

Bibliography, UK**Ed Mountford, Jim Latham***Historical Perspectives*

Bennet K.D. (1989): A provisional map of forest types of the British Isles 5000 years ago
Journal of Quaternary Science 4, 141-144

Birks H.J.B. (1989): Holocene isochrone maps and patterns of tree spreading in the British Isles
Journal of Biogeography 16, 503-540

Abstract: Two papers that provide details of the composition development of prehistoric natural forests in the British Isles. The map of forest types from 5000 years ago shows the composition of the last near-natural forests, and the isochrone maps show how the main species in these and later forests spread through the country.

Key-words: Flandrian past-natural forest composition, tree spreading, pollen analysis, tree distribution, long-term forest succession, *Tilia-Quercus-Fraxinus-Ulmus-Betula-Alnus-Fagus-Corylus-Pinus*

Godwin H. (1975): The History of the British Flora (2nd Edition)
Cambridge University Press, Cambridge

Abstract: Classic volume summarising numerous pollen and macro-fossil studies around Britain. It provides details on the composition development of prehistoric natural forests in the British Isles, including past-interglacials and the last 10,000 years.

Key-words: inter-glacial, Flandrian past-natural forest composition, long-term forest succession, tree spreading, tree distribution, pollen analysis, macro-fossils, ground vegetation, human impacts, *Tilia-Quercus-Fraxinus-Ulmus-Betula-Alnus-Fagus-Corylus-Pinus*

Peterken G.F. (1993): Woodland Conservation and Management (2nd Edition)
Chapman & Hall, London

Abstract: Various book chapters deal with the principles behind woodland conservation in Britain, including the establishment of Strict Forest Reserves. Contains detailed information on the origins and ecological characteristics of British woodland, and a stand-type classification for ancient semi-natural woodland.

Key-words: Woodland conservation, biodiversity conservation, woodland management, Flandrian past-natural forest composition, ecological characteristics of British woodland, comparison between natural/managed forests, woodland history, woodland nature reserves, human impacts, woodland classification

Rackham O. (1976): Trees and Woodland in the British Landscape
Dent, London

Rackham O. (1980): Ancient Woodland
Arnold, London

Abstract: Two books that describe in detail the vegetation, historical development and management of woodland in Britain. The importance of maintaining traditional management practices for biodiversity conservation is stressed, and hence the risks both from plantation forestry and minimum intervention management are discussed.

Key-words: Woodland conservation, biodiversity conservation, woodland management, Flandrian past-natural forest composition, ecological characteristics of British woodland, comparison between natural/managed forests, woodland history, woodland nature reserves, human impacts, woodland classification

Steven H.M., Carlisle A. (1959): The Native Pinewoods of Scotland
Oliver and Boyd, Edinburgh and London

Abstract: Book dealing with the origin, history, ecology, and conservation of the remaining fragments of the natural Scots pine forest found in the Scottish Highlands.

Key-words: Caledonian Scots Pinewood, woodland history, woodland nature reserves, human impacts, ecological characteristics of Scots Pinewood, *Pinus sylvestris*

Tubbs C.R. (1968): The New Forest: An Ecological History
David and Charles, Newton Abbot

Tubbs C.R. (1986): The New Forest
Collins, London

Abstract: Two books that deal with the extensive area of semi-natural wood-pasture, heath, and mire found in The New Forest, south England. Details are given of the history and ecology of the 1,000 year old wood-pasture system, and the effects this has had on the woodland structure and composition.

Key-words: Woodland history, woodland conservation, biodiversity conservation, woodland nature reserves, comparison between natural/managed forests, human impacts, wood-pasture, ecological characteristics of wood-pasture, *Quercus-Fagus-Ilex*

Milestones in the Research on Natural Forests

Jones E.W. (1945): The structure and reproduction of the virgin forest of the north temperate zone
New Phytologist 44, 130-148

Abstract: Classic paper reviewing the concept of virgin forest, the sizes and ages attained by trees, the types of structure, death and regeneration, and the theory of succession climax in north temperate forests.

Key-words: Ecological characteristics of natural forests, natural forest structures, natural forest processes, regeneration, mortality, succession

Kirby, K.J. and Morecroft, M.D. (2000): Long-term studies in British Woodland. English Nature Science Series No. 34. English Nature, Peterborough.

Peterken G. F. (1996): Natural Woodland
Cambridge University Press, Cambridge

Abstract: Various chapters deal with the role and management of nature reserves in Britain; recording in woodland reserves; and the conclusions on stand dynamics that emerge from these studies. Describes the structure of near-natural stands in Britain and comparisons with managed forests.

Key-words: Ecological characteristics of natural forests, natural forest structures, natural forest processes, regeneration, mortality, succession, woodland conservation, biodiversity conservation, woodland management, woodland nature reserves, woodland history, comparison between natural/managed forests, human impacts

Jones E.W. (1959): Biological Flora of the British Isles: *Quercus L.*
Journal of Ecology 47, 169-222

Morris M.G., Perring F.H. (eds.) (1974): The British Oak: Its History and Natural History
Classey, Faringdon

- Newbold A.J., Goldsmith F.B. (1981): The regeneration of oak and beech: a literature review
Discussion Papers in Conservation No. 33, University College London
- Watt A.S. (1919): On the causes of failure of natural regeneration in British oakwoods
Journal of Ecology 7, 173-203
Abstract: Papers, reviews and a book that deal specifically with the ecology and history of the British oak species, *Quercus petraea* and *Q. robur*
Key-words: *Quercus petraea*, *Quercus robur*, regeneration, growth, physiology, mortality, tree distribution, invertebrate interactions, small mammal interactions, fungal pathogens, epiphytes, history of oak
- Matthews J.D. (1955): The influence of weather on the frequency of beech mast years in England
Forestry 28, 107-116
- Jones E.W. (1952): Natural regeneration of beech abroad and in England
Quarterly Journal of Forestry 46, 75-82
- Watt A.S. (1923, 1924, 1925): On the ecology of British beechwoods with special reference to their regeneration. Part I. The causes of failure of natural regeneration of the beech (*Fagus sylvatica* L.)
Journal of Ecology 11, 1-48
Part II. The development and structure of beech communities on the Sussex Downs
Journal of Ecology 12, 145-204
Part II, sections II & III. The development and structure of beech communities on the Sussex Downs (continued)
Journal of Ecology 13, 27-73
- Watt A.S. (1931): Preliminary observations on Scottish beechwoods (continued)
Journal of Ecology 19, 137-157 and 321-359
- Watt A.S. (1934): The vegetation of the Chiltern Hills, with special reference to the beechwoods and their seral relationships
Journal of Ecology 22, 230-270 and 445-507
Abstract: Series of papers and reviews that deal specifically with the ecology of European beech, *Fagus sylvatica*.
Key-words: *Fagus sylvatica*, regeneration, growth, mortality, history of beech, tree distribution, succession, invertebrate interactions, small mammal interactions
- Gardner G. (1977): The reproductive capacity of *Fraxinus excelsior* on the Derbyshire limestone
Journal of Ecology 65, 107-118
- Jones E.W. (1945): Biological Flora of the British Isles: *Acer* L.
Journal of Ecology 32, 215-252
- Merton, L.F.H. (1970): The history and status of the woodlands of the Derbyshire limestone.
Journal of Ecology 58, 723-44
- Wardle P. (1961): Biological Flora of the British Isles: *Fraxinus excelsior* L.
Journal of Ecology 49, 739-751
- Waters T.L., Savill P.S. (1984): Ash and sycamore regeneration and the phenomenon of their alternation
Forestry 65, 417-433

Abstract: Series of papers and reviews that deal specifically with the ecology of *Fraxinus excelsior* and *Acer species* and woodlands in Britain.

Key-words: *Fraxinus excelsior*, *Acer pseudoplatanus*, *Acer campestre*, regeneration, growth, mortality, succession, history of ash, history of sycamore, tree distribution, invertebrate interactions, small mammal interactions

Piggott C.D. (1969): The status of *Tilia cordata* and *T. platyphyllos* on the Derbyshire limestone
Journal of Ecology 57, 491-504

Piggott C.D., Huntley J.P. (1978-82): Factors controlling the distribution of *Tilia cordata* at the northern limits of its geographical range
New Phytologist 81, 429-441; 84, 145-64; 87, 817-839

Piggott C.D. (1989): Factors controlling the distribution of *Tilia cordata* Mill at the northern limits of its geographical range. IV. Estimated ages of the trees.
New Phytologist 112, 117-121

Abstract: Series of papers that deal specifically with the ecology of *Tilia* species in British woodlands.

Key-words: *Tilia cordata*, *T. platyphyllos*, regeneration, growth, history of lime, tree distribution

Kinloch B.B., Westfall R.D., Forrest G.I. (1986): Caledonian Scots pine: origins and genetic structure
New Phytologist 104, 703-29

McVean D.N. (1963): Ecology of Scots Pine in the Scottish Highlands
Journal of Ecology 51, 671-688

Miles J., Kinnaird J.W. (1979): The establishment and regeneration of birch, juniper and Scots pine in the Scottish Highlands
Scottish Forestry 33, 102-119

Miles J., Kinnaird J.W. (1979): Grazing: with special reference to birch, juniper and Scots pine in the Scottish Highlands
Scottish Forestry 33, 208-289

Abstract: Series of papers that deal specifically with the ecology of Scots pine *Pinus sylvestris* and associated woodland.

Key-words: *Pinus sylvestris*, genetic origins, communities, seed production, seed distribution, seed germination, seedling establishment, seedling mortality, natural regeneration, grazing, debarking, fraying, invertebrate interactions

Stand structure, gap dynamics, disturbances, and research on long-term change

Allen J.R.L. (1992): Trees and their response to wind: mid Flandrian strong winds, Severn Estuary and inner Bristol Channel, southwest Britain
Philosophical Transactions of the Royal Society of London B 338, 335-364

Kirby K. J., Buckley G. P. (eds) (1994): Ecological Responses to the 1987 Great Storm in the Woods of South-East England
English Nature (English Nature Science 23), Peterborough, 170pp

Whitbread A. (ed.) (1991): Research on the ecological effects on woodland of the 1987 storm Research and Survey in Nature Conservation No. 40. Nature Conservancy Council, Peterborough

Abstract: Series of works dealing with storms and the effects and responses of natural woodland. The first paper combines a literature review and field studies on the effects of the October 1987 and January 1990 storms. It examines the direction of tree fall in the present with those observed in wind-felled trees in British estuarine peats from the mid-Flandrian age. It concludes that local fall-directions indicate as now a westerly circulation during the mid-Flandrian and the movement of deeper depressions over a wide range of courses. The other two reports include records of many studies initiated following the October 1987 storm. They describe monitoring systems set up to record the effects of and recovery of trees and shrubs, ground flora, invertebrates, and birds to this exceptional disturbance.

Key-words: Long-term monitoring, permanent transects, permanent plots, natural forest processes, natural forest structures, natural disturbance, storms, windthrow, weather patterns, Flandrian past-natural forest dynamics, regeneration, growth, mortality, succession, invertebrate dynamics, bird dynamics, biodiversity conservation, human impacts, comparison between natural/managed forests

Backmeroff C. E., Peterken G. F. (1989): Long-term changes in the woodlands of Clairinsh, Loch Lomond

Transactions of the Botanical Society of Edinburgh 45, 253-297

Abstract: Describes two permanently-marked transect through mixed deciduous woodland that were established in 1961 and re-recorded in 1986 with position and girth of all trees measured. Changes were limited; basal area increased; canopy trees thinned out; and shade-bearers (*Sorbus aucuparia*, *Ilex aquifolium*) increased in the understorey. Despite a hurricane knocking out some canopy oaks in 1968, the stand remained dominated by oak (*Quercus* spp.), most of which originated in the nineteenth century.

Key-words: Long-term monitoring, permanent transects, natural forest processes, natural forest structures, natural disturbance, storms, regeneration, growth, mortality, succession, woodland history, *Betula-Quercus-Sorbus-Ilex-Fraxinus*

Barkham, J.P. (1978): Pedunculate oak woodland in a severe environment: Black Tor Copse, Dartmoor

Journal of Ecology 66, 707-740

Proctor M.C.F., Spooner G.M., Spooner M. (1980): Changes in Wistman's Wood, Devon: photographic and other evidence

Transactions of the Devonshire Association for Science, Literature and Art 112, 43-79

Abstract: Two papers that deal with the long-term development of upland oakwood growing amongst granite boulders on steep slopes at >250 m altitude. The trees in these oakwoods are distinctive in growth form and height: most have gnarled and twisted trunks with stunted crowns, whilst others grow procumbently. These woods have been treated as wood-pastures for centuries and regeneration has been episodic. In one of the woods a wave of marginal regeneration occurred about 100 years: the development of this and the wood since has been achieved through a photographic record and a permanent plot recorded first in 1922.

Key-words: Long-term monitoring, permanent plots, photographic monitoring, natural forest processes, natural forest structures, natural disturbance, storms, regeneration, growth, mortality, succession, debarking, browsing, wood-pasture, woodland history, human impacts, *Quercus-Sorbus-Ilex*

- Farmer A. M. (1995): Soil chemistry change in a lowland English deciduous woodland 1974-1991
Water, Air and Soil Pollution 85, 677-682
- Kirby K.J., Bell J., Thomas R.C. (1996): Changes in abundance of six ground flora species in Wytham Woods (1974-1991)
English Nature Research Report No.175, English Nature, Peterborough
- Kirby K.J., Thomas R.C., Dawkins H.C. (1996): Changes in the composition and structure of the tree and shrub layers in Wytham Woods (Oxfordshire), 1974-1991
English Nature Research Report No.143, English Nature, Peterborough
- Kirby K. J., Thomas R. C., Dawkins H. C. (1996): Monitoring of changes in tree and shrub layers in Wytham Woods (Oxfordshire), 1974-1991
Forestry 69, 319-334
- Kirby, K.J., Thomas R.C. (1999): Changes in the ground flora in Wytham Woods, southern England, 1974-1991, and their implications for nature conservation
English Nature Research Report No 320, English Nature, Peterborough
Abstract: Series of research reports and papers describing changes between 1974 and 1992 in soil chemistry from 50 permanent plots, and the tree/shrub and ground layers from 164 permanent 10x10 m permanent plots in Wytham Woods, Oxfordshire. In the soil, pH declined and soil nitrogen increased in both ancient and recent woodland: atmospheric deposition was believed to be the main cause. In the tree and shrub layers, the stands have become more open; shrub cover has declined; mean tree diameter and basal area have increased; and woody species richness per plot has declined. In the ground vegetation; overall cover has declined, although some species have increased in cover; *Rubus fruticosus* and *Mercurialis perennis* have decreased most; and changes were mostly associated with stand growth increasing the amount of shading and increased deer browsing which has reduced *Rubus fruticosus* especially. The role of elm disease, windblow and increased deer browsing are discussed and the implications for biodiversity assessed.
Key-words: Long-term monitoring, permanent plots, natural forest processes, natural disturbance, natural forest structures, storms, Dutch Elm disease, regeneration, growth, mortality, ground vegetation, browsing, succession, biodiversity conservation, woodland history, human impacts, *Quercus-Acer pseudoplatanus-Fagus-Betula-Ulmus-Larix-Picea*
- Mountford E.P., Peterken G.F. (1998): Monitoring natural stand change in Monks Wood National Nature Reserve
English Nature Research Report No. 270, English Nature, Peterborough
- Mountford, E.P., Peterken, G.F., Burton, D. (1998): Long-term monitoring and management of Langley Wood: a minimum-intervention National Nature Reserve
English Nature Research Report No. 302, English Nature, Peterborough
Abstract: Two research reports that deal with stand development as recorded on permanent transects in two lowland woods containing mixed stands of *Fraxinus-Acer-Quercus-Corylus-Crataegus* and *Quercus-Betula-Tilia-Corylus-Crataegus*. They report on the general changes in stand structure and composition, patterns of mortality and regeneration, tree growth, stratification, mammal debarking, and dead wood.
Key-words: Long-term monitoring, permanent transects, natural forest processes, natural forest structures, natural disturbance, storms, regeneration, growth, mortality, succession, dead wood, debarking, browsing, *Fraxinus-Acer-Quercus-Corylus-Crataegus-Betula-Tilia*

Mountford E.P., Peterken G.F., Edwards P.J., Manners J.G. (1999): Long-term change in growth, mortality and regeneration of trees in Denny Wood, an old-growth wood-pasture in the New Forest (UK)

Perspectives in Ecology, Evolution and Systematics (in press)

Abstract: Monograph covering the long-term development of an old-growth *Quercus-Fagus-Ilex* wood-pasture in the New Forest as recorded by permanent transects set up in the 1950s. Following enclosure in 1870 the original wood-pasture regenerated strongly mainly with beech. Grazing levels increased greatly after 1964: the wood stopped regenerating and most small saplings and low-growing holly was destroyed. In 1976 a severe drought killed groups of old beech trees and further deaths ensued. Storms in 1987 and 1990 further opened the stands and dead wood levels became very high. However, grazing prevented regeneration and released young beech were badly debarked and killed by grey squirrels. Below many of the gaps grazed lawns and bracken stands have spread and the wood is returning to a wood-pasture habitat.

Key-words: Long-term monitoring, permanent transects, natural forest processes, natural forest structures, natural disturbance, drought, storms, regeneration, growth, mortality, succession, dead wood, debarking, browsing, *Quercus-Fagus-Ilex*

Peterken G.F., Jones E.W. (1987): Forty years of change in Lady Park Wood: the old growth stands
Journal of Ecology 75, 477-512

Peterken G.F., Jones E.W. (1989): Forty years of change in Lady Park Wood: the young growth stands
Journal of Ecology 77, 401-429

Peterken G.F., Mountford, E. P. (1996): Effects of drought on beech in Lady Park Wood, an unmanaged mixed deciduous woodland
Forestry 69, 125-136

Mountford E.P. (1997): A decade of grey squirrel bark-stripping damage to beech in Lady Park Wood, UK
Forestry 70, 17-29

Peterken, G.F., Mountford E.P. (1998): Long-term change in an unmanaged population of wych elm subjected to Dutch elm disease
Journal of Ecology 86, 205-218

Abstract: Series of papers dealing with change since 1945 in a mixed deciduous wood on the English-Welsh border. Stand changes in a range of different aged in different topographical conditions and in responses to various types of disturbance - drought, Dutch elm disease, storms, deer browsing, squirrel debarking, vole debarking - are described in detail. Conclusions are drawn on the natural dynamics of near-natural woodland under modern British conditions.

Key-words: long-term monitoring, permanent transects, natural forest processes, natural forest structures, natural disturbance, drought, storms, Dutch elm disease, regeneration, growth, mortality, canopy gaps, succession, debarking, browsing, voles, woodland history, *Tilia-Fagus-Fraxinus-Quercus-Betula-Ulmus-Corylus*

Peterken G.F., Stace C.E. (1987): Structure and development of the Black Wood of Rannoch
Scottish Forestry 41, 20-44

Abstract: Describes results from permanent plots in boreal pine woodland in Scotland showing change between 1948 and 1984. Substantial regeneration of pine (*Pinus sylvestris*) and birch (*Betula* spp.) has occurred, in a slow and continuous fashion, rather than as a single flush; slow thinning of mature stands has taken place; mortality of mature pine has been slow. Two major disturbances (gales) were identified from observation of windthrown trees.

Key-words: long-term monitoring, permanent plots, permanent transects, natural forest processes, natural forest structures, natural disturbance, fires, storms, regeneration, mortality, succession, browsing, *Pinus sylvestris-Betula*

Rackham O. (1992): Mixtures, mosaics and clones: the distributions of trees within European woods and forests

In: Cannell M.G.R., Robertson P.A (eds.): The Ecology of Mixed-Species Stands of Trees
Blackwell Scientific, Oxford. 1-20

Abstract: Paper that considers the distribution of trees in natural temperate forests. It concludes that most natural forests consist of combination of tree species, sometimes in mixtures and sometimes in mosaics. Natural mosaics may result from the patchy nature of the environment or from patchy regeneration; but much of the variation appears to be inherent in the behaviour of certain trees, especially those that reproduce vegetatively to form clones. The stability of mixtures and mosaics in natural and other forests are discussed.

Key-words: Natural forest composition, natural forest processes, natural forest structures, tree spreading, regeneration, succession, browsing, wood-pasture, comparison between natural/managed forests

Biodiversity conservation, comparisons between natural/managed forests, and applications for silviculture

Backmeroff C. E. (1993): A bibliography of research on woodland NNRs

English Nature (Research Reports 41) Peterborough

Abstract: List of publications relating to woodland national nature reserves in Great Britain (up to 1988): Includes both managed and strict forest reserves.

Key-words: woodland conservation, biodiversity conservation, woodland management, woodland nature reserves, ecological characteristics of British woodland, comparison between natural/managed forests, woodland history, human impacts, wood-pasture, past-natural forest composition, forest structures, forest processes, regeneration, mortality, succession, invertebrate interactions, small mammal interactions, long-term monitoring, permanent transects, permanent plots, natural disturbance, bird dynamics, debarking, browsing, ground vegetation

Green P., Peterken G.F. (1997): Variation in the amount of dead wood in the woodlands of the Lower Wye Valley, UK, in relation to the intensity of management
Forest Ecology and Management 98, 229-238

Kirby K. J., Reid C. M., Thomas R. C., Goldsmith F. B. (1998): Preliminary estimates of fallen dead wood and standing dead trees in managed and unmanaged forests in Britain
Journal of Applied Ecology 35, 148-155

Abstract: Two papers dealing with dead wood levels found in natural, semi-natural and plantation forests. Both are based on line intersect sampling of fallen and standing dead trees. The first gives an example from one area in Britain, whilst in the second estimates were made in c.63 sites across Britain. Fallen wood varied from <20 m³/ha in managed woodland to 60-140 m³/ha in strict reserve areas (untouched for the last 80 years). Localised accumulations of dead wood were often associated with extreme events such as the 1976 drought or the severe storm of 1987, or residues left after felling. Few woods had more than 20 standing dead trees per hectare and all were less than 40 cm dbh.

Key-words: dead wood, natural disturbance, drought, storms, mortality, succession, human impacts, comparison between natural/managed forests, woodland management, biodiversity conservation

- Hester A.J., Mitchell F.J., Kirby K.J. (1996): Effects of season and intensity of sheep grazing on tree regeneration in a British upland woodland
Forest Ecology and Management 88, 99-106
- Latham J., Blackstock T.H. (1998): Effects of livestock exclusion on the ground flora and regeneration of an upland *Alnus glutinosa* woodland
Forestry 71, 191-197
- Linhart Y.B., Whelan R.J. (1980): Woodland regeneration in relation to grazing and fencing in Coed Gorswen, North Wales
Journal of Applied Ecology 17, 827-840
- Mitchell F.J.G., Kirby K.J. (1990): The impact of large herbivores on the conservation of semi-natural woods in the British uplands
Forestry 63, 333-53
- Peterken G.F., Tubbs C.R. (1965): Woodland regeneration in the New Forest, Hampshire, since 1650
Journal of Applied Ecology 2, 159-70

Pigott C.D. (1983): Regeneration of oak-birch woodland following exclusion of sheep
Journal of Ecology 71, 629-46

Abstract: Series of papers and a review of the ecological impacts of large herbivores on forests, especially tree regeneration and ground vegetation. They include studies of different woodland types, different types of grazing, and different types of grazers, and highlight the direct and indirect effects particular combinations can have. The implications for biodiversity conservation management are discussed.

Key-words: long-term monitoring, permanent plots, forest composition, forest structures, regeneration, ground vegetation, succession, browsing, debarking, wood-pasture, woodland history

Methods, systems (sampling plot development) for gathering information on natural forests

Dawkins H.C., Field D.R.B. (1978): A long-term surveillance system for British woodland vegetation

Commonwealth Forestry Institute (Occasional Paper 1), Oxford

Abstract: Describes establishment of a grid of 100-200 permanent sample plots (each 10 x 10 m) at each of three woods (Wytham Woods, Bix Bottom in Oxfordshire, and Halton Forest in Buckinghamshire). Tree and shrub information, ground flora and soil data were collected (soil data omitted from Bix). Discusses the general principles for setting up and maintaining permanent plots and the records collected from them. (See references by Farmer 1995 and Kirby et al. 1996 for re-recording in 1991/2.)

Key-words: long-term monitoring, permanent plots

Peterken G.F. (1993): Long-term studies in forest nature reserves

In: M.E.A. Broekmeyer, W.Vos and H.Koop (eds): European Forest Reserves. Pudoc, Wageningen, 35-48

Abstract: Summarises the British experience on long-term studies in forest nature reserves to understand forest dynamics in managed and unmanaged stands, and for monitoring environmental change. Discusses problems of establishing and maintaining permanent plot systems. Specific suggestions are made for how long-term recording in reserves could be improved, including relatively simple procedures such as photographic monitoring.

Key-words: long-term monitoring, permanent transects, permanent plots, human element in long-term recording, woodland nature reserves, photographic monitoring

Peterken G.F., Backmeroff C.E. (1988): Long-term monitoring in unmanaged woodland nature reserves

Nature Conservancy Council (Research and survey in nature conservation 9), Peterborough

Abstract: Describes the history of five studies of change in the structure and composition of unmanaged woodland reserves that have been sustained for more than 25 years; draws lessons from these studies; describes new baselines established 1985-7; briefly reviews the general value of long-term permanent plot studies.

Key-words: long-term monitoring, permanent transects, permanent plots, human element in long-term recording, woodland nature reserves, photographic monitoring

Rodwell J. (1991): British plant communities. I Woodland and scrubs

Cambridge University Press, Cambridge

Abstract: Describes with species tables and maps a phytosociological classification of British woodland. Provides the basis for identifying the range of sites that should be included within the minimum intervention series.

Key-words: Woodland classification, phytosociology, forest composition, ground vegetation, soils, climate, tree distribution, ecological characteristics of British woodland, forest structures, forest processes, regeneration, mortality, succession, woodland management, woodland history, human impacts, wood-pasture

Sykes J. M., Lane A. M. (1996): The United Kingdom Environmental Change Network: protocols for standard measurements at terrestrial sites

The Stationery Office, London

Abstract: Describes the ECN programme, the sites included within it and the procedures adopted for recording soils, climate, vegetation, vertebrate and invertebrate groups.

Key-words: Long-term monitoring, permanent plots, forest processes, regeneration, succession, physiology, soils, climate, invertebrate interactions, small mammal interactions, human impacts

Peterken, G.F. (2000): Natural Reserves in English Woodland.

English Nature Research Report No. 384, Peterborough.

Mountford, E.P. (2000): A Provisional List of Minimum Intervention Woodland Reserves for England. English Nature Research Report No. 385, Peterborough.

Abstract: Two reports commissioned by English Nature (Nature Conservancy Council for England) which review the concept of Minimum Intervention or Strict Forest Reserves as applied in Britain and develop into a provisional list of candidate Minimum Intervention sites to act a representative series for England. They discuss the background to Strict Forest Reserves in Britain and elsewhere, consider the value of such sites for nature conservation, scientific research and other purposes, identify what types of sites are best suited to act as a representative series, and provide a detailed list of sites with guidelines for long-monitoring therein.

Key-words: Woodland nature reserves, minimum intervention, review of Strict Forest Reserves, forest types, long-term monitoring.