

Assessing and addressing the impacts of ash dieback on UK woodlands and species of conservation importance

Case study 7 : Coed Wen



Case study key facts

Total area of woodland: **16 ha**

Proportion of ash in canopy overall: **90%**

Woodland structure: **neglected coppice with standards**

NVC: **W8**

Vulnerable ash-associated species: **2**

Alternative trees and shrubs: **none in the stand and privet should be introduced**

Management: **establish transplants in recently felled coppice coupes**

Site and Location

Name
Country
Local Authority
Landscape context

Coed Wen
Wales
Newport
The woodland is on a south-east facing slope surrounded by pasture to the west and arable land to the north and east.



Densely stocked area of stand with sycamore, cherry and ash stems which regrew following a coppice cut in 1980 (photo R Harmer).

Site Characteristics

Woodland area

16 ha

Woodland type

NVC W8

Soil type

Deep, fertile, neutral to calcareous base rich clay and clay loams which are poorly drained on the lower slopes

Lithology

Limestone

Stand structure

The stand is neglected coppice with standards with two small areas of recently cut coppice 1 to 4 years-old (c. 2 ha total). There are a few large, old standards which are unevenly distributed across the site; all of these are ash or oak. Within recent coupes large coppice stems have been retained as standards. Overstorey cover in uncut areas is almost continuous, about 90% of this cover is ash, mostly stored coppice. Other overstorey species include cherry (c. 5%), oak (c. 5%, all standards), and rare wych elm and field maple. A small amount of sycamore occurs at the north west of the wood. The understorey is dominated by hazel which is unevenly distributed throughout; hawthorn is common, but other species including wych elm, field maple, sloe and holly are uncommon. Natural regeneration of ash is common with juveniles (< 30 cm tall) being most noticeable in recently cut areas. Larger sapling ash regeneration occurs in some older natural canopy gaps. Ivy is abundant in the ground flora throughout; bramble occurs everywhere and grows vigorously after coppicing. There appear to be no deer at the site and there was no obvious damage to trees, shrubs or bramble.

Biodiversity interest

Designations

The site is an isolated block of woodland which forms part of an NNR within the larger Penhow Woodlands SSSI (42 ha) that has been recognised as a good example of ancient semi-natural woodland.

Vulnerable species likely to be affected

Only two ash associated species were identified both of which are moths, one has an obligate requirement for ash and the other is highly associated.

Other species of conservation interest

The known assemblage of species at this site is fairly typical of many ash woodlands including a few moths (e.g. small phoenix) and some vascular plants (e.g. herb Paris and wild daffodil) which are of interest.

Management

Historical

Coppice with standards with the final cut in 1946/47. Substantial areas appear to have been planted with cherry at the end of the 19th century. About half of the site was re-coppiced in two large coupes in 1980 when most of the elm present was also cut; removal of sycamore began.

Current

Reintroduction of coppice with standards began in 2009 using c. 0.25 ha coupes with an expected 25 year rotation. All oak standards are retained. Sycamore removal has ceased.

Long-term vision for site

Coppice with standards woodland managed for wildlife and conservation purposes.

Factors limiting delivery of management currently planned

Practicalities of harvesting and extracting on parts of the site with very wet clay soils.

Future methods of management

Potential response of ash associated species to ash dieback

One species of moth will disappear as it has an obligate requirement for ash. The other species (*Ennomos fuscantaria*) is highly associated with ash; it can use privet as an alternative, but this shrub is not present in the woodland.

Continuation of existing management with loss of ash occurring

Under the recently introduced coppice system the site is likely to remain woodland but with a much reduced overstorey cover provided by oak, cherry and other tree species present on the site. However if deer colonise the woodland then the system is likely to fail unless stools / coupes are adequately protected and appropriate deer management is carried out. A reduction in the amount of understorey cover, which is currently provided by regrowth of ash from coppiced stools, will adversely affect the conditions for natural regeneration within recently felled coupes. Cover from competitive ground flora species will become more abundant and persistent reducing the likelihood of tree seedling establishment. As established privet is not present on the site and it is unlikely to regenerate naturally under current or future conditions the population of *Ennomos fuscantaria* is likely to decline.

Management allowing for loss of ash but maximising persistence of ash related biodiversity

Continued use of coppice with standards, but with changes to current practice is probably the most appropriate method of management. Privet, the alternative plant for the ash associated species, is unlikely to regenerate naturally and planting will be the best method of establishment. Management to introduce privet should start before loss of ash begins to ensure continuity of habitat for the endangered moth. Small groups of transplants should be planted at suitable locations within coppice coupes (e.g. in gaps between coppice stools, not beneath standards) with the intention of establishing patches of privet scattered across the site. Privet has a preference for well drained soil and it may not flourish in the poorly drained lower slopes of the site. Planting should take place within a coupe immediately after felling and subsequent management should follow best practice to ensure establishment. The control of competitive ground flora vegetation and removal of shade provided by regrowing coppice are likely to be important operations to aid rapid establishment.

Factors likely to constrain delivery of future management to maximise persistence of ash associated species

Practicalities of harvesting and extracting on parts of the site with very wet clay soils. The possible colonisation of the woodland by deer.

Potential for use of generic methods to establish alternative species

As natural regeneration of privet is unlikely the felling with replanting (option 4) is the only one of these procedures that is likely to be successful.