
CULTURAL "NATURE"
AND BIOLOGICAL CONSERVATION

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ABSTRACT. Landscapes that we think of as 'natural' are also cultural artifacts, a combination of ideology and the concrete. Awareness of this can illuminate debates on how to manage natural areas. Different social groups with different values espouse different images of 'nature'. Four concepts of nature current in Britain are outlined: biodiversity, historic countryside, wilderness and companionship. All four of these need to be instantiated to complement each other, though each will be more appropriate for particular circumstances. Political alliances between supporters of these views should be built to promote attentiveness and care for the more-than-human around us.

KEY WORDS. Nature, landscape, ideology, biodiversity, historic countryside, wilderness, companionship, nature reserves, motivation, conservation

NATURE IS NOT NATURAL

*Human beings are a fragment of nature,
and nature is a figment of humanity.
Kemal and Gaskell (1993)*

This quotation nicely sketches the relationships of humans with nature, mediated by language. Most of this paper will focus on humans, but it will first attend to some non-human fragments of nature, viz. other mammals. Might nature be a figment in the minds of animals other than humans? If so, it would not be a verbal concept, but it might have some behavioral outworkings that we could detect as analogous to our own.

There is a sense in which all animals inhabit the land-surface, but intelligent, mobile mammals inhabit landscapes in quite complex ways. It is rare for a mammal to be of no fixed abode; most have a home range of diverse scale, some migrating between ranges along established routes. The mammal will become familiar with this range, memorizing visual, olfactory and even auditory or textural signals from distinct points in the range. It will keep this complex geographical knowledge 'in its head'.

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But it does not merely wander about the landscape, it inhabits it by making use of it, most importantly as its source of food. The more intelligent species will 'remember', as evidenced by returning to sites, places where food may be regularly found, even from year to year as seasons return. It will remember the location of other resources, e.g., water, and places of relative safety or danger.

And more, it does not just make use of the landscape, it alters it. Sometimes these alterations are just the affects of the animal's primary behavior, e.g., the accumulation of faeces at latrine sites, middens under feeding stations, or grazed grassy areas. Sometimes the alterations are the primary behavior of the animal, such as scent marking a territory or constructing a den or other safe site.

In ways like these a mammal turns a land surface into a landscape. It deals with the land-surface under a number of relationships, e.g., territory, food source, risk assessment. These relationships could be said to be 'cultural' in that the initiative lies with the animal, that there is an element of learning involved (at least applying particular behaviors to particular places) and this often includes social learning (as in herds of animals moving together, or even lone animals interacting with their neighbors over territorial boundaries).

Like other mammals, humans also deal with 'land, or 'nature', under cultural relationships, e.g., territory or economic resources, though, clearly, in much more complex ways than other animals. There is another difference, humans can stand back to reflect on these relationships and not just act them out. Although humans can do this, we often don't, just relating to our landscapes unreflectingly in a way that feels just obvious, commonsense, 'natural' even! Of course we should plough this field as it is farmland; it's natural I should build a house on my own land; it's commonsense to widen a road between two expanding towns; it makes economic sense to mine a rich ore seam. All these decisions make sense under categories of property ownership, trade, and the unarguable 'it's just what people do'. Humans can operate solely at this level, but in addition to whatever inherent desire there is to think more widely, we are most often compelled to reflect on how 'natural' our behavior is in relations to landscape when other groups of people contest our understanding.

This paper is particularly interested in what some might call 'natural landscapes' when describing them unreflectingly as land set apart from the more usual economic uses. These 'natural landscapes' are sometimes contested by people who would prefer the protected areas were put to 'use', much more common are the debates within the nature conservation world on how these landscapes should be managed. It is the argument of this paper that these debates about management reflect underlying differ-

ences in the concept of 'nature' that these nature conservation landscapes are exemplifying.

The discussion of animals' relationship to landscapes, and the special case of humans, has illustrated how landscapes are cultural phenomena. This applies no less to landscapes designated by humans as 'natural'—at the very least they have been allocated to this purpose and their boundaries demarcated by humans. Most of all, the very concept of 'nature' is a cultural one. This is demonstrated by the fact, as will be shown, that there are different understandings of what is natural, and that these differ between cultures and over time. They are also socially embedded in different social and economic structures. For instance, the different social groups contesting the place of raptors on grouse moors with the hunting and shooting fraternity on the one side and the scientific conservation lobby on the other. These are instantiated in institutions such as the Country Land and Business Association (CLA) and the Royal Society for the Protection of Birds (RSPB). This is also reflected in the arts, e.g., the different styles of bird paintings. As Schama claims (1995), "Even the landscape that we suppose to be most free of our culture may turn out, on closer inspection, to be its product."

All this is not to say that there is nothing real 'out there'; there is another 'nature' of which this is a mere fragment. It is to claim that the real is always an inextricable mixture of culture and that ultimate nature. Changing scale for the purposes of illustration from the level of landscape to that of a tree, there are real trees 'out there' that we cannot walk through, and some in Britain have recently been termed 'veteran trees.' These are ancient trees that are also valuable as a habitat to saproxylic insects. Such trees are real, but they are only in particular places because people have allowed them to grow there. Also the shape of these veteran trees will owe much to the ways people have pruned them and to adjacent land uses. In this sense these trees are creations of human will. A tree on the ground that is this mixture of culture and nature can be termed a 'somatic tree' (Cooper 2004). In a way it is a bit like a piece of behavior that provides evidence of the hidden thinking of an animal, evidence of the 'nature' that is the figment of human minds. This 'nature', when specifically focused on veteran trees, may be termed the 'ideological tree.' It is ideological in the sense of the definition in Blackburn (1994): "Any wide ranging system of beliefs, ways of thought, and categories that provide the foundation of programmes of political and social action: an ideology is a conceptual scheme with a practical application." This gives greater precision to the notion that 'nature' is cultural, it is, specifically, ideological.

In practice, this means for veteran trees there has come to be a whole set of new features. These include a new and distinct language, including the term 'veteran tree' itself, with its appeal to the metaphor of an old

soldier. There is a distinct institution, the Ancient Tree Forum (ATF), a distinct economic analysis (e.g., new guidance on how to conduct safety risk assessments), and a novel category that is different from the previous concepts of old trees such as the functional term ‘over-mature tree’ in forestry. As Tsouvalis (2000) puts it, “Such trees [i.e., veteran trees] have now been baptized so as to give them a proper place in the social cosmos of the present day.” They have now, to press the metaphor, a name (‘veteran tree’), Godparents (the ATF), and even christening presents (lots of management care and attention). The veteran tree movement has a system of belief that old trees are valuable (a belief that is a *sine qua none* of ATF membership) and ways of thought (inculcated in training provided by the ATF and its followers). This movement has gone so far as to conceive an ‘ideal’ veteran tree as illustrated in the *Veteran Tree Handbook* (Read 2000). This is the foundation of programs of action as tree managers around Britain will be influenced by this ideal/ideological tree to instigate treatments for the somatic trees in their care so that they come to conform more and more to this ideological tree.

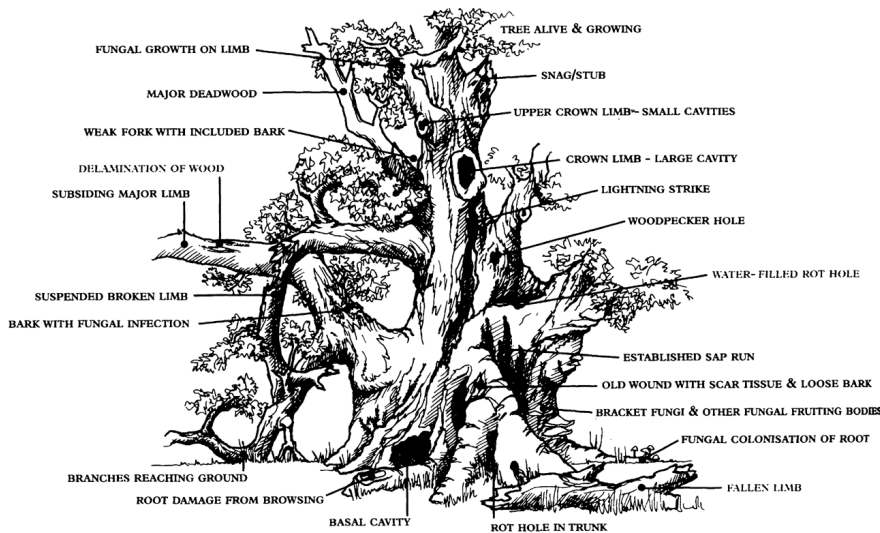


FIGURE 1
The ‘ideal’ veteran tree as illustrated in figure 35 in Read (2000);
drawn by Sarah Wroot. © *English Nature*, used by permission.

This analysis at the scale of a tree can be extended to whole landscapes, so that the conceptions of nature that managers are trying to realize on nature reserves and suchlike can be termed 'ideological nature', and the reserves themselves as the 'somatic nature' manifesting the ideal more or less adequately.

The aim of the argument so far is to break the spell of naivety, the belief that it is obvious what is natural and what should be done in nature conservation. Within a tightly-drawn social group there may be such consensus that the group's concept is held to be the only sensible one and that all other concepts are held by either idiots or knaves. This naïve experience is reinforced by the place of science in modern society, which creates "bodies of knowledge so persuasive as to seem unrhetorical—to seem, simply, the way the world is" (Gross 1990). "Even nature, postmodernism might point out, doesn't grow on trees" (Hutcheon 1989).

The consequence of 'nature' being ideological, being a figment of human thought, is that we have choices over the 'nature' we conceive and try to impose on the world. It is wise to reflect on the options in these choices. Even if it is hard to say that one notion of nature is superior to another, at least we might have constructive conversations with people of different outlooks. We may be able to get our own thinking clearer about what we are trying to do when managing nature.

A CHOICE OF 'NATURES'

Four clusters of nature, or at least three, have been independently identified by several authors examining the nature conservation scene. Using terminology from Cooper (2000), the clusters are 'biodiversity', 'historic countryside', 'wilderness', and 'companionship'. Summarily, from the perspective of biodiversity, nature is seen as a treasury of things, e.g., species or ecosystems. When historic countryside is the focus, nature is seen as an idealized landscape based on the nation's past. Wilderness is nature seen primarily as process but also as ideally lacking humans and culture. When, in contrast, nature is conceived as companion, it is not seen as fundamentally alien but full of other beings who sustain us and whose personhood we should respect.

Other authors have produced similar typologies: Adams (1996) has biodiversity, wilderness, and past landscapes; Peterken (1996) has management for diversity, natural woodland, and traditional management; and Botkin (1990) has conservation, no action, and pre-agricultural areas. The categories of others may lie more at a tangent. For example, Mabey (1981) contrasts sanctuaries that foster future naturalness with living museums that conserve past naturalness; Ehrenfeld (1991) speaks of a clash between process-orientated and species-orientated management;

and Callicott *et al.* (1999) distinguishes compositionists who see nature as entities apart from humans and functionalists who see nature as a process that involves humans. An example from the veteran tree literature is Alexander (2001), who argues for their care on four grounds that can be equated with the four concepts of nature:

“aesthetics—people like them for their own sakes [sic]—*companionship*

“cultural history—they are living demonstrations of our relationships with the land and nature—*historic countryside*

“natural history—they support a huge range of organisms—*biodiversity*

“forest ecology—veteran trees play a key part in the special value of old growth woodlands—*wilderness.*”

To identify these clusters is not to claim that there are no intermediate positions. Indeed Cooper (2000) used the language of vectors to try to convey a sense that the concept of nature lying behind any one particular nature reserve, management plan or journal article may not precisely fall into any single cluster carrying one of these four labels. However, like vectors in mathematics, any one concept can be resolved into components from these four clusters.

BIODIVERSITY

The biodiversity concept sees nature as a set of parts, species in particular, but also communities and ecosystems. These parts are to be collected, classified and used. Historically humans were often first interested in plants and animals for food and medicine. Those used for food were relatively few in number once agriculture was established, but the diversity of human ailments was matched by the diversity of plant pharmacology. The herbalists were the first publishers of floras and these set out the names of plants, the first step of classification. The early botanical gardens of the seventeenth century, such as that of Oxford University in England, were motivated by a desire to collect these useful plants together and to act as a teaching resource in their identification (Allen 1994).

With the rise of ecology at the start of the twentieth century, the movement of collecting species of plants and animals in gardens and zoos was extended to the collection of the new level of biological diversity then being described, that is, the community. The size and complexity of these communities largely precluded establishing these in gardens (though attempts are still made to do so, e.g., the fenland recreation in Cambridge University Botanic Garden). Instead, the best examples of the main habitats in Britain were gradually identified so that after the Second World War these representative sites were designated National Nature Reserves and, as a second tier, Sites of Special Scientific Interest. This series has been expanded in the subsequent half-century. Often these sites are designated

not just because they are 'typical' of some community, but also because they have a fuller range of species than most non-designated sites (Nature Conservancy Council 1990).

Although this may be termed *in situ* conservation, there are a number of similarities to *ex situ* botanical and zoological gardens. For instance, in order to maximize diversity in a nature reserve, often new habitats are specially created, e.g., creating glades within woodland, or even novel habitats such as 'the scrape' at RSPB Mimsmere, now copied elsewhere. Even the original site selection process is likely to favor places with many small habitat types over places with an extensive single habitat as naturally being more diverse. In this way nature reserves come to exhibit an artificially high density of both species and habitats, because these are compressed into relatively small reserves (Mabey 1981).

Many species in nature reserves need a lot of care if they are to survive. This is partly owed to the compression of many habitats into small spaces alongside the greater vulnerability of small populations to stochastic events. Another important reason is the pervasive impact of human perturbations on nature reserves, both through the historical legacy of past land use, and through the widespread impacts that cannot be controlled locally, climate change being the greatest example. Thus, in order to preserve species on site, all sorts of even large-scale intervention take place. These include civil engineering, the culling or extirpation of predators and competitors, and the provision of extra food.

Many biologists are critical of the intensity of management efforts that goes into these biodiversity reserves. Morris (1991) observes, "The activities which tend to turn a reserve into a zoo or botanic garden are surely dependent on their number, frequency, and the resources needed to sustain them, as well as on their character." Another way nature reserves can become like zoos is the use of exotic species of large mammals. Reserve managers desirous of keeping vegetation low or the soil surface exposed sometimes turn from using large machinery like forage harvesters and bulldozers to using large mammals instead. Apart from cost implications, mammals such as pigs, Konik horses and water buffaloes can create more structurally diverse habitats for plants and invertebrates. They are also more closely analogous to the original mammals that produced the natural disturbance. However, visitors to reserves are often more excited by the sight of these exotic animals than they are by the small creatures their presence and activities enable; the visit becomes a trip to the zoo.

Meanwhile, zoo management has been trying to make the animals' cages into more natural enclosures, both for the sake of the animals and to educate and entertain the visitor. Thus Colchester Zoo in Essex a few years ago ran an advertisement of a boy looking into a glass tank of

penguins with the caption “You can’t get closer to nature.” This image epitomizes the concept of nature as biodiversity.



FIGURE 2
The Colchester Zoo poster. © Colchester Zoo, used by permission.

“If the zoo was becoming more like nature, nature was also becoming more like the zoo; [both] concealed in similar ways the social and technological infrastructure [of power] that made their very existence possible” (Mitman 1996). Mitman points out that zoos and biodiversity reserves are coming to share a further feature, the hidden role of human power. This power is exercised through the interventions of reserve management, but it is hidden by techniques that make the use of power appear ‘natural’. So in the zoo, for example, the animals are constrained not by bars but by water-filled moats; in the reserve, the machinery has been replaced by the exotic mammals.

Whatmore and Thorne (1998) argue that human power is also exercised in the process of naming and classifying, "This cultural impulse to subject the world to systematic scientific account [i.e., taxonomy] proved itself to be one of the most authoritative actions in the exercise of government." In human societies names are nearly always handed out by superiors, e.g., parents, and used in control (e.g., parents often use the full name when disciplining their child, but a nickname when offering affection). In more extreme cases, humans are identified by numbers, e.g., soldiers or prisoners. In a similar way, organisms are given names to enable their appropriation as a resource. Naming allows humans to communicate to one another which creatures to use for what purposes. Several specific epithets in the Linnaean system refer to usage, e.g., *utile* (useful), *officinale* (medicinal), *sativa* (for food).

This theme of useful nature is closely associated with the concept of biodiversity. Indeed, E.O. Wilson, the key coiner of the term has written, "Biological diversity must be treated more seriously as a global resource, to be indexed, used, and above all preserved" (quoted in Evans 1996). Wilson neatly sets out the close relationship between classification, use and conservation. Nature is a sort of treasury containing all sorts of valuables. Responsible stewardship would not squander these but take care to protect the reproductive stock, while drawing upon the surplus for human needs.

HISTORIC COUNTRYSIDE

In mid-twentieth century Britain, the main political power for nature conservation lay with the scientific lobby that was greatly influenced by the biodiversity notion. At first it was assumed that just setting aside protected land in which desired species and habitats existed would be sufficient protection. That proved not to be the case. At Wicken Fen, for example, the richness of its invertebrate fauna in the late nineteenth century, that led to its establishment as a reserve in 1899, had significantly declined by the 1930s. "The changes in management that occurred when conservation began to be the major land use at Wicken may have been the most significant and damaging in the history of the Sedge Fen" (Rowell 1997). It was recognized that this was because the reeds and sedges of the fen were no longer being harvested sufficiently and so scrub was invading. To keep the traditional species required maintaining the traditional management of reed cutting.

Wicken Fen is not an isolated example. "The failure to maintain continuity of management within semi-natural habitats is at the heart of most conservation problems" (Sutherland, 1995). In a country like Britain that has experienced intense human occupation for millennia, there are no untouched habitats left. The species found in these altered habitats must

at least tolerate if not require the human management that has been customary on these sites for centuries. Coppicing woodland is a case in point. From at least Iron Age times in Britain it has been the custom to cut trees and shrubs just above ground level and to allow the stumps to re-sprout. This new growth is then re-cut every five to twenty years or so in rotation blocks. This way the trees provide a plentiful and convenient source of 'wood' for fuel, tools and fencing. Some trees were allowed to grow to full height (standards) to provide 'timber' for building houses and ships. The coppicing cycle regularly provides an unshaded habitat so that the ground flora is distinct (and often prettier) from that of high forest. This unshaded habitat is also more attractive to many butterfly species. In order to keep these desirable plants and insects in a woodland nature reserve these historic practices must be retained or restarted. The reserve has then become an historic countryside park, aiming to recreate a landscape our forebears would have recognized as familiar.

In addition to the discover of the need for historical landuse for preserving species, ecologists, inspired by Oliver Rackham, were excited by the history of the landscape. "I am specially concerned with the loss of meaning. The landscape is a record of our roots and the growth of civilization. Each individual historic wood, heath, etc., is uniquely different from every other, and each has something to tell us" (Rackham 1986). The word 'conservation' is used in Britain for the management of ancient monuments, buildings and other artifacts as much as for nature. The heritage in the countryside is highly valued. "Nowhere else is landscape so freighted as legacy" (Lowenthal 1991). The meaning of nature lies in its relationship with human culture and history. We cannot understand where we are now, over issues of sustainability for instance, unless we understand how we got here, what are the historical roots of our situation. And to understand history we need more than documents, we need the vital exemplars of historic patterns of landuse, whether coppice woodland or waste heath.

Nature and nationalism are closely intertwined; they share an etymology with the Latin word *natus*, birth. Other cultures might use a phrase like 'fatherland', but in Britain the word 'country' has the dual meaning of both the nation and the non-urban countryside that somehow epitomizes the nation. This is illustrated by the armed forces recruitment poster from World War Two [see illustration]. Most of the warriors called up to fight would have been city-dwellers and only a small proportion would have been familiar with the downland scene depicted. Nevertheless, the strength of this landscape appeal would surely have been powerful.



FIGURE 3
A British war poster of Birling Gap, South Downs, East Sussex. "Your Britain, fight for it now," lithograph by Frank Newbould, 1942. © Imperial War Museum, used by permission.

The landscape, however, is a contested domain. "Arguments about the aesthetics of landscape were almost always arguments about politics" (Everett 1994). In the past there were conflicts between rich and poor, e.g., at the time of the Enclosures. Today the landscape is the scene of many battles, e.g., over the erection of wind-farms. "The contemporary adulation of the picturesque is duplicitous as it idealizes a landscape of make-believe as part of a forlorn protest against modern industrial progress" (Daniels 1988). Often the past is romanticized with an emphasis on preserving landscapes of power, such as the portfolio of properties held by the National Trust, many of which are English Landscape Gardens of the eighteenth century. Such gardens in their own day carried very clear political messages. Not infrequently the village people were moved off the parkland so that they were no longer visible, and public roads were diverted outside the boundary. Then what had been an agriculturally productive landscape was set aside purely for aesthetic pleasure, demonstrating that the owner had amassed so much wealth from industry that he could afford to forgo the income from the land. These landscapes themselves harked back to a pre-industrial, pre-agrarian even, age. Yet, whatever their political dynamic, such parkland landscapes are now the subject of renewed nature conservation interest as they are among the best sites for veteran trees.

WILDERNESS

In the past few decades there has been a growing enthusiasm in British nature conservation circles for the wild and the untamed. This has partly been influenced by the wilderness movement in North America and by the paradigm shift in ecology from balance to catastrophe. Instead of thinking that there might be some 'climax communities' to which ecosystems inevitably develop, it is now widely considered that ecosystems are perpetually experiencing disturbances, e.g., fire, wind-throw, flood, disease and pest outbreaks. There is, then, never a steady state, nor do ideal communities exist towards which the conservation manager can try to steer their nature reserve. Norton calls this the 'Axiom of Dynamism': "Nature is more profoundly a set of processes than a collection of objects" (1991). Although in fashion at the moment, this concept has never been completely eclipsed. In Britain mid-century, ecologists like Tansley and Watt worked on similar dynamic theories. They were also very involved in the establishment of the Nature Conservancy. Thus the National Nature Reserves were not only protected examples of ecosystems, to use Tansley's own term, they were also outdoor laboratories—in Britain "more than anywhere else" (Nicholson 1957).

There has also been persistent criticism of British nature conservation in the biodiversity tradition as merely 'gardening'. "Much of British terrestrial conservation has been a form of our favorite pastime: gardening" (Hamblen and Speight 1995). A response from the biodiversity point of view might be: "It is one of the anomalies of the English landscape that much of our wildlife requires human activity to survive. In terms of manpower, our National Nature Reserves are among the most intensively managed parts of the countryside" (Marren 1994). From the wilderness camp, the Canadian, Henderson expostulates: "The British predilection to maintain environments in a steady state can legitimately be viewed as the most unnatural conservation policy possible" (1992).

There has been much debate over whether abandoning intensive management leads to the loss of species or not. This abandoned management may be either the micro-managed interventions favored by the concept of nature as biodiversity, or the traditional practices of the historic countryside concept. *English Nature* has conceded that it might, but that it is a risk worth taking: "We want to maintain healthy ecosystems, not botanical or zoological parks. We recognize that, as ecological processes, specially climate change, develop, there will inevitably be gains for some species at the expense of others" (1997). Hamblen and Speight, after reviewing the conservation of invertebrates in woodland, are robust in claiming: "Much of Britain's wildlife has survived despite traditional management" (1995). Those concerned at the risk to biodiversity of this shift to the wilderness concept of nature point to the dangers in the transition period ("relaxation

time'), before the wilderness systems have settled down. There have also been major changes since 'wildwood' times such as the loss of large mammals in Britain, both herbivores and predators; other examples would be habitat fragmentation and climate change.

Mabey (1996) suggests that the main argument for the wilderness concept is not that it increases biodiversity, but that it is valuable for its own sake. It is just good to know that there are places still that are not dominated by humans. As Thoreau wrote a long time back, "In wildness is the preservation of the world." There is the appeal to the wildness in the human soul, the hunter within each of us. Conservationists may not be keen on killing animals for sport, but there is still the thrill of the chase with a camera and the pitting of wits and body against all that the wild can throw at us. Many of the most extensive reserves are in landscapes historically set apart for hunting, e.g., the royal forests such as Epping Forest, or the northern moors and glens stocked with grouse and deer. Even the landscape gardens of the eighteenth century, though not often used for actual hunting, gained their appeal from their savannah-like appearance that is ideal for blood-sports.

There is a social process common to both conservation and hunting landowners in the view of some populist critics—both eject the natives from the landscape in order to maximize the wild game. The story of the Scottish Clearances, in which crafting people were thrown off the land (many having to emigrate to America) to make room for sheep and deer is frequently told; and told with bitterness still some two centuries later. Are contemporary conservation organizations currently excluding, ejecting or restricting local farming communities by their land purchases and their sponsoring of legislation and regulation?

COMPANIONSHIP

An alternative vision would be to include both nature conservation and local communities operating together in the same sites—and why restrict this multiple occupancy to traditional or primitive communities? If humans are to achieve living sustainably with nature or the non-human, this will not be achieved if the only 'nature' that survives is found in reserves. Where nature is restricted to such ghettos, "environmental prisons of the wildlife they maintain" (Barkham 1994), all sorts of subtle changes comes over it. As in a zoo, the gene pool of species on reserves changes from the wild-type (Wood 1996); protected species have become cultivars; nature reserves become zoos. This sort of reserve management is also costly in terms of staff, contractors and volunteers. All these have to be paid for by economic activity outside the reserve. This leads to the anomaly that a site that should be sustainable actually has an environmental footprint sub-

stantially larger than its area. Conservation areas “are fantasies which enshrine the values by which society as a whole cannot afford to live” (Thomas 1984).

Gathering spectacular wildlife into reserves tends to make nature inaccessible to all but a special-interest group of middle-class people, mostly scientists. This restricts access to this wildlife both socially and geographically, e.g., the well-known challenge of involving working class and ethnic minorities in nature conservation in Britain. The wider conception of nature as the non-human all around us becomes unavailable to all these social groups. This has the serious political consequence of making nature conservation a marginal issue. A current example of this is the plan to drastically cut the government’s own ecological research institution, the Centre for Ecology and Hydrology. The reduction in the number of long-term monitoring sites from eight to four is not likely to produce sufficient concern in the wider public to force a change of heart. Both scientific institutions and their staff, and the nature they study itself, is pushed to the margin.

What is happening here is the splitting of the ‘nature’ that sustains and surrounds all human life into two categories. In one category this nature is called by its name. This category, however, includes only species that are of no economic use (biodiversity), reconstructions of bygone eras (historic countryside), and terrain too refractory and inhospitable to be profitable. No, these do share tourist value, for without some commodity value other uses would be found for the space, if only as a receptacle for waste (as has been done to the oceans). Humans come to this desirable nature as visitors, which is nice, but no basis for a lasting relationship. The other category into which nature is split, and in which we dwell, does not have the dignity of a name. It is the nature we forget about, take for granted, abuse. A park boundary gives psychological permission to exploit whatever lies beyond it. Nature reserves can reinforce the unsustainable view that nature is separate from our ordinary lives and that humans are not really part of it. Such a misconception of the life support context of human society will end in tears.

The alternative is to establish areas that can model sustainable relationships between humans and the non-human. The wider society can then copy these demonstrations of how humans can live as one species among many. Even if humans are the dominant species, we can treat the others with care and respect. In Britain there has been quite a lot of progress in integrating forestry and nature conservation sustainably (Forestry Commission, n.d.); agriculture has proved more difficult. Each anticipated reform of the EU’s Common Agriculture Policy has raised hopes that economic signals would shift farming towards greater sustainability. The reality of each reform has been a disappointingly small step. If the whole

agricultural industry has a way to go, there have been attempts to establish exemplar farms, particularly by the County Wildlife Trusts. The aims vary somewhat, but the general idea is to run a farm commercially while increasing the wildlife, partly by making use of all available agri-environment payments, and partly through lateral thinking on behalf of wildlife.

The urban equivalents are the many sustainability initiatives that also attend to ordinary people's experience of the wild at the heart of the city. Often the foci are urban green spaces such as parks, churchyards and riverways. The aim is both to improve their environmental quality for wildlife and to improve access, both physically and psychologically (e.g., by reducing the fear of crime). Brownfield sites, i.e., areas that were once industrial but now abandoned, typically are the target for building regeneration schemes. However, they can be particularly biodiverse, especially for insects and other invertebrates. They may also be the main places of encounter with nature for groups of children and young people who would otherwise, because of their social disaffection, be turned off by formal, greenspace schemes. This ruderal, irrepressible nature that is always finding niches between the paving slabs of modern life, also provides for the majority of people today the closest and most intimate encounter with nature as companion (nature as the one we 'share bread with'). This nature in our midst needs to be affirmed alongside the special nature that can only survive in protected areas. Fortunately, urban ecology of this sort is not a totally neglected discipline.

NATURAL MOTIVATIONS

This paper does not argue that any one concept is superior to the others, rather we need all of them to complement each other. It is not an either/or; it is a both/and. There is a place and need for different conceptions of nature and for their exemplification in real places. The acceptance of diverse concepts of nature implies a desire for diversity of approaches to practical nature conservation in the field. Different concepts will be more or less appropriate in different circumstances. There is a benefit in this multiplicity of approaches in that it can appeal to the diversity of human motivations to gather a wide support for the project of conserving nature. This building of a political consensus is critical to achieving a momentum for change and for nature conservation. Any one approach on its own will command such a minority of support it will forever remain marginal to the main collective decisions of nations and societies.

An historical analysis would show how various concepts of nature have garnered popular and political support at different periods, though often collaborating with others at key points (e.g., Sheail 1998). One example is the establishment of the Nature Conservancy, with its emphasis on science

and biodiversity protection, after the Second World War in Britain. This political move benefited enormously from the synergy of the parallel establishment of the National Parks with their emphasis on history and the wild.

Each of the four concepts of nature appeals to different motivations for support. Thus, the biodiversity concept highly esteems the existence value of species and ecosystems, and it may also acknowledge the instrumental value of species to science and future technology (e.g., pharmacology). With these great natural assets in the treasury of the earth, it behooves humankind to act as good stewards, with an eye to our own future and that of future human generations. The historic countryside looks both forwards and back over the generations. It values human self-understanding and addresses the common need for a sense of rootedness, to know where we have come from. In nostalgia we acknowledge the past in order to receive permission to build a different future, but this has to be done secretly from ourselves. There are two separate compartments of life, in one we laud the romanticized past, in the other we adopt the latest technology and fashion. It is important to us that we keep evidence of our old relationship with nature, demonstrating that it is possible to incorporate nature into culture and that this can be done creatively and aesthetically. The wilderness concept, in contrast, emphasizes the value of the 'otherness' of nature. This is a spiritual value in that we recognize that humans, however wonderful and competent, are incomplete on their own. We need the reminder of our limits and our mortality to be sane. We accept that we are not the only things on this planet of intrinsic worth, then our own intrinsic worth would be questionable, "Whence this intrinsic value? Why are humans singled out for its reception?" In comparison, it is value of the ordinariness in nature that is prized in the notion of nature as companion. It is not exceptional places alone that hold spiritual value, though they may help us to recognize it more easily when we get back home. The respect and compassion we desire others to give to us we can only receive if we are also givers and not receivers only. This applies to the more-than-human in nature as much as to our fellow humans. Respect includes a commitment to a sustainable lifestyle that the world is not to be messed with. Compassion is a heart-felt care for what is around us. There is a double attentiveness, both to how the world experiences us and to how we are blessed by the earth and its creatures.

The different value systems of the four concepts of nature may sometimes come into conflict in matters of detail, but they share an underlying orientation which is the valuing of things beyond the purely human. This common ground provides the basis of collaboration in the conservation of nature, however it is conceived.

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