to suppose, as foresters did then, that the planted trees would have ‘great economic value’. The Second World War, and then the Town and Country Planning Act prevented urbanisation from spreading much beyond Porthnavas Creek. Most of the Helford woods belonged to private owners who saved them from modern forestry. However, there have also been fears that the wooded landscape is self-destroying: that it has not been actively managed for many years; that it is deteriorating and will, in course of time, lose its distinctive character or even disappear altogether; and that human intervention, maybe of a drastic kind, is needed to save it. Are these fears well founded?

How woods work

It is often said that ‘the woods of Cornwall were cut down for fuel to smelt tin’, as if this explained why the county has not much woodland. This view has been repeated from author to author for over two hundred years:

Another reason of the scarcity of woods is, that blowing of tin (that is, melting it with wood fire), has much diminished and consumed our wood with charking.

W. Borlase, *The Natural History of Cornwall*, 1758

But this view is a fallacy and not even Borlase’s authority makes it right. As we shall see, the Helford River woods have indeed been cut down – many times – for this purpose, but this has not diminished them. Woodland is the natural vegetation of Cornwall and cannot so easily be prevented from growing.

In Cornwall there are ancient woods, natural recent woods and *plantations*. Ancient woods are those that have been in existence since before about 1600. Many are recorded in the *Middle Ages*. One is tempted to suppose that they have never been other than woodland and are direct successors to the *wildwood* of early prehistory, although, as we shall see, there are occasional indications that the story is more complex.

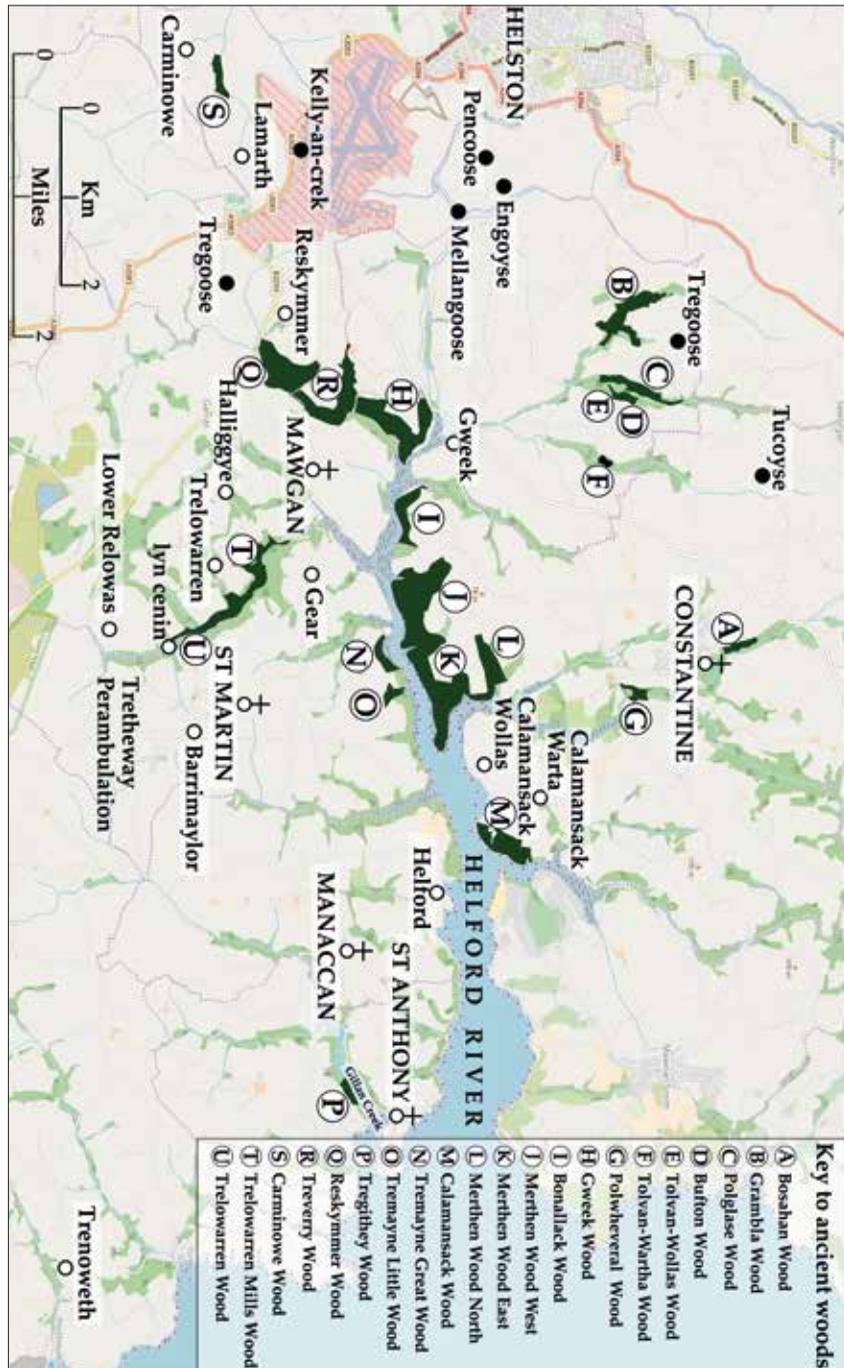


Fig. 1.3 Woods of the Helford River: ancient woods are shown in dark green. Black spots: place-names indicating former woodland. Circles: other places mentioned in the text. Light green: natural recent woods and plantations. (DM 2018 after Rackham 1987; base map © OpenStreetMap contributors.)

The main subject of this book is the 25 or so ancient woods, totalling some 600 acres, or 240 hectares, of West Cornwall. Most of these are on the Helford River, but I have included some outliers (Fig. 1.3).

Almost any land, especially in West Cornwall, tends to become woodland unless actively prevented by cultivation, grazing or burning. For example, the fields north of Merthen Wood in summer are full of oak seedlings among the corn, and even one year without ploughing would send them on the way to becoming an oakwood. Two centuries ago, almost every inch of West Cornwall, except the ancient woods, was either cultivated or grazed. Since then there have been times when heathland, fens, roadside verges and the less good farmland have been neglected and allowed to turn into natural *secondary woodland*. Such recent woods have grown bigger in extent than the ancient woodland; they form ribbons along the bottoms of many valleys, sometimes filling an entire valley. In them are the remains of farmsteads, watermills, furnaces, orchards and hundreds of tiny fields.

Plantations are the result of people planting trees, usually trees not indigenous to the area, such as beech (probably not native to Cornwall; see page 73), sweet chestnut or various conifers. Plantations may turn into natural woodland by neglect or by the planted trees not surviving and wild trees taking their place. Conversely, natural woods (ancient or recent) may be made into plantations by replanting – destroying the indigenous trees and replacing them by planted trees.

Our ancient woods, like most in England, are *coppices*. Oak and most other native trees, when cut down, do not die but sprout from the stump, which becomes a permanent base called a stool and can be cut again and again to yield successive crops of poles (Fig. 1.4). After centuries of cutting and regrowth the stool becomes a giant stool which may be 10 ft [3.05 m] or more across. Some species – we are concerned with cherry, service, and some elms – instead of coppicing produce suckers from the roots; they grow in ever-widening circular patches called clones.

Under traditional woodmanship an ancient wood was self-renewing and produced two distinct products: timber and *underwood*. Every year, or every few years, part of the wood was cut down to yield underwood, coppice poles or sucker poles which were the main and regular product. Underwood had many uses, but we are chiefly concerned with it as fuel. In this area of Cornwall it grows slowly and was cut at rather

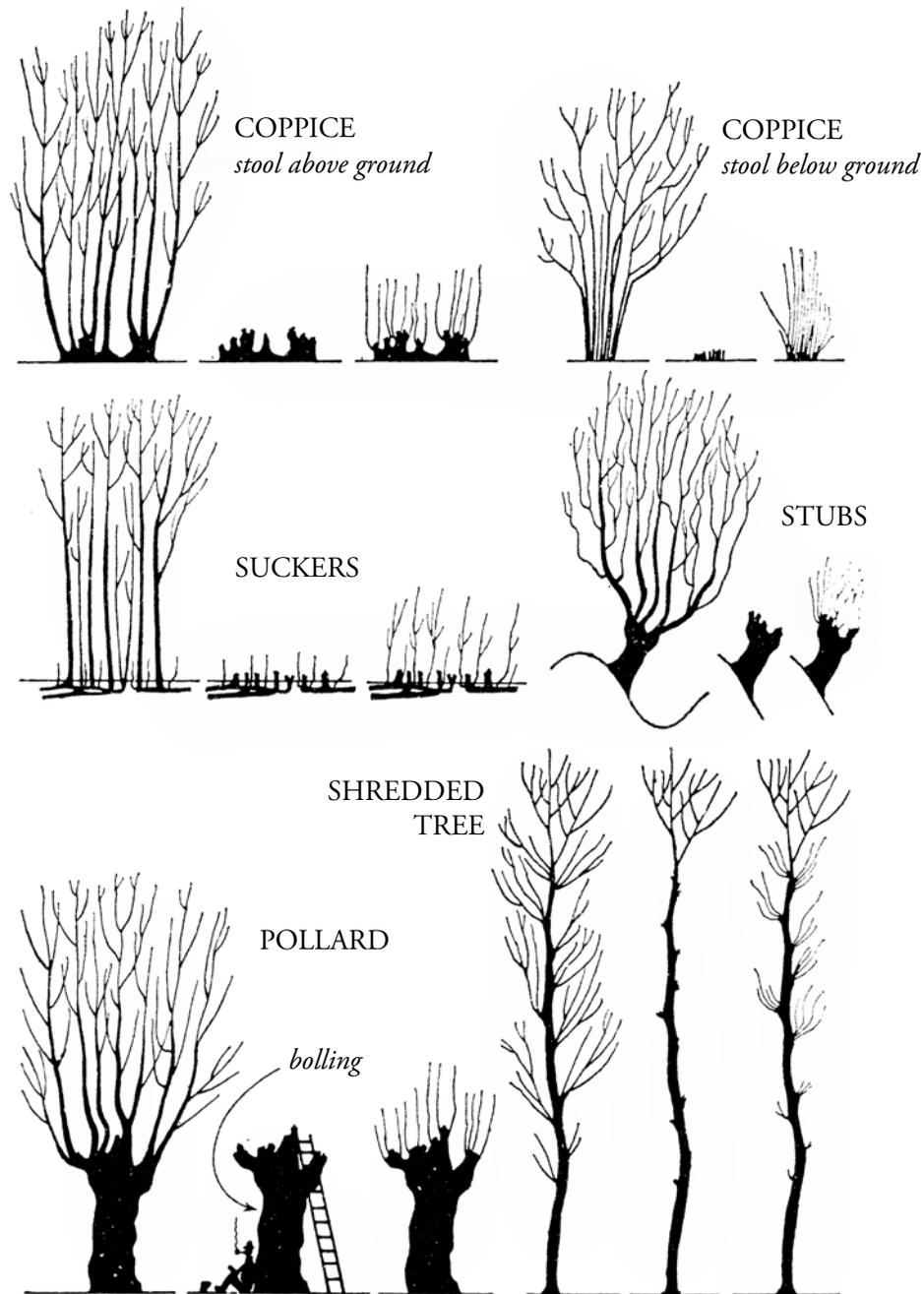


Fig. 1.4 Ways of managing wood-producing trees. For each method, the tree, or group of trees, is shown just before cutting, just after cutting, and one year after cutting. All drawn to the same scale. (Originally published in Rackham 1976; reproduced courtesy of Jennifer Moody.)

long intervals of perhaps thirty years. Most woods also had *timber* or *standard* trees, usually oaks, allowed to grow through several cycles of the underwood and then felled to provide beams and planks. Coppicing in origin goes back to the Neolithic period; in Cornwall it was already established by the time of the earliest medieval records.

Even in neglect, an ancient wood preserves the characteristic multi-stemmed structure of coppicing. Plantations and recent woods usually have only one stem per tree.

Coppice-woods are not quite the whole story. In a few places there are remains of *wood-pasture*, where the trees are widely spaced, allowing grass or heather to grow between them. Historical references to cattle or sheep feeding in 'woods' must mean wood-pasture. Wood-pasture trees were often treated as *pollards*, cut high enough above the ground for the animals not to be able to browse the regrowth. Such trees tend to become long-lived 'veteran' trees, of special *conservation* value because of the peculiar animals (bats, special insects) and rare lichens that live on them.

Significance of the West Cornwall woods

These woods are the south-west tip of the great belt of Atlantic oakwoods that runs through Devon and Wales and northern England into south-west Scotland and ending in Argyll, but with outliers as far north as Inverness and also scattered over Ireland. Distinctively, most of the trees are oaks, timber and underwood alike; and the oaks tend to be of the 'sessile' species, *Quercus petraea*. These woods contrast with the greater variety of tree species characteristic of lowland England, where oaks tend to be more thinly scattered as timber trees only, and are nearly always of the 'pedunculate' species, *Quercus robur*. This is a fundamental distinction and was established in the time of the prehistoric wildwood.

Wood-pasture is part of a worldwide tradition, which is widespread in the tropics under the name of *savanna*. It barely extends into Cornwall, although there is one famous example in the ancient deer-park of Boconnoc.