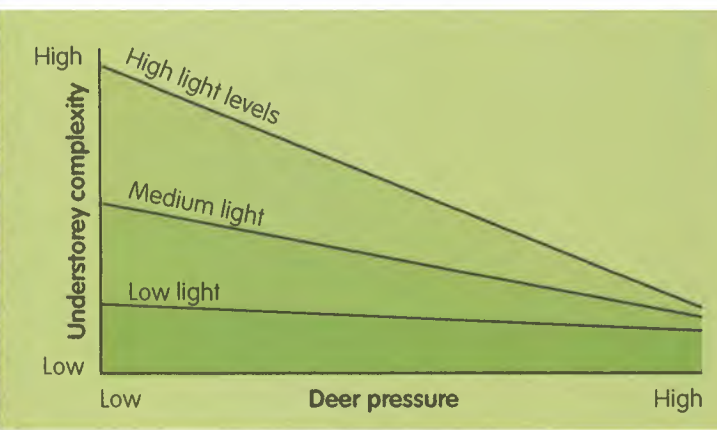




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Managing deer impacts is essential to improve woodland biodiversity in England

Deer are a part of our woodland ecology, but their populations are now higher and more concentrated across England than they have ever been. High deer numbers can reduce the value of the timber resource, stop trees regenerating, and endanger many of the plants and animals that also live in or use woodland.

What's going on?

Over the last few decades all six deer species have increased dramatically in range and number.

- There are fewer agricultural field workers to disturb deer
- Milder winters are leading to greater survival rates and breeding success
- Over-wintering crops give constant food supply

Some population control by culling is already happening, but it is not enough to reduce the impacts from deer and their populations are expanding everywhere.

Why is this happening?

- Deer have had no predator (apart from people) for over 400 years
- Since 1850 3 deer species have been introduced

What impact do deer have on woodland plants and animals?

Overgrazing reduces the diversity of ground flora particularly the most palatable species such as flowers that are a food source for insects and birds.

Reduction or loss of understorey reduces nectar and berry sources for insects and birds and nesting sites for birds and dormice

Browsing tree seedlings and coppice stools prevents the trees and the understorey being replaced causing a loss of diverse structure and nesting and roosting sites for bats, birds and sheltering sites for insects.

How do impacts of shade and deer interact?

Sustainable deer populations can help create a good shrub understorey that can hugely increase the biodiversity and habitat quality of a wood.

Too many deer will browse out the shrub layer, initially leaving a defined browse line, and ultimately removing the shrub layer altogether. However, in a dark shady wood, the light levels prevent the shrub layer from growing. The deer PLUS too much shade can be a problem even with low deer impact.

Deer population dynamics

Unmanaged herds in favourable conditions with an even sex ratio, can increase between 15 and 30 percent a year. If there are more females than males, as is often the case, the rate of growth can be considerably greater.

If too few are culled, or you underestimate the number of deer, the population quickly reaches the maximum carrying capacity of the landscape causing significant impacts to woodlands and the health of the deer themselves.

Different deer species have different impacts and management challenges

Red, sika and fallow deer have big ranges: when herds grow, they can cause significant damage quickly, and over large areas:

The best management is culling at a landscape level with co-operation across land holdings.

Reducing herd size should avoid dispersing the herd.

Deer change their behaviour and move long distances during the rut; this needs to be considered.

Roe deer move in smaller groups and are territorial so densities increase slowly but can still have impacts locally.

Muntjac densities can increase quickly and culling makes them more secretive.

There is no evidence that Chinese water deer have a negative impact on woodlands so careful monitoring is needed.

Deer management options

To identify the scale and nature of the problem you should do a deer impact assessment.

Culling is usually the most effective solution provided enough are shot. It needs to be co-ordinated across land holdings and take place every year. Selling the venison may alleviate costs.

Fencing is an alternative for those unwilling to cull and makes it possible to manage small areas of woodland. It also demonstrates the problem very visibly. It is more expensive than culling, will need maintaining and moves the problem rather than solving it.

Abundant Spring flowers in
a newly coppiced woodland
patch on the Isle of Wight.



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Further advice on deer management can be
obtained from the Deer Initiative at:
www.thedeerinitiative.co.uk

For details of grants to assist with the
management of deer:
[www.gov.uk/topic/farming-food-grants-
payments/rural-grants-payments](http://www.gov.uk/topic/farming-food-grants-payments/rural-grants-payments)

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Managing deer for woodland biodiversity

The England Woodland Biodiversity Group



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