Book Reviews

Storia del Paesaggio Forestale del Molise (sec. XIX—XX)
[History of the Forest Landscape of Molise (19th and 20th centuries)]
Paolo Di Martino
Campobasso: Istituto Regionale per gli Studi Storici del Molise 'V. Cuoco', 1996
173 pp. Many illustrations (some in colour)

Italy, the least arid of Mediterranean countries, is an increasingly forested land. Old-fashioned uses of trees persist: woods are coppiced on a vast scale and in surprisingly remote places. The actual forest area is unmeasurable, because it shades off into savanna, macchia, and chestnut groves, but when flying over the Apennines one sees whole landscapes of trees and little else. This has not always been so: there have been periods when forests were rapidly being eaten away by agriculture.

Molise, halfway down the east side of the peninsula, was an area of many pressures on tree-land in the last century. Much of the tree-land was common, belonging to the local townships. It was used for producing wood (*legna*) for firewood and charcoal; as pasture for cattle and sheep; as acornage for feeding pigs; as a source of dried leaves, cut from pollard trees, for feeding sheep when there was no pasture; and locally for producing timber (*legname*). The pasture use implies that much tree-land was not 'forest' as a modern forester would call it, but savanna with grass between scattered trees. There were also many non-woodland trees and hedges between fields. Sheep and pigs were partly local and partly transhumant, brought along a network of broad drove roads (*tratturi*), like the *canadas* of Spain and the 'long paddocks' of New South Wales.

From 1800 onwards traditional practices were under pressure from various directions. Increasing population incited farmers to extend their fields at the expense of tree-land, and to intensify grazing in the remaining tree-land. As in other countries, this was an age of privatisation when communal land-uses were unfashionable. Conventional cultivation in big rectangular fields was the only respectable use for cultivable land: this philosophy weakened the resolve of local councils to resist demands on public land. At the same time modern forestry on the French model was gaining influence. Producing timber was the proper use of uncultivable land; wood production might be tolerated in deference to Italian tradition, but pasturage and pollarding were frowned upon. These scholarly ideas of the eighteenth century were put on the ever-expanding agenda of central government: they were encouraged and often compelled, especially after the unification of Italy in 1870.

This book deals with the detailed consequences. Woods were grubbed out or handed over to the foresters; savannas were turned into treeless pasture or forest. The changes were not all permanent: in the twentieth century demographic decline took over, and much farmland became either natural woodland or plantations.

The general result has been a polarisation between forest and the rest of the landscape. Forests are concentrated in the mountains: very little lowland forest remains. The forests are much denser than they were. Italy contrasts with Spain and Greece, in which modern forestry has had less effect and extensive savannas survive.

The study is based partly on official records, and shares some of the shortcomings of such documents. Do decreases in measured forest area reflect grubbing-out of forests, or a narrowing of the official definition of forest versus savanna or macchia? Verbal surveys,

however, were very thorough, and often illuminate critical matters, such as the recognition that shade suppressed pasture, or the contempt in which officialdom held pollards and ancient trees The many reproductions of early maps, often accompanied by aerial photographs of the same area today, are a great strength of the study. Here, better than in any table, one can see where savanna (carefully differentiated by 19th-century cartographers) is now forest, or where forest is now half-overgrown fields – with the ghostly lines of the *tratturi* overlying all.

This is an example of the excellent work of Italian historical ecologists. I hope it will become the basis of a broader study. As a botanist, I would like to see more on the biological effects of the changes. The mysterious references to woods coppiced in order that livestock might eat the young shoots – do they mean that there were permanently bitten-down forms of some trees, like the 'ground-oak' carpets of some Balkan savannas? Why did fire apparently play so little part, in view of the strong Italian tradition of occupational burning?

I would also hope to see the study extended backwards in time. How long had the coastal forests been in existence? Were 19th-century changes a re-cycle of changes that had happened before in Imperial Roman and Papal times?

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A River Lost: the life and death of the Columbia
Blaine Harden
London and New York: W.W. Norton, 1996
ISBN 0-393-03936-6. $25.00. 271 pp.

The Columbia, the greatest west-flowing river in North America. rises in the Canadian Rockies and runs across the arid interior of Washington, and Oregon to reach the rainy Pacific coast via a gorge through the Cascades. The building of the Bonneville and Grand Coulee dams in the 1930s converted a wild salmon river into slackwater, a series of lakes held back by some of the largest dams in the world. It had become one of Donald Worster's *Rivers of Empire:*

> The Columbia, now generating electricity for much of the northwest, provides irrigation water for an immense area, and is a waterway to the interior for barge-trains with the capacity of ocean-going ships. Upstream of the Snake confluence, at the Hanford site, plutonium was made for the original atomic bombs and for later missiles. These days, it decontaminates nuclear machinery.

Blaine Harden, a journalist, born and bred close to the river, returned to the Columbia after an interval of 20 years during which he had reported on Africa and Bosnia for the *Washington Post.* He saw the river with new eyes. He rode on barges, visited nuclear plants, inspected farms. He talked to everyone he met on the way, the representatives of the two contrasting societies living either side of the Cascades, the rednecks of the interior, the urban-dwellers and sail-boarders of the westcoast.

Engineers half a century ago aimed to turn the river into a working machine, and they succeeded. Environmentalists, the 'ecofreaks' of Portland and Seattle, point to the near

destruction of the salmon run and the consequent degradation of the native Americans, who lived by it. The urbanites are concerned at the radiation hazard presented by wastes from the Hanford site. They complain that irrigators are a burden on the rest of the country, benefiting from the funds originally made available by federal government, and continuing to depend on huge subsidies from the state. The Bureau of Reclamation, the Army Corps of Engineers, the Atomic Energy Commission and the power companies appear as villains of the piece. As for the rednecks, they are ignorant of the river, they despise the Indians, and they regard the city folk as unrealistic idealists.

It is a story well-told, ambivalent, a striking case history – with nine pages of endnotes including references.

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The Thames Embankment: Environment, Technology and Society in Victorian London
Dale H. Porter
Akron, Ohio: University of Akron Press, 1998
ISBN 9-781884-83629-9. 318pp.

This is the kind of book that should be covered by the Book Reviews section of a journal, both in drawing attention to a relatively little-known publishing house (at least to British and, I guess, non-American readers) and to the fact the study is not as parochial as the main title might suggest. The all-embracing sub-title endeavours to remove such a misapprehension.

There is indeed considerable detail on the three retaining walls of some 5 miles in length, which the Metropolitan Board of Works, representing the City Corporation and all the London borough councils, began building in 1863. The closely-referenced work illustrates how they streamlined the previously irregular shore, improved navigation and provided new docking facilities. The walls enclosed 52 acres of previously heavily-polluted shoreline, providing a new boulevard between the City and Westminster, and a new underground railway line. Most importantly, the embankments incorporated the final section of the London Main Drainage system, a network of sewer lines that carried the city's tremendous output of human, animal and industrial waste more directly to the Thames estuary.

The embankments are now so much part of the London scene as to be taken for granted. Planned by committees and built by a nascent bureacratic agency, their construction lacked the drama commonly associated with the personal endeavours of such men as Telford and Brassey in building the earlier canals and railway lines. Despite the scale of the venture, they neither made nor threatened a political career or survival of a government. There was no 'crash' on the Stock Exchange. And yet, as the author makes clear, the Embankment went a considerable way to restoring the river to London. It gave Londoners a fresh vision of themselves and their community. The history of its conception and development offers insight into both the significant and less familiar aspects of Victorian society and its environment.

The wide-ranging research interests of the author, Dale Porter, the Professor of History and Humanities at Western Michigan University, are reflected in his remark that 'the business of historians is not to describe the external features of objects or situations

as they are now, but to explore the interactions through which they emerged out of antecedent conditions'. Technology in general, and construction projects in particular, were not isolated endeavours driven by some inherent logic. They occurred within a matrix of changing social and environmental conditions, where each level of complexity added a further element of uncertainty. The object of engineering, as an interface between society and 'the world in which it lived', was not so much to eliminate uncertainty, but to make it more manageable.

For Porter, the public-works project of the Thames Embankment becomes a case study of how technology mediates between cultural values, social groups, and institutions on the one hand, and the natural environment on the other. It illustrates how an architectural enterprise quickly became an engineering response to problems of environmental degradation and urban expansion. As the Embankment neared completion, the technical alternatives tended to narrow, but the social implications of the transformed waterfront became even wider. As a kind of interface, technology is affected by both environmental conditions and the attitudes and practices of society. The Embankment was 'constructed', socially as well as physically. Close account had to be taken of both physical contingencies, such as the weather and availability of raw materials, and of the 'multifaceted, competitive negotiation' among the relevant interest-groups, each of which had different ideas as to the purpose and nature of the river frontage.

Chapters detail the physical background of the river Thames, the critical nature of London's main drainage, the antecedents and genealogy of the Embankment, and the financial and institutional environment in which it was built. The final chapter, 'The historical future' is, perhaps, the least successful in the sense of possibly over-reaching itself. The warning signs are there, in the first chapter, as Porter drags in Capability Brown and all manner of other personalities and subjects to emphasise the wider relevance of his book. In the last chapter, there are signs of his moving beyond his immense field of knowledge in his references to a present-day 'Thames Valley Authority' and the institutionalisation of a Countryside Commission in 1981. His argument may similarly be overdrawn in asserting that technological and environmental history are different from other sorts of history, because 'the objects of physical conditions they focus on can endure for long periods'. Maybe, but they can also become obsolescent very quickly, whereas some political, economic and social 'constructions' have proved remarkably robust.

The book is highly stimulating, both in its content and the ease with which it can be read. It deserves to be read widely – and not least by those who find themselves rushing between appointments and the Tube, taxis, buses and trains on the Embankment itself!

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Scottish Woodland History
T.C. Smout (ed.)
Edinburgh: Scottish Cultural Press, 1997
ISBN 1-898218-53-6. £9.99. 215 pp.

Scotland is not England, and its woodland history is not the same. Both countries have had little woodland throughout historic times, and both have traditions of conservation. But in Scotland one of the principal trees is Scots pine, which dies when cut down and will burn, unlike English trees. In Scotland, especially the Highlands, woods often lack the permanent boundaries which play a large part in English woodland history.

The book's fifteen chapters – the proceedings of a conference – show the depth and variety of Scottish woodland history. Here (at last!) is a book about real woodland, not forestry politics and regulations, well illustrated by maps, pictures, and fieldwork.

Woodland history in Scotland carries political weight. There is a grand proposal to 'restore' the Great Caledonian Wood, covering most of the Highlands until historic times, whose 'destruction' by marauding Vikings or exploitative English symbolises the supposed ecological degradation of Scotland. But is it possible to restore a myth? The Great Caledonian Wood, as C.T. Smout and D.J. Breeze demonstrate, disappeared in prehistory; the Highland ecosystem, that wilderness of moorland and blanket-bog and occasional woods, has been much the same since before the Romans. Their analysis is a classic study in how secondary sources exaggerate the woodland of the past and play down that still existing. Even maps do this. Blaeu's Atlas of 1654 has been quoted as showing that considerable remains of wildwood still existed then. Smout shows that Blaeu, a Dutch mapmaker, miscopied field sketches made by Pont, a Scot, sixty years earlier. Almost everywhere that Pont shows a wood Blaeu has a bigger wood. The real extent of woodland, as noted by Pont, was more than today, but not much more.

Scotland apparently has little documentation on medieval woodland and its management. This does not mean that woods were not managed, but that the records were not written, do not survive, or have not been read. There is some evidence from ancient trees (P. Quelch), from indicator plants of ancient woodIand (J. Miles and A. Miles), and from pollen analysis (R. Tipping) – although, as ever, pollen cores are rare from within existing ancient woods.

After 1600 written records and pictures become copious. Woods were managed under feudal tenure, with rather more communal usage than in England; arrangements existed for policing the wood and preventing the 'Tragedy of the Commons' (F. Watson). Pasturage was a major use, which means that the woods were not very dense. Nevertheless, coppicing was prevalent among trees which would sustain it (C. Dingwall). Much of the evidence, of course, comes from disputes between lords and tenants, or with outside entrepreneurs who saw in Scottish woods additional sources of charcoal, tanbark, or timber.

Most wooded parts of Scotland practised woodland conservation, although seldom so strongly or persistently as in England. There were many variants. The Glasgow woods approximated to English practice, with coppices having permanent boundaries (M. Dougall and J. Dickson). Highland pinewoods and birchwoods operated quite differently, successive generations of trees moving around the moorland. Woodland operations usually depended more on local needs than on trade. Most of the pine used in Scots towns came from Norway or the Baltic rather than from Scotland, except when war interrupted imports.

Scottish woodland customs were sometimes broken up by the intervention of outside entrepreneurs or of advocates of modern forestry. (Forestry, however, has often encouraged birch as well as planted trees: N. MacKenzie and R.F. Callender).) The collapse of conservation in the 18th and 19th centuries was due first to the temporary pressure on land of an unsustainably increased human and cattle population, and then to unprecedented numbers of sheep and latterly deer (C. Smout and F. Watson). Scottish woods, however, are resilient, and many have survived even this degree of abuse. Modern woodIand conservation came late and until 1980 was disastrously confused with the objectives of modern forestry (T. Clifford and A. Forster).

The study of woodland history has come of age in Scotland. May the contributors to this book write many further chapters.

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