Woodlands in Wales: an introduction

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Coed y Brenin

P27 Douglas Fir

Welsh woodlands in context

Oceanic upland woods.

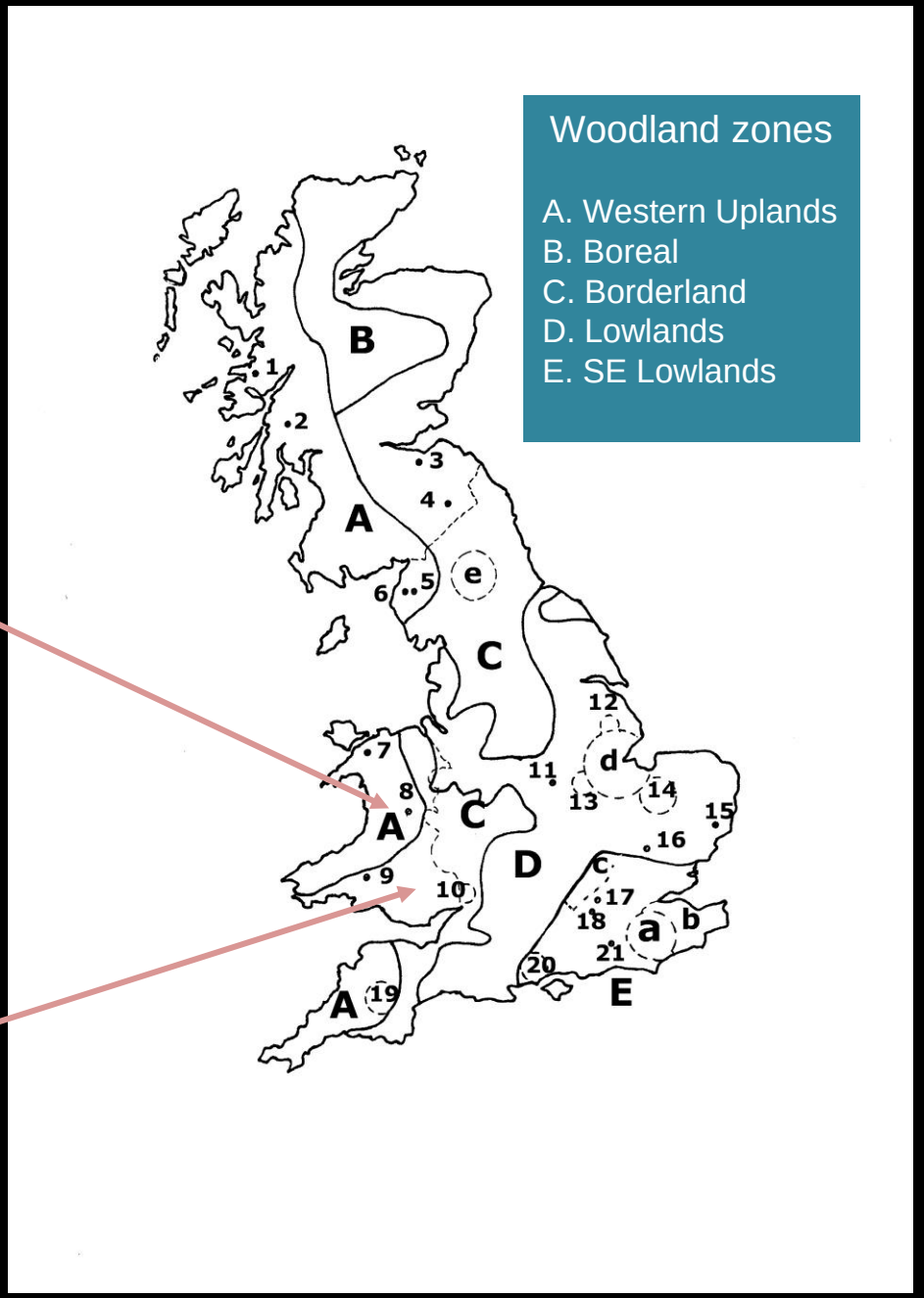
North and west Wales. Part of a zone extending the length of the western seaboard.

Oaks (mainly sessile), birches, hazel; ash-wych elm on more fertile ground

Borderland woods

South and east Wales. Part of a zone extending from NE Scotland to SW England.

Ash, wych elm, hazel, maple; birches, oaks; locally beech, both limes; diverse minor trees and shrubs



Upland oakwoods in Wales

The darkest zone shows where these oakwoods comprise more than 80% of all native woodland

Source: CCW, Priority habitats

Relative cover of upland oakwood
- 81 - 100%
- 61 - 80%
- 41 - 60%
- 21 - 40%
- 0 - 20%

0 15 30
kilometres

N

Coed Ganllwyd

Long-term history of Coed Ganllwyd

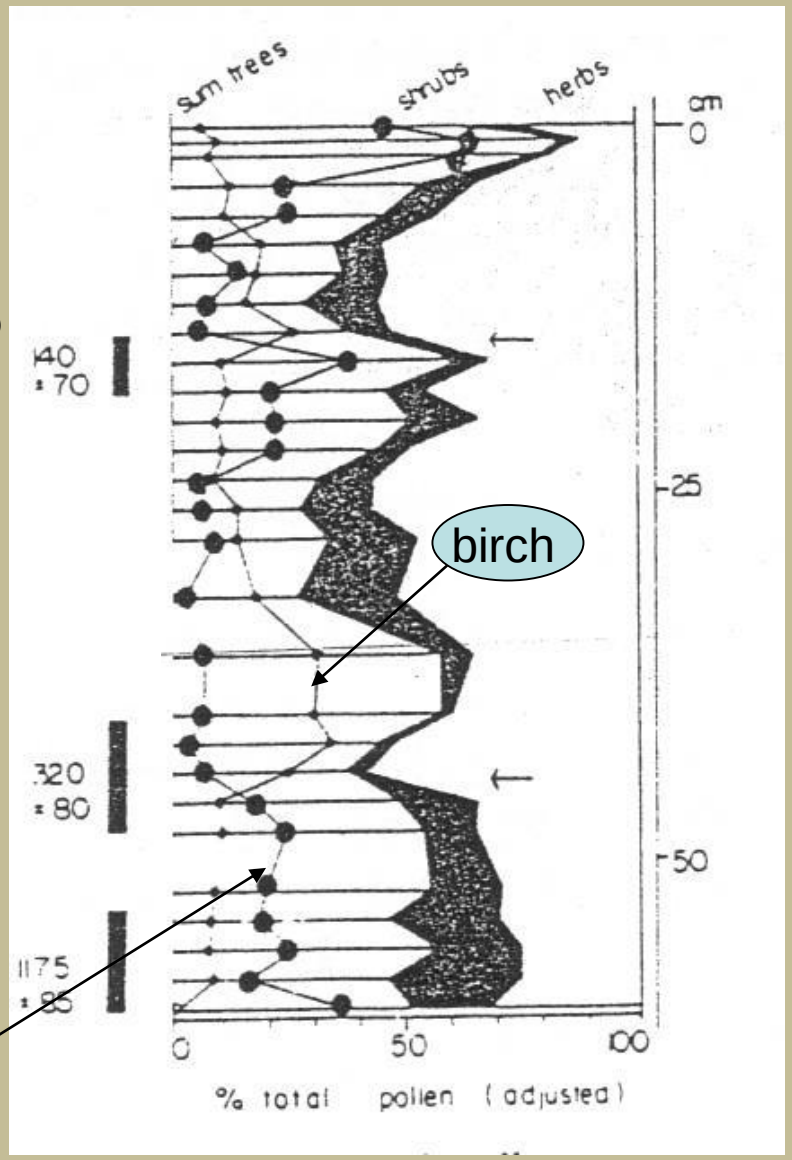
Rapid oak regeneration to all-time high

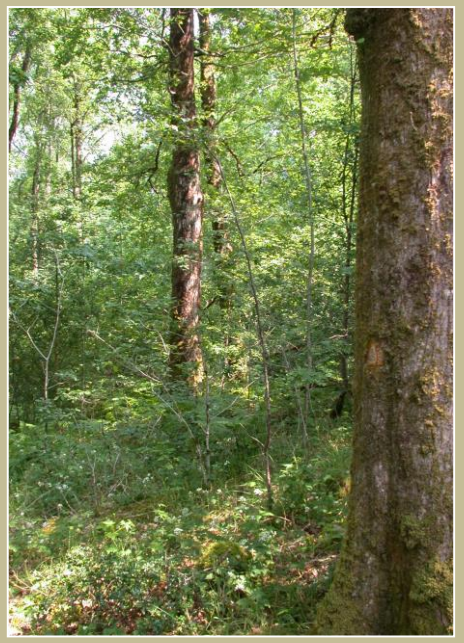
Oak decline and birch + shrub increase 140 years ago

Shrubs common amongst birch and oak. Coppicing recorded

Oak decline and birch increase 300 years ago

Other tree species form significant minority





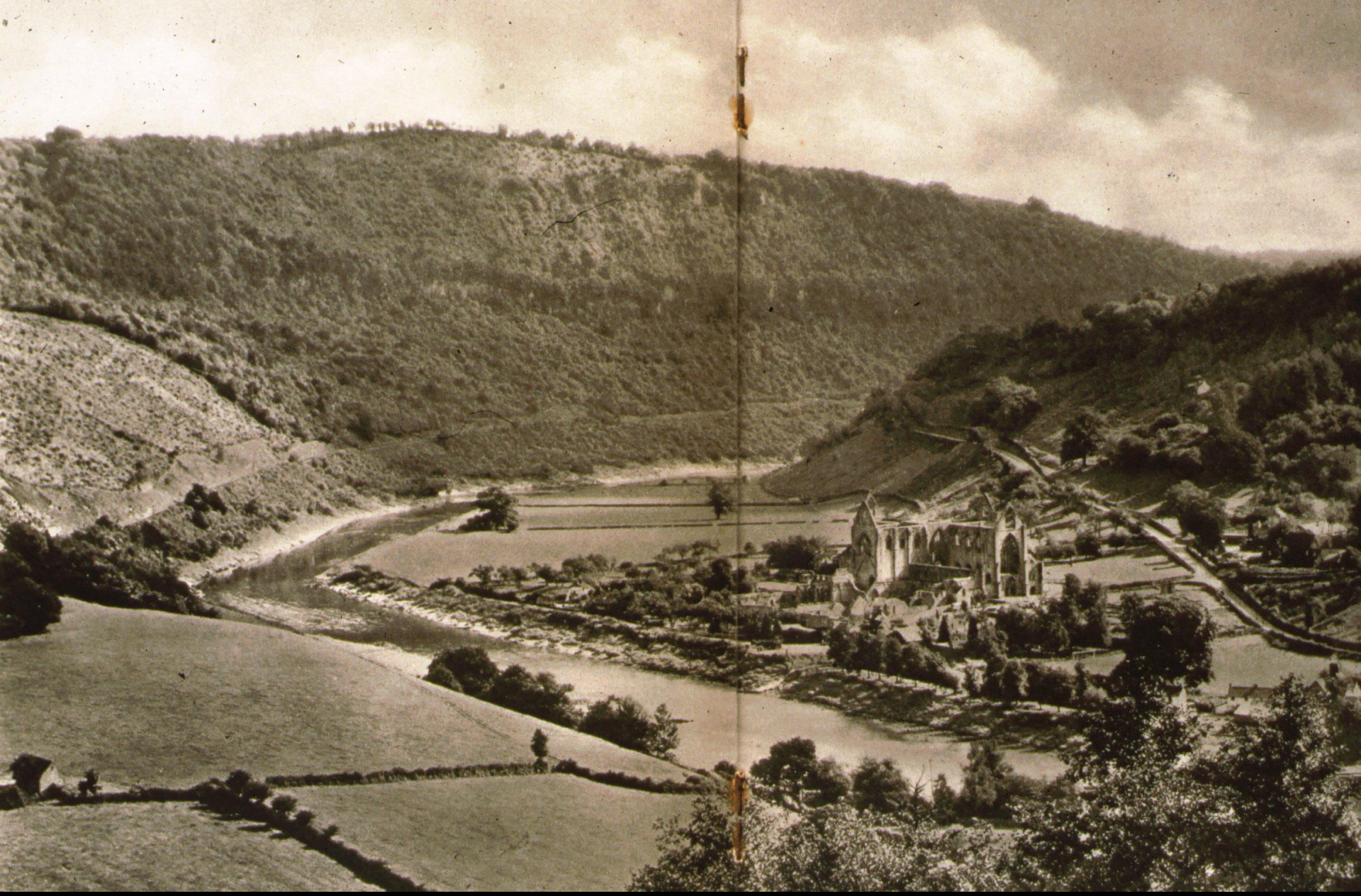
Oak-dominated stand, even-aged, originated c.1850.

No evidence of sustained grazing.

Many rare oceanic bryophytes

Monmouthshire: former pedunculate oak over hazel, field maple coppice-with standards


The upper Wye gorge
Lady Park Wood



Woods at Tintern, c.1900, still coppiced

Outline history of woodland in Wales

	Oceanic zone	Borderland zone
Pre-Neolithic	Oak and wych elm as common constituents of mixed woodland	Mixed woodland, including limes and beech
Wood pastures	Extensive wooded pastures with irregular patchwork of parkland, groves, pollards, coppice. Still widespread in 18C	Wooded pastures less extensive; much diminished by 17C
Coppice	Many oakwoods planted and coppiced in 18C and 19C.	Many woods coppiced at least from 16C to mid 20C
High forest	Many replanted oakwoods treated as high forest in 19C	Limited conversion to high forest beech woods
Neglect	Largely unmanaged and used as sheepwalk in 20C	Coppicing widespread in early 20C, but largely died out by 1980s

Many sources, including: W.Linnard (2000), *Welsh Woods and Forests, a history*

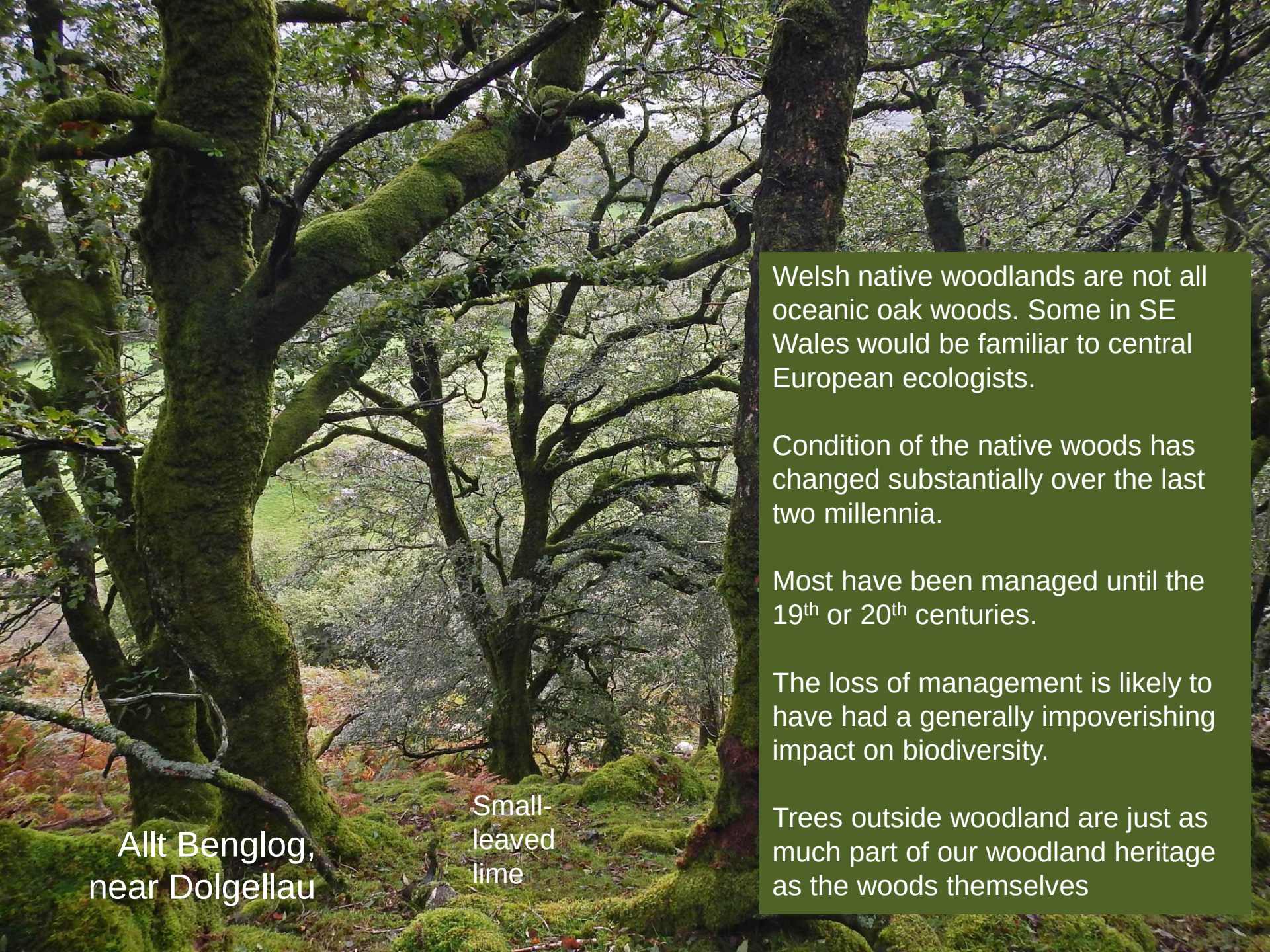
Sunart wood-pasture

Decline in woodland plants

Whole wood, 1940-1979: 164 species;
but only 112 in 2012-2015

Sample plots, 1979-2009:
- at 8m^2 scale, decline by 50%
- at 200m^2 scale, decline by 27%

Lady Park Wood



Welsh native woodlands are not all oceanic oak woods. Some in SE Wales would be familiar to central European ecologists.

Condition of the native woods has changed substantially over the last two millennia.

Most have been managed until the 19th or 20th centuries.

The loss of management is likely to have had a generally impoverishing impact on biodiversity.

Trees outside woodland are just as much part of our woodland heritage as the woods themselves

Allt Benglog, near Dolgellau

Small-leaved lime

Looking towards Brecon
from the path to Pen y Fan

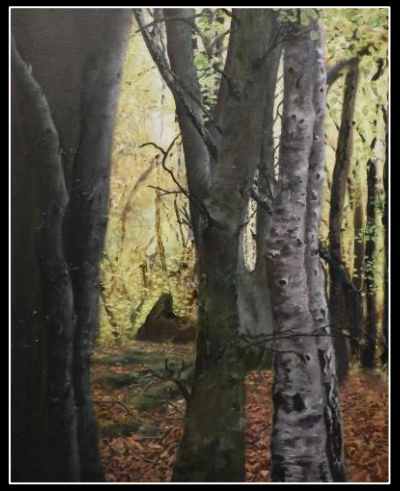
Part of Monmouthshire

Cwm Nantcol, near Llanbedr

Near Machynlleth


Restoration of management at a moderate intensity is likely to be beneficial for biodiversity

Coed y Brenin



The Arborealists in Lady Park Wood