

English Nature Research Report 494

# Defining 'old growth' in a UK context

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### *Introduction*

Old growth as a term has become more widespread in UK conservation debates, with suggestions that an inventory of old growth be produced. However different usages of the term have developed. English Nature therefore let a contract to see whether there was a consensus could be reached on the use of 'old growth' in the UK context which would be consistent with international usage.

### *What was done*

Views were canvassed from a wide range of individuals in the conservation and forestry worlds in the UK. From these, and a literature review, a set of ideas were put together on what old growth might mean.

### *Results and conclusions*

Three contrasting views emerged. One group considered that old growth was close to the idea of undisturbed, virgin forests and therefore does not really exist in the UK. A second group considered it should be used to describe late-successional stands with the sorts of structures found in American old growth areas such as old trees, abundant dead wood, etc; stands of both native and introduced trees could qualify if they have the right structures. A third approach was to emphasise continuity of old trees and dead wood and to restrict the term to sites where this was apparent through the presence of various indicator species particularly lichens and saproxylic insects. This last was seen to be most in line with a definition on the Convention of Biological Diversity website:

'Old growth forest stands are stands in primary or secondary forests that have developed the structures and species normally associated with old primary forest of that type, that have sufficiently accumulated to act as forest ecosystem distinct from any younger age class.

Some old wood-pastures could be included under this definition. A problem with the 'continuity' argument is that it is difficult to prove that while indicator species indicate rich and important sites, they really do depend on continuity of site conditions rather than other factors of these sites (eg abundance of really old trees) that are present.

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Table 1. Number of articles with keyword 'old growth' in CEH-held literature, by country and by year. The term 'old growth' remained largely specific to the USA until the end of the 1980s when it was adopted more widely in the scientific literature. A search of Centre for Ecology & Hydrology (CEH) held texts demonstrates the recent history of 'old growth' in scientific literature.

Year	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	Total
USA/CAN	6	7	4	7	16	8	13	11	8	12	83	72	101	70	96	105	106	106	129	148	133	1241
Japan										1	1	2			7	5	3	2	7	6	4	38
Rest			1	1			1	1	3	2	10	2	8	21	20	29	34	38	39	46	55	311
All	6	7	5	8	16	8	14	12	11	15	94	76	109	91	123	139	143	146	175	200	192	1590

### English Nature's viewpoint

An overall consensus on the definition was not achieved: therefore it may be better to refer to sites as having some old growth characteristics or old growth-type stands.

Key species can usefully be used to define important sites for old trees and dead wood, independently of whether or not they really do indicate continuity of conditions. Inventories of key species are however very incomplete and usually follow on from initial identification of sites based on structural characteristics.

A separate inventory of old growth sites is not probably not that useful. Rather existing or developing ancient woodland and wood-pasture inventories should have the capacity for the sites to be labelled as having old growth characteristics.

### Selected references

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### Further information

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