

Whichwood Forest, Oxfordshire: An Episode in its Recent Environmental History

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Abstract

Much writing on the social ecology of English forests has been cast in isolation from their evolving *natural* ecologies. Using evidence from Whichwood Forest in Oxfordshire, it is demonstrated that social and natural ecologies were inextricably intertwined. As a wood pasture environment, the overall traditions of Whichwood's management and use were by no means detached from the needs of ecological stability. However, over the centuries, periods of lax forest regulation acted in combination with the increasing demands of the commoning populace to effect what was eventually to become a spiral of deterioration in Whichwood's natural ecology. Some measure of the deterioration is provided in studies undertaken by ecologists in the twentieth century when parts of the forest were placed under scientific protection. When these studies are coupled with the documentary record of forest use and misuse, the picture that emerges is one of steadily increasing ecological stress. By the late eighteenth century, Whichwood's forest commoners faced not only the pressures of the reforming agrarian interest, but also the undermining of the very ecosystem which underpinned their livelihoods.

The landscape is in truth nothing less than the complex, interrelated and unified material product of the geographical environment, a seamless totality in which the immemorial processes of nature and the much more recent activities of mankind interpenetrate. Society is not a supranatural category which creates cultural landscapes isolated from nature; rather it remains inextricably related to natural elements and forces, constraints and resources.¹

THIS paper seeks to offer an insight into the changing interactions of social and natural ecologies in a forest environment of the south Midlands in the eighteenth and nineteenth centuries. It is an approach which falls within the realm of what has come to be known as *environmental history*. To borrow Worster's aphorisms of 1984, environmental history grew out of there being 'little history in the study of nature' and 'little nature in the study of history'.² North America has provided much of the subject material of environmental history and North Americans have become

its leading exponents.³ One particular work that could be said to have formed an apotheosis of the genre was William Cronon's now widely-quoted study of the ecological history of New England.⁴ Alongside the cultural consequences of European invasion, Cronon set out the ecological ones. English colonization of New England's forest landscape impressed not only new forms of social organization that were alien to the communities of Indians there, but also instituted ecological transformations which progressively undermined the delicate symbiosis that Indians maintained with their natural habitats.

Despite the recent round of challenging work on the *social* ecologies of *English* forests, pioneered by E P Thompson,⁵ the

³ See, for example, L J Bilsby, ed, *Historical Ecology: Essays on Environment and Social Change*, 1980; R White, 'American environmental history: the development of a new historical field', *Pacific Hist Rev*, 54, 1985, pp 297-335; M Williams, 'The relations of environmental history and historical geography', *Jnl Hist Geog*, 20, 1994, pp 3-21.

⁴ W Cronon, *Changes in the Land: Indians, Colonists and the Ecology of New England*, 1983.

⁵ E P Thompson, *Whigs and Hunters: The Origin of the Black Act*, 1975; *idem*, *Customs in Common*, 1991; J Broad, 'Whigs and deer-stealers in other guises: a return to the origins of the Black Act', *Past and Pres*,

¹ P Coones, 'One landscape or many? a geographical perspective', *Landscape History*, 7, 1985, p 5.

² D Worster, 'History as natural history: an essay on theory and method', *Pacific Hist Rev*, 53, 1984, p 16.

interdisciplinary perspective represented by Cronon has found scant registration on this side of the Atlantic. Neeson touches on the theme in her recent, arresting examination of commoners and common right, focusing in particular on the forest communities of Northamptonshire.⁶ But otherwise there remains in much of the work of Thompson and others an apparently unconscious presumption that forest environments are ecological constants against which human agency operates,⁷ echoing the failing identified in the opening quotation. The present paper sprang from exactly such a lacuna in a project on the social ecology of the royal forest of Whichwood. A research focus which was originally set entirely around the 'crimes' of deer-stealing and wood-stealing and upon the social frameworks within which such activities were located was brought face to face with evidence suggesting a regressive natural ecology.

The argument of the paper is structured as follows. The first section describes Whichwood as a forest ecosystem in history and examines the traditions of its social use. This is succeeded by an account of the forest ecology as commentators have recorded it in recent time, that is over the last hundred or so years. The third section of the paper then seeks to depict the ways in which changes in the social ecology of the forest community interacted with the forest's natural ecology so as to produce the degraded environment that observers have since described.

As a prelude to the discussion, it is necessary to indicate the nature of the forest bounds. The specific geographical extent of Whichwood over the period

under consideration is depicted in Figure 1.⁸ In broad terms, the forest extended in a band one to two miles wide running ENE-WSW for some five miles, with the settlements of Burford and Charlbury at western and eastern ends respectively. Its 3750 acres were roughly equally split between coppice and open forest.⁹ The boundary as defined on the map was commonly described as forming the perambulation of the forest.¹⁰ Beyond it, in what was frequently known as the purlieu woods, the commoning rights of forest dwellers and the forestal rights of herbage or feed for the king's deer also applied.¹¹ The purlieu woods were basically parts of the old royal forest that had been disafforested in former times, either by specific grant or by trespass.

When the act to disafforest and enclose Whichwood was passed in 1853-4,¹² not all parts of the wooded area were grubbed up and converted into crown farms. A residue, amounting to approximately 1700 acres, was retained by the second Lord Churchill in lieu of his former office of ranger. In 1901, this residue, together with the Churchill family seat of Cornbury Park, was acquired by the Watney family.¹³ Later, in 1955, part of the Watney estate was declared a National Nature Reserve (NNR).¹⁴ Today, it forms the Wychwood [sic]¹⁵ Site of Special Scientific Interest (SSSI).

⁸ For a brief history of Whichwood, J F Archibald, 'Report on Wychwood Forest, Oxfordshire, for the Nature Conservancy', 1954 (from files in the possession of English Nature, loaned by courtesy of Dr Keith Payne, Conservation Officer for the Oxford region). See also the extensive Wickham-Steed manuscript files in the Centre for Oxfordshire Studies, Westgate Library, Oxford.

⁹ House of Commons Journals, 47, 1792, *Tenth Report of the Board of Land Revenue - The Forest of Whichwood*, pp 240-1.

¹⁰ *Ibid.*, p 230.

¹¹ *Ibid.*

¹² 16 and 17 Vict c 36.

¹³ V J Watney, *Cornbury and the Forest of Wychwood*, 1910.

¹⁴ See files in possession of English Nature.

¹⁵ An enormous range of spellings of Whichwood can be found in history. The one used in the present paper was that current in the eighteenth and nineteenth centuries and refers to the area of the royal forest. The modern spelling, Wychwood, describes a much contracted geographical area and a private domaine. For fuller information, see Watney, *Forest of Wychwood*.

119, 1988, pp 56-72; D Hay, 'Poaching and the game laws on Cannock Chase', in D Hay, P Linebaugh, J G Rule, E P Thompson, C Winslow, *Albion's Fatal Tree: Crime and Society in Eighteenth-Century England*, 1975; R W Bushaway, 'Custom, crime and conflict in the English woodland', *Hist Today*, 31, 1981, pp 37-43.

⁶ J M Neeson, *Commoners: Common Right, Enclosure and Social Change in England, 1700-1820*, 1993.

⁷ See note 5.

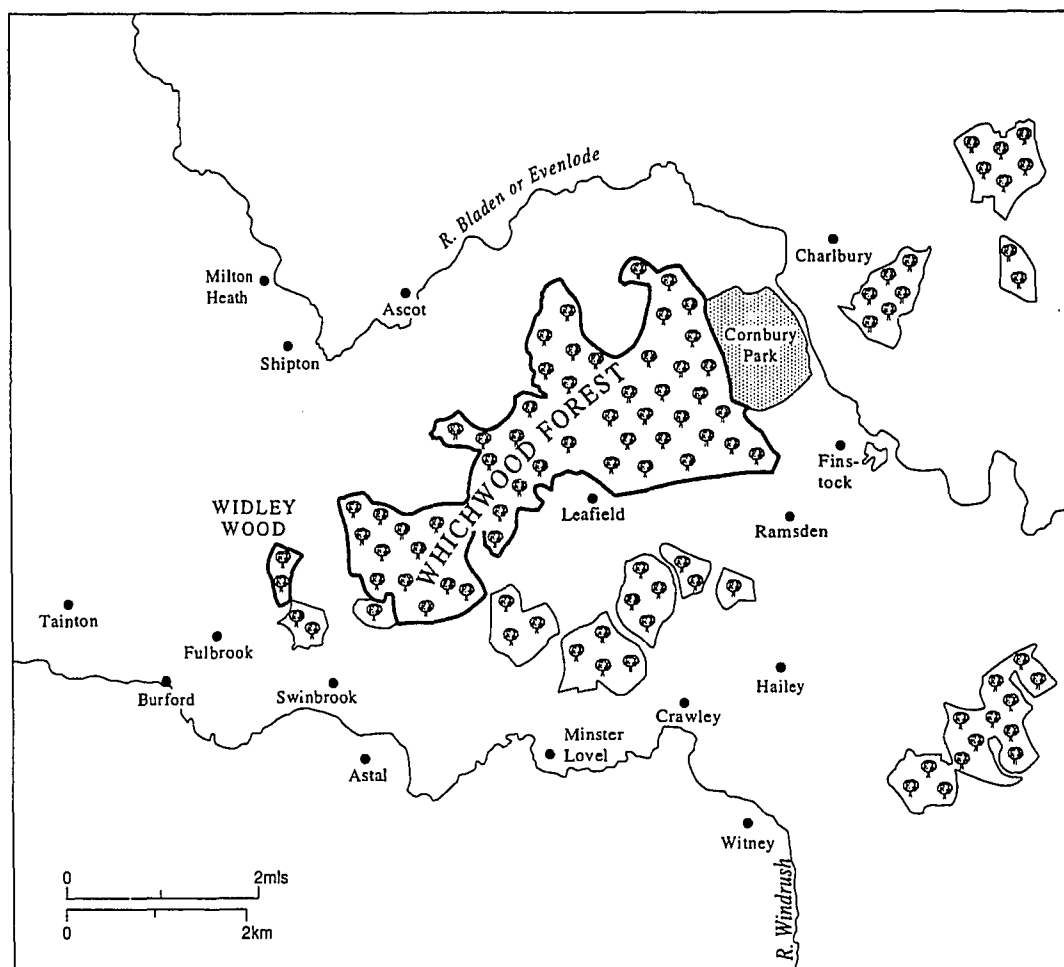


FIGURE 1
Whichwood Forest in the eighteenth and nineteenth centuries.

I

For a thousand years or more, it seems, Whichwood was an oak-ash forest, with an understorey of hawthorn, hazel and field maple.¹⁶ Place-name evidence offers confirmation of the spectrum of timber and underwood species.¹⁷ Coppice names, for instance, included 'Five Oak', 'Shaken Oak', 'Hazlewood' and 'Pollard' (very likely oak). Sites in the open forest had

names like 'Cross Maple Hill', 'Five Ashes', 'Hazle Hill' and 'Fern Hill'. The area is almost wholly on Great Oolite but the valley systems cut down to Fuller's Earth clay and, occasionally, high places reach Forest Marble limestone above.¹⁸ As the forest lies just south of the southern edge of the ice during maximum glaciation, downwash clays (drifts) are found over much of the area, often much stained with black humus.¹⁹ All told, Whichwood soils provided healthy ground for the growth of

¹⁶ Centre for Oxfordshire Studies, Wickham-Steed Ms, esp Box 2: The Great Days of Whichwood Forest, 1158-1306.

¹⁷ Bodleian Library, MS Top Oxon c. 179, 'A Plan of Whichwood Forest and Blandford Park taken by order of His Grace the Duke of Marlborough, Lord Warden of the Forest', drawn by J Underwood, 1813, from Pride's Survey, 1770.

¹⁸ W H Pearsall, 'Notes on soils', 1955, from files in possession of English Nature.

¹⁹ *Ibid.*

timber and underwood.²⁰ There was also (incidentally) a healthy woodland flora.

As a royal forest, Whichwood's primary purpose was to provide hunting for the royal household. It afforded a habitat for deer and, as game, deer were heavily protected in law. Indeed, forest law in medieval times brought large tracts of the country under an especially repressive social regime complete with its own bureaucracy of courts and officials.²¹ As part of this, the deer were looked after and protected by a hierarchy of officials on the ground, of whom the keepers became the most well-known and, in some cases, most hated.

Deer are voracious feeders. The forest understorey and the lower branches of trees, along with the grass of clearings, provided their basic sustenance, but this was often inadequate in the winter season. Then it was the practice of keepers and their assistants to feed them hay or else to cut browsewood specially for the purpose; as Birrell has remarked, the most prized red deer can eat the equivalent of their own body weight in fresh forage in a ten-to-fourteen-day period.²² During the fawning season, it was also the task of keepers to make certain that the deer were left as undisturbed as possible. This meant ensuring that there was adequate cover for the deer and ensuring, too, that the activities of commoners and of timber management were limited or suspended. A further task of forest officers was to maintain the perimeter fencing, for deer are notorious for their ability to break down or jump obstacles.²³ In Whichwood's case, the per-

imeter was mostly formed by a high stone wall²⁴ but, within that, fencing was necessary to protect saplings and any crop enclosures, particularly those around keepers' lodges.

It is fair to say that the deer remained paramount in Whichwood throughout the medieval period. However, this altered somewhat from the sixteenth century as the needs of regular naval ship-building expanded, especially after the Restoration.²⁵ It seems clear that some form of coppicing was practised in Whichwood in medieval times, but that of the modern period appears to have followed from the Act for the Preservation of Woods of 1543.²⁶ It was known as coppicing with standards and involved allowing isolated timber trees to grow to their full height among the coppice wood. Standards were cut almost every one hundred years, whereas the coppice was cut at much shorter intervals. Arthur Young, in 1807, recorded that in Whichwood the king's coppices were cut at eighteen-years growth.²⁷ The act of 1543 established the minimum of twelve standards to the acre. Such spacing yielded wide, spreading crowns and hence much bent and forked timber to furnish the 'crooks' and 'knees' of ships' hulls,²⁸ what, in the language of the day, was known as 'navy timber'. Whichwood was, of course, peculiarly well-placed as a supplier for the dockyards on the lower Thames. Its oak and ash stands were within a few miles carting distance of the upper Thames at Eynsham which afforded a relatively easy navigation downstream to Oxford and London. From 1596 until 1831, it was common practice

²⁰ House of Commons Journals, 47, 1792, p 241.

²¹ For general commentary on forest law, see, for example, C R Young, *The Royal Forests of Medieval England*, 1979; N Neilson, 'The forests', in J Willard and W A Morris, eds, *The English Government at Work, 1327-1336*, 1940, pp 394-467; W Nelson, *Manwood's Treatise of the Forest Laws*, 1717; R Grant, *The Royal Forests of England*, 1991.

²² J Birrell, 'Deer and deer farming in medieval England', *AHR*, 40, 1992, p 118.

²³ These various features are considered in Birrell, 'Deer and deer farming', pp 118ff.

²⁴ House of Commons Journals, 47, 1792, p 240.

²⁵ O Rackham, *Trees and Woodland in the British Landscape*, 1976, pp 99-102, 156; C R Tubbs, *The New Forest: An Ecological History*, 1968, pp 152-6.

²⁶ The method in general is outlined in H L Edlin, *Forestry and Woodland Life*, 1947, pp 81ff; details for Whichwood are taken from House of Commons Journals, 47, 1792, p 232.

²⁷ A Young, *General View of the Agriculture of Oxfordshire*, 1809, p 237.

²⁸ Edlin, *Forestry*, p 85.

for the coppices in Whichwood to be leased, typically to the forest ranger.²⁹

As well as providing an environment for the royal deer and for the growth of coppice wood and 'timber',³⁰ Whichwood also afforded grazing for the livestock of its inhabitants. Forest commonage, so-called, was in compensation for damage done to crops by wandering deer and had a basis in forest law.³¹ Such commoning rights figure in local manorial rolls. In 1636, the lords of the manor of Charlbury, for example, claimed for the hamlet of Finstock 'common or mast in time of pannage in the wastes and commonable places within the forest for all their hogs and pigs, ringed, levant and couchant in and upon their lands and tenements in Finstock'.³² Tenants exercising pannage paid a schedule of fees in relation to the age of the hogs and pigs.³³ By contrast, in the parish and manor of Ascot, tenants there in 1591 claimed free common in Whichwood for *all* their cattle, horses and hogs, *without stint*.³⁴ Grimaldi, in his exhaustive legal examination of rights in Whichwood completed in 1838, listed seventeen places with 'rights of common for beasts (not oxen) as annually settled by marksmen and for sheep without stint', but excluding swine.³⁵ In this particular citation, animals were driven from the forest as often as the officers and marksmen pleased; any cattle belonging to

strangers were impounded and fines levied on their owners.³⁶ It is plain from the variety of documentation on forest commonage, as indeed some of the preceding examples indicate, that commoning practices were subject to significant variation, notwithstanding the citations of court rolls and forest ordinances. In effect, commonage reflected what was custom. It embraced the activities which enjoyed the common consent of interested parties and thus was open to flux. It was also, as Thompson, has remarked, an arena of contest between social groups as the equilibria of social relations altered.³⁷

The combination of the deer population, the livestock of commoners, and the timber requirements of the Navy clearly had the potential to make for formidable demands upon the forest's ecology. The manorial and forest courts, along with the forest officials on the ground, afforded one vital means of regulating these pressures, but there were others. When Elizabethan forest administrators framed the legislation on coppicing with standards, it appears that they had more than a passing familiarity with the ecology of timber nursing and wood pasture. Coppicing with standards naturally led to a very open forest canopy and gave rise to a vigorous understorey, particularly of hawthorn and hazel. If unchecked, this understorey had the potential to diminish the open canopy in due course of time, notwithstanding the practice of coppicing. The oak timber could also become overshadowed by ash which is especially vigorous on the lime-rich stonebrash of Whichwood.³⁸ What grazing animals did, therefore, was to exercise some control over the woodland understorey, helping to maintain its open condition. Even as late as 1990, commentators for English Nature were remarking from field evidence that much of Whichwood's

²⁹ S Grimaldi, 'Report on the Rights of the Crown in the Forest of Whichwood in the County of Oxford', 2 vols, 1838, manuscript kindly loaned by the late Edward Thompson, now on deposit in Oxfordshire Archives (hereafter OA). Stacey Grimaldi (1790–1863) practised as a solicitor for more than forty years. He was eminent as a 'record lawyer' and was engaged on various prominent record trials and pccage cases.

³⁰ The word 'timber' is used in this paper to refer to trees for potential use by the Navy. Typically, this meant oak. In law, however, 'timber' covered a wider range of species, including beech, chestnut, walnut, ash, elm, cedar, fir, aspen, lime, sycamore and birch (5 Geo III c 48). The list of species in fact grew under successive statutes and reflected attempts to curb wood-stealing by commoners: R W Bushaway, *By Rite: Custom, Ceremony and Community in England, 1700–1850*, 1982, esp ch 6.

³¹ See note 21.

³² Grimaldi, 'Forest of Whichwood', II, p 341.

³³ *Ibid.*

³⁴ *Ibid.*, II, p 543.

³⁵ *Ibid.*, II, p 305; see also note 29.

³⁶ *Ibid.*

³⁷ Thompson, *Customs in Common*, pp 102–3.

³⁸ Edlin, *Forestry*, p 85.

woodland derived from open wood pasture – seen in the presence of very open grown trees amongst uniform stands of ‘forest grown’ timber.³⁹ The cutting by keepers of browse for the deer (the ‘lopping and topping of the maiden ash’) would have fulfilled the same function as the grazing animals,⁴⁰ as, in turn, would the cutting of firewood from the understorey by the commoning population. There are senses, then, in which one might well regard Whichwood’s wood pasture regime as sustainable. With regular management of the timber to remove dead or decayed trees and to prevent shrouding of the standards, with regulation of commonage, including the deer, Whichwood could have yielded oak for the Navy, feed for the king’s deer as well as sustenance for the commoning stock.

II

The designation of part of Whichwood as a National Nature Reserve (NNR) in the mid-twentieth century exposed what remained of the forest to a measure of scientific scrutiny unprecedented in its history. In this section of the paper, material from these surveys is introduced as a datum from which it is possible to construct something of the deteriorating condition of Whichwood as a wood pasture environment from the late eighteenth century, if not earlier.⁴¹

Hemsley, visiting the NNR site in 1957, was struck by the ubiquitous occurrence of Dog’s Mercury (*Mercurialis perennis*). The plant formed a continuous field layer in many areas.⁴² He noted that he never recalled seeing the plant so prominent or so overpoweringly dominant. The plant is frequently found in the field layer of

woods. It is generally poisonous to animals and its overabundance indicates that competing species had been denuded, almost certainly by a long history of overgrazing.⁴³ Dog’s Mercury is also characteristic of infertile soils and Jarvis’s report on Whichwood’s soils, undertaken in the mid-1970s, indicates that they had become leached and non-calcareous.⁴⁴ His soil borings discovered many yellowish (E) horizons beneath dark (A) horizons. The tendency for soluble mineral salts to be washed into lower horizons, so leading to pan formation and infertility, would have been accelerated by excessive grazing of the woodland understorey. The distinguished naturalist, W H Pearsall, on a visit to the site in 1955 in the company of the then estate owner, Mr Oliver Watney, offered a more direct verdict: Whichwood showed evidence of *severe* grazing in the past, especially of the valley sides and outer edges.⁴⁵ He attributed this to heavy stocking of deer up until disafforestation in the mid-nineteenth century, but it is unlikely that Pearsall could have distinguished the depredations of deer from the livestock of commoners.⁴⁶

The degraded soil regime noted by Jarvis in the surviving areas of forest would almost certainly have found parallel on the farms that the crown created in the parts of Whichwood that were cleared from the late 1850s. Indeed, Orr, writing in 1916, records how much of the area grubbed up for farming proved very poor in the returns that it yielded.⁴⁷ At the same date, Morison commented that the area offered poor grassland and, as arable land, presented ‘the

³⁹ J W Spencer, ‘Wychwood Forest and management of former wood pasture’, from files in possession of English Nature.

⁴⁰ Grimaldi, ‘Forest of Whichwood’, I, p 230.

⁴¹ See note 8.

⁴² J H Hemsley, ‘Fieldnotes of visit to Wychwood. 11–12th April, 1957’, from files in possession of English Nature.

⁴³ For details of the ecology of Dog’s Mercury, see O Rackham, *The History of the Countryside*, 1986, pp 108, 120, 203, 230; and, more especially, H Peat and A Fitter, *The Ecological Flora Database of the British Isles*, Bath Information and Data Services, Bath University, 1995.

⁴⁴ M G Jarvis, ‘Notes on the soils of the Wychwood Forest National Nature Reserve’, Soil Survey of England and Wales, 1976, from files in possession of English Nature.

⁴⁵ W H Pearsall, ‘Note on Wychwood Forest, 1955’, from files in possession of English Nature.

⁴⁶ *Ibid.*

⁴⁷ J Orr, *Agriculture in Oxfordshire*, 1916, p 51.

difficulties of clay without its compensatory advantages'.⁴⁸ It was, all told, 'cold and late country of bad reputation'.⁴⁹ Monk, writing in 1902, confirmed these accounts. He claimed that the soil ought never to have been cultivated, as those who farmed it found 'sorrowfully to their cost'.⁵⁰ The pattern was echoed in the turnover of tenants who found the hungry soils and poor water supplies a constant drain on profits.⁵¹

Unduly heavy grazing, along with the soil compaction and impeded drainage that went with it, probably had a bearing on the disease that was noted as prevalent in Whichwood's wood pasture by the 1840s.⁵² This appears to have been Johne's disease, a chronic bacterial enteritis of sheep and cattle. It was common in this part of Oxfordshire at the time and its spread was facilitated by undrained pastures and stagnant pools.⁵³ In the parts of Whichwood where the stonebrash was overlain by clay, trampling stock would have contributed to form just the sort of ground where the microbes of Johne's disease could become fixed.

In the section of Whichwood which survived as forest after the Disafforestation Act, the withdrawal of the deer and of the commoners' stock, not to mention the dramatic fall in the Navy's demands for timber, led to changes in the forest ecology. The first stage in the process was, as indicated previously, the domination of oak by ash. Succeeding this, according to Archibald's account of 1954, was a 'high forest' of hawthorn as the understorey was no longer browsed or cut. This, in turn, was being followed by elder scrub.

Archibald was unclear on the final successional product, but the sequence offers a useful perspective from which to examine how Whichwood's wood pasture ecology evolved in the early modern period.⁵⁴

III

It is clear that one of the most critical controls on Whichwood's particular forest ecosystem was grazing. As has been remarked above, in the later nineteenth century, the forced withdrawal of stock had serious repercussions for the traditional open woodland regime. In a similar way, *over-stocking* could undermine the regenerating capacity of 'timber' species: oak saplings, for instance, needed protection or cover. The history of grazing in Whichwood over the seventeenth, eighteenth and nineteenth centuries forms an almost continuous tale of misuse, over-use and lax regulation. In Charles I's reign, for instance, the then ranger, Anthony Cooke, allowed his beasts to 'depasture' in some of the crown coppices at times when they should have been fully enclosed and permitted some of his servants to do likewise.⁵⁵ What little pasture was then left was destroyed by the beasts of commoners 'wandering and depasturing for want of fences'.⁵⁶ It seems, in fact, that Cooke, despite his holding the lease of the coppices, had abandoned any pretence at managing them, for by the 1630s no less than eight had suffered deterioration in *vert* on account of deer entering them.⁵⁷ And as if the deer and wandering cattle were not enough, Cooke also presided over the introduction of another band of grazing competitors: rabbits. He allowed coney burroughs [*sic*] to be established in various of the forest ambits.⁵⁸

⁴⁸ C G T Morison, 'Soils', in Orr, *Agriculture in Oxfordshire*, p 185.

⁴⁹ *Ibid.*

⁵⁰ W J Monk, *Walks and Drives around Burford*, 2nd ed, 1902, p 16; see also K Tiller, 'The transformation of Wychwood', *Oxfordshire Loc Hist*, 1(7), 1983, pp 20-22; F Emery, 'The transformation of Whichwood: some fresh evidence', *Oxfordshire Loc Hist*, 2(2), 1984, pp 19-22.

⁵¹ C Miller, ed, *Rain and Ruin: The Diary of an Oxfordshire Farmer, John Simpson Calvert, 1875-1900*, 1983, p 8.

⁵² BPP, 1847-8, XXIV, pt 1, Report from Select Committee on Woods and Forests and Land Revenues of the Crown, p 64.

⁵³ Orr, *Agriculture in Oxfordshire*, pp 53-4.

⁵⁴ Archibald, 'Report on Wychwood Forest'.

⁵⁵ Grimaldi, 'Forest of Whichwood', I, pp 124, 130.

⁵⁶ *Ibid.*, p 130.

⁵⁷ *Ibid.*, pp 123ff.

⁵⁸ *Ibid.*, p 136.

Evidence from the second half of the eighteenth century paints a similar picture. In the 1760s, the *vert* had so deteriorated that the forest woodward cut down young oaks in the coppices in an effort to generate a more vigorous understorey.⁵⁹ The position was made worse after 1780 with the introduction of oxen by one minster commoner.⁶⁰ Oxen, which are heavy feeders, had never been permitted in the forest, but after 1780 the practice became commonplace, one keeper even implying a forbearance in this on the part of the crown and the then forest ranger, the duke of Marlborough.⁶¹ Sheep provided another case in point. Grimaldi, in his report of 1838, asserted that there was no legal authority for sheep pasture and suggested that interested parties had illegally established it among themselves.⁶² By the 1790s, there appears, too, to have been a problem with pigs: the forest was over-run with them – in the coppices as well as in the open forest.⁶³ It was the duty of forest officers to control livestock commonage (including pannage), by determining the time for allowing stock in and the time for clearance.⁶⁴ However, by the 1790s, forest officials seem to have cleared it 'only by necessity'.⁶⁵ Indeed, owners of stock took them home of their own volition – when want of food obliged them to do so.⁶⁶

It was not just animals which contributed to the deterioration of the Whichwood's grazing. Somewhat ironically, humans

were culpable, too. It had long been customary for commoners to take rotten wood to make their fires, the so-called 'right of fuel' or 'estovers'.⁶⁷ Any coppice wood taken as part of the 'hedge acre' and not used for hedging was also claimed by commoners.⁶⁸ However, by the 1790s, commoners are recorded as cutting bushes, cutting and lopping young trees, and taking the spoils away under cover of night, ostensibly to be sold.⁶⁹ Thorn, maple and hazel were their primary targets, all critical elements of the forest *vert*.⁷⁰ In doing this, they were in some ways merely copying the practice of one former forest ranger, Lord Cornbury, who in the earlier eighteenth century cut browse for the deer and then sold much of it.⁷¹

The grazing that Whichwood offered has to be understood within the context of a local agricultural economy that was heavily tied to stock-keeping. Given that many holdings were too small in themselves to be self-supporting, forest commonage became vital to their viability. A plan of the community of Leaffield drawn up for the duke of Marlborough in 1764 shows that most holdings were less than ten acres and many were less than five.⁷² The significance of pasture, generally, is underscored by the dominance of freehold tenure, including many of the yardlands in the open fields.⁷³ Field orders in the local court leet in 1749 echoed the place of livestock in the economy, with their precise references to the times when different stock could be baited or could have common in the arable fields.⁷⁴ A perusal of the notices and advertisements for freehold lands in and around Whichwood in *Jackson's Oxford Journal* in the later eight-

⁵⁹ House of Commons Journals, 47, 1792, p 251.

⁶⁰ *Ibid.*, p 246.

⁶¹ *Ibid.*, p 251.

⁶² Grimaldi, 'Forest of Whichwood', II, p 321.

⁶³ House of Commons Journals, 47, 1792, p 262; Thomas Walker, in evidence to the Board of Land Revenue (p 233), claimed that no swine were admitted to the forest. The board's view seems to have been the more accurate one, as is apparent from the following advertisement in *Jackson's Oxford Journal* (hereafter *JQJ*) in 1788 (311b): 'Stolen out of Whichwood Forest – large white sow and 9 pigs property of James Empson of Leaffield'. The reference number in brackets refers to the entries in E C Davies, ed, *A Chronological Synopsis and Index to Oxfordshire Items in Jackson's Oxford Journal, 1753–1780*, 1967, and E H Cordeaux and E Davies, eds, *idem*, 1781–90, 1976.

⁶⁴ Grimaldi, 'Forest of Whichwood', II, p 305.

⁶⁵ House of Commons Journals, 47, 1792, p 233.

⁶⁶ *Ibid.*

⁶⁷ *Ibid.*, p 244.

⁶⁸ Grimaldi, 'Forest of Whichwood', II, pp 290–1.

⁶⁹ House of Commons Journals, 47, 1792, p 262.

⁷⁰ *Ibid.*, p 250.

⁷¹ Grimaldi, 'Forest of Whichwood', I, p 242.

⁷² OA, Plan Leaffield 1764, Photo 53.

⁷³ *Ibid.*

⁷⁴ OA, Misc Watney III/i/1, Court book for manors of Leaffield, Langley and Ramsden, 1671–1827.

eenth century demonstrates forcefully the part played by common grazing rights in the local agricultural economy. Some entries even went so far as to refer to 'unlimited rights of common'.⁷⁵ It was no wonder, then, that, even as late as the 1840s, there was apparently no *general* pressure from the forest populace for Whichwood to be cleared and enclosed.⁷⁶ In fact, the intensity of the stock-keeping regime appears to have been growing during the first half of the nineteenth century, especially among the poorer commoners. The local courts leet increasingly record encroachments for pigstyes and instances of commoners' livestock being allowed to wander without control.⁷⁷ In parallel, common regulation of grazing became harder and harder for court stewards to enforce.⁷⁸ These trends reflected the rising poverty levels that were becoming manifest in Whichwood after the 1790s, as well as the pressures to which small-time tenant farmers were exposed in trying to maintain the poor.⁷⁹

A second critical element of Whichwood's particular forest ecosystem was the management of its 'timber' and, in tandem with that, its coppices. But the story that Whichwood presents in this regard is a chequered one to say the least.⁸⁰ The coppices were poorly managed some of the time and widely abused a great deal of the time. There were phases when parts of the forest canopy were heavily

depleted, both in the open forest and in the coppices. There were times when the timber was shrouded, making for much 'unthrifty' growth.

It can be stated with some certainty that conditions were rather *less* unfavourable in the decades between 1730 and 1760, and between 1790 and 1830. This is reflected in the former case in the recording of some good timber stocks in 1789–90 which, subsequently, became an important source of 'navy timber' during the French Wars. It was reflected in the latter case in the fine timber noted by various observers in the 1830s and 1840s. When good 'navy timber' was being recorded, or when unthrifty growth was being removed, the certainty is that the wood pasture regime was effective. As indicated previously, 'navy timber' came from oak standards with wide, spreading crowns, possible only within an open forest canopy. So when such timber was in good supply, the inference must be that the understorey conditions were productive for grazing purposes. By the same token, the clearance of 'unthrifty' trees, that is standards unfit for the Navy, indicated attempts to re-instate the open forest regime. Naturally, too, felling of *good* 'navy timber' helped to re-instate the forest's open condition. A further indicator of the effectiveness of the wood-pasture regime was when there was adequate cover for young trees and saplings. In the mid-eighteenth century, it was regular practice during cutting of the underwood to mark saplings with paint and to protect them from foraging animals subsequently.

The times of relative failure of the wood pasture regime registered in a variety of ways. In the 1720s, for instance, Charles Withers, Surveyor-General of Woods and Forests, complained how the timber in Whichwood was 'shrouded and browsed', 'none coming up in the knipes or coppices'.⁸¹ His counter-

⁷⁵ See, for example, *JOJ*, 1784 (260a), sale notice of three inclosed freeholds (c 12 acres), with 'unlimited rights of common on Ramsden Heath and in Whichwood Forest'.

⁷⁶ BPP, 1847–8, XXIV, pt 1, p 64.

⁷⁷ OA, Misc Watney III/1/1, and 1/1/3, Court book for manor of Ascott Doiley, 1818–1924.

⁷⁸ See esp OA, Misc Watney I/1/3.

⁷⁹ See M Freeman, 'Plebs or predators: deer-stealing in Whichwood Forest, Oxfordshire, in the eighteenth and nineteenth centuries', *Social Hist*, 21, 1996, pp 1–21.

⁸⁰ Unless separately footnoted, the sources for this discussion are as follows: 1) the survey of Whichwood Forest undertaken in 1789–90 at the instigation of the then Surveyor-General of Woods and Forests, John Robinson – the survey is set out in full in House of Commons Journals, 47, 1792, pp 230–64; 2) timber warrants in the Land Revenue records: PRO, LRRO/82, Accounts, Whichwood Forest, 1677–1851; also PRO, LR.4 16/98, Whichwood Forest: woodsales etc; 3) BPP, 1847–8, XXIV, pt 1.

⁸¹ Quoted in Thompson, *Customs in Common*, pp 103–4.

TABLE I
Stocking rate of coppices (oak standards), 1789-90*

<i>Coppice</i>	<i>Theoretical</i>	<i>Actual</i>	<i>Percentage</i>
Cranehill	1165	296	25.4
Hazlewood	1800	586	32.5
Eveddon	864	140	16.2
Buckleap	744	386	51.9
Five Oak	684	335	48.9
Slate Pits	1176	232	19.7
Lankridge	1488	1045	70.2
Cockshoothill	1248	601	48.1
Smallstones	1824	1081	59.2
Kingswood	1968	812	41.2
Shakenhoof	468	368	78.6
Pollard	1152	984	85.4
Gadley	876	277	31.6
Hawkes	1032	342	33.1
Broad Quarter	1716	755	43.9
Rowstage	1116	447	40.0
Wastage	912	150	16.4
Knottage	1764	692	39.2
Total	22,092	9529	43.4 (x)

* Taking twelve oaks to the acre as standard and using acreages as given in the 1789-90 survey. There is, in fact, considerable disagreement among the various sources as to the coppice acreages. For example, Underwood's 1813 revision of Pride's map of 1770, drawn up for the duke of Marlborough, gives a total acreage for the coppices of 1649, whereas Robinson's survey of 1789-90 gives the acreage as 1841.

part of seventy years later, John Robinson, remarked upon the astonishingly poor stocking rate of the coppices. There were remarkably few oaks greater than fifty years old, plainly a legacy of the conditions that Withers had recorded half a century before. As stated earlier, the leases required twelve oaks to the acre, giving a theoretical figure for the coppices of some 23,000 standards. In 1789-90, in fact, there were just 9500-odd. Table I sets out the stocking rate of the eighteen coppices at the time.⁸² A few had little standing timber at all. Robinson found the open forest rather more favourably supplied with 'navy timber', but even here the open canopy was being filled out with ash in places and some keepers complained that the understorey was so destroyed that the timber was not regenerating.

Under Robinson's surveyor-generalship,

the claims of the timber in Whichwood took on a significance beyond that prevailing in any previous era. Supplying the Thames dockyards of Deptford and Woolwich by sea from the New Forest and from Dean in Gloucestershire was expensive and risky in time of war. Whichwood was thus a critically placed source of supply. Robinson directed the planting of acorns in coppices cut within five years. He also circulated notices threatening with prosecutions those who injured the timber and recommended that Whichwood be taken in hand as a timber nursery. Moves in the latter direction met resistance from the forest ranger and, after 1815, as the value of timber and bark fell, their impetus inevitably waned.⁸³ One effect of the more assertive management of the timber after 1790, though, was that some of the abuses

⁸² The table has been computed from material in House of Commons Journals, 47, 1792, p 261.

⁸³ Details can be found in a document in OA, Misc Watney VIII/i/1, Duties of West Oxfordshire Yeomanry in Whichwood Forest, 1817-1836.

and misuses of the grazing were curtailed, especially in the coppices. But against the backcloth of a rising demand for stock-grazing from around that time, this merely served to enhance the pressure on remaining parts of the forest. Such pressure was re-emphasized from the 1830s when the ranger's legal dispute with the crown brought felling of timber in the open forest to an abrupt halt and when he also re-introduced the highly destructive red deer.⁸⁴ The cessation of felling allowed ash to begin to fill up the open spaces between oak standards and the red deer added to the degradation of the already contracting area of wood pasture. Commentators rightly remarked upon the way Lord Churchill, as ranger, was peculiarly tenacious of his customary rights of office.⁸⁵ But the paradox was that his dispute with the crown actually compromised the customary rights of commoners by suspending one of the activities that was critical to the maintenance of the forest's open condition: regular felling.

IV

It almost goes without saying that one cannot begin to grasp the environmental history of Whichwood in the two centuries up to the Act of Disafforestation without embracing the transformation of the social relations of production that has figured so prominently in recent traditions of writing on social history.⁸⁶ Whichwood was little different from other 'resources in common' in the way it was itself exposed to the forces of commercialism and, perhaps more pertinently, in the way it struggled to survive as an island of commonalty amidst an increasingly privatized and proletarianized agrarian landscape. It also goes

largely without saying that few social historians would fail to register the way commoning systems were not in any sense immune to becoming implicated in market mechanisms. Innes and Styles, for example, have described plebeian attitudes to the emerging capitalist order as 'ambivalent and contingent'.⁸⁷ E P Thompson's delineation of the 'forest habitus' reflects much the same mould: within it, all parties strove to maximize their own advantages, the common people as much as the rich or the 'middling sort',⁸⁸ and as has been argued elsewhere, some of the plebeian elements among Whichwood's inhabitants can be cast as predators as much as they can be cast as losers in an increasingly weakened customary economy.⁸⁹ However, the analysis needs to go further than this. Whichwood's natural ecology was not static, as so much writing on the *social* ecology of English forests would lead one to believe. It was dynamic and human occupancy was itself part of that dynamism. At different stages in time, the activities of the parties which variously looked after the deer and the timber, together with the activities of commoners, contributed to the transformation of Whichwood's natural ecology. It was not, though, a transformation that was *necessarily* downward. The deer could co-exist with the beasts of commoners, and the 'timber' storey could yield a harvest for the Navy alongside. But such multiple usage required regulation and, in Whichwood, as in so many of the other royal forests, regulation was intermittent and fluctuating in force. The upshot *was*, therefore, a varyingly regressive natural ecology. And when coupled with a commoning population whose livelihood was being undermined, especially from 1800, the ecological pressures intensified and

⁸⁴ The case for the crown is set out in Grimaldi, 'Forest of Whichwood'; a summary of the case (which never in fact came to court) is contained in BPP, 1847-8, XXIV, pt 1, pp 62-3 and Appendix O.

⁸⁵ See Anon, *English Forests and Forest Trees*, 1853, p 259.

⁸⁶ See note 5.

⁸⁷ J Innes and J Styles, 'The crime wave: recent writing on crime and criminal justice in eighteenth-century England', *Jnl Brit Stud*, 25, 1986, p 209.

⁸⁸ Thompson, *Customs in Common*, pp 102-3.

⁸⁹ Freeman, 'Plebs or predators'.

resulted in negative feedback. The combination of uses became unsustainable and the entire forest environment suffered degradation.

It is clearly a reasonable presumption that Whichwood's environmental history in the early modern period was replicated in varying ways in other royal forests. The work of Tubbs, on the ecological history of the New Forest, offers some confirmation of this.⁹⁰ Indeed, Tubbs provides a very early example of a partial attempt to study the interactions of social and natural ecologies in a forest environment. The New Forest was for long a primary royal hunting ground and thus the maintenance and protection of its deer were paramount. In parallel, though, the forest had a long history of use for grazing – not just for commoning stock, but also on a rental basis and as part of the pickings of forestal offices. Like Whichwood, the New Forest had also long been a source of 'timber'. In medieval times, coppicing was practised to provide industrial fuel. The first real demands for 'navy timber' emerged in the mid-seventeenth century, although construction in the Hampshire yards was slow compared with those on the lower Thames. The upshot, then, was that the New Forest demonstrated much the same combination of multiple usage as Whichwood. In turn, under proper regulation, it was possible for these uses to be sustained. The reality, though, often proved otherwise. By the mid-twentieth century, parts of the forest ecosystem had degraded in ways rather similar to Whichwood. The oak-dominated canopy had given way to beech;

hazel had largely disappeared from the understorey; areas where woodland had been removed or had retreated were exhibiting degraded soil profiles. The ecological downturn sprang from a long run of confused and overlapping official competencies which made for a tortuous relationship between the needs of silviculture and the needs of deer and livestock. When the demand for coppice wood for industrial fuel declined in favour of coal, coppices degenerated into stock pounds, adding to the potential ecological instabilities. There was a contrast here with Whichwood, where coppice wood actually remained a local industrial fuel for the forest potteries and lime-kilns well into the nineteenth century.

In Whichwood by the nineteenth century, it was not just the new political economy that was bearing down upon the customs of commoners, but a new bourgeois morality which saw commoning communities as undisciplined, idle and depraved.⁹¹ The pressure to sweep away the old order was thus formidable. However, one cannot begin to understand the process without registering that commoners faced what, in some senses, was an even more powerful agent of change: the deterioration of the very ecosystem within which their livelihoods were founded. Most students of the social ecology of forest communities in England in the period have argued their cases in isolation from this critical frame.

⁹⁰ Tubbs, *The New Forest*.

⁹¹ This saw, for example, the cessation in 1827 of the Whitsuntide forest feast at Capp's Lodge, on the edge of Whichwood near Burford, under pressure from a reforming local clergyman; later, the annual forest fair held on Newell Plain was abandoned: R and J Moody, *The Book of Burford*, 1983, pp 58–60; E Corbett, *A History of Spelsbury*, 1962, pp 103–4.