

# Isle of Wight Deer Position Statement

## Isle of Wight Biodiversity Partnership, September 2014

### ***History***

Although deer have not been native on the Island for many hundreds of years, the archaeological record shows us that that was not always the case. Indeed, at the time that the Island was joined by a land bridge to the mainland, it is to be expected that it would have shared much of the same mammalian fauna as the rest of the nearby land mass.

Neolithic and late post-medieval archaeological finds to date have provided a poor understanding of the historic mammalian fauna of the Island. However, there is strong evidence for Red Deer being well established as a native species on the Island up to the late medieval period. The evidence for Roe Deer rests solely on an antler of Roman origin but archaeological deer bones have generally not been identified to species and it is likely that Roe Deer were also present during this period.

By the time of the Middle Ages, in common with the rest of southern Britain, deer seem to have died out, apart from Fallow Deer that were introduced for sport into a number of deer parks and hunting grounds for the benefit of the landed gentry.

The pattern nationally is that, as farmland advanced, deer declined. By the Middle Ages, Red Deer were no longer common in England and, with the decline of the Forest system, almost died out in England. By the Middle Ages, Roe Deer had declined to a greater extent than Red Deer. However, within the last hundred years, both Red and Roe Deer have re-colonised much of England and are now more abundant than they were in the heyday of the Forest system.

In contrast to the mainland, wild (and feral) deer were unable to re-colonise the Island's countryside. The upshot of this is that the Isle of Wight and its habitats have evolved in the absence of a population of deer for at least five hundred years, and probably longer, making this a unique situation.

The keeping of deer in captivity, for example in deer parks or farms, and the individual deer that escape from captivity from time to time as a result of deliberate or accidental releases has had no significant impact on this situation.

### ***Impacts on Biodiversity***

The Island's woods have a rich native woodland fauna. The full complement of mammalian species is no longer found in any other woodland in the UK and includes Red Squirrel, Hazel Dormouse, Bechstein's Bat and Barbastelle Bat. These have evolved over a period of several hundred years in the absence of significant grazing pressure and in the absence of Grey Squirrels.

Whilst there is as yet no evidence to demonstrate a direct link between the presence of deer and the long-term survival of any of these species, the impacts of deer upon woodlands are well documented.

Grazing pressure has a clear impact upon the regeneration of both woody and herbaceous plants and the degree of impact will depend upon the level of grazing pressure and the deer species involved. Sustained heavy grazing pressure will lead to a suppression of the herbaceous woodland flora, a severe reduction in natural regeneration of woody species and significant damage to some canopy and understorey species. Over time, the woodland composition will change. Anything other than light grazing pressure will result in a modification of the woodland ecology which is likely to have impacts upon a whole range of woodland dependent flora and fauna.

It has been suggested that there are ecological advantages of grazing at low densities – preventing scrub encroachment in open habitats and actively increasing diversity within woodlands where grazing is at comparatively low levels. (1)

The balance of opinion in lowland England appears to be that the damage to woodland biodiversity caused by deer outweighs any possible benefits. By the end of the 1990's, grazing and browsing had become recognised as a serious constraint on conservation management of British woodlands. The 2003 DEFRA report Current and Future Deer Management Options stated “English Nature consider deer damage the single biggest issue in lowland woodlands”(3),

### ***Forestry Impacts***

All species of deer eat tender leaves and plant shoots and leaves. Most trees are eaten but broadleaves, especially cherry, ash, willow, hazel and rowan are strongly preferred. Red, Sika and Fallow Deer will peel and eat bark. High densities of deer can prevent woodland regeneration and destroy shrub layers, especially freshly cut coppice. Some deer will feed selectively on important woodland flora.

Newly planted trees and recently coppiced areas will need protection from grazing deer if they are to be successful. This increases the economic cost of forestry operations. Forestry on the Isle of Wight is already disadvantaged by the transport costs of exporting timber, but this is to some extent counterbalanced by the lesser cost of woodland establishment and re-growth in an environment where the cost of mitigating deer damage is not a factor. Therefore the presence or anticipated presence of deer, even if they cause little damage, can have the effect of discouraging investment in forestry and woodland management.

To give some idea of the cost:benefit analysis, figures from the Forestry Commission for Scotland indicate that the 2009/10 cost of protecting the FCS Estate (600,000 ha, approximately 40% of Scotland's commercial forestry) was £10.5 million, with an income of £1.1 million derived from venison and stalking lets. (5)

## ***Wider Economic Impacts***

### **Damage to agriculture.**

Winter cereals are now grown more extensively, providing an important food source for deer. Deer in large numbers can cause damage to crops, especially rape, kale and high value crops such as turnips, carrots and beans. Ripening cereal crops may be eaten or trampled down by deer which often lie up in it during the day. Fallow deer particularly are well known for making tracks through, and sitting in, standing cereal crops, which can open crops out to wind-blow(6). Winter cauliflower crops around Chale have been targeted by escaped red deer.

Gardeners, market gardeners and commercial fruit growers may experience extensive damage, as vegetables, soft fruit and flowering plants are very attractive food for deer.

### **Road Traffic Impacts**

There are estimated to be up to 74,000 deer-vehicle collisions every year across the UK. They present a major animal welfare problem and lead to up to 700 human personal injury accidents and 10 to 20 human fatalities every year. It is estimated that around 11,000 privately insured vehicles are likely to suffer significant damage each year as a result of collisions, with commercial vehicles affected at a probably similar level. Anywhere between 20% and 30% of collisions will result in deer being injured but not killed. They may suffer for prolonged periods before eventually dying. Traffic collisions are the major cause of annual mortality among wild deer, aside from deliberate culls. (4)

### **Deer and Disease**

The risk and cost of deer-to-livestock disease transmission has not been calculated, but these are likely to rise as local deer densities increase. Deer are believed to be of low risk in the spread of bovine tuberculosis and foot and mouth disease. However, they may aid the spread of bluetongue by acting as a reservoir in which the virus can over-winter, and in which new viral strains can establish. In Belgium, the incidence of red deer exposed to bluetongue has risen from 0.2% to 40% in the past 5 years. The presence of bluetongue in wild deer in the UK would alter the proportion of livestock requiring vaccination to ensure a successful control programme. (2).

Other diseases carried by deer that affect livestock include internal parasites such as liver flukes, lung worms and bowel worms; red water fever, and Johne's disease. The potential for deer to transmit these diseases to livestock depends on the species of deer and the disease in question. For example, fallow deer pose the greatest risk of disease transmission because they graze in pasture and congregate in feeding sites.

Deer are likely to be a contributing factor in the current increase and spread of ticks. These can carry diseases that infect humans, such as tick-borne encephalitis, which are predicted to become more prevalent in coming years due to climate change. However, although formerly implicated in the increasing incidence of tick-borne Lyme Disease in the UK, there is now some evidence that deer are not the sole cause of its spread.

## **Wild Deer as a Resource**

Wild deer are a natural economic and social resource. They and their management contribute directly and indirectly to the economy through professional and recreational stalking, the supply of products such as rifles and fencing, the venison trade, and benefits to tourism, for example through stalking holidays.(1)

The importance of deer as a resource varies across the UK. In Scotland, sustaining wild deer for sport is a primary management objective across much of the Highlands, and is estimated to contribute over £170 million to the economy. Deer management provides the equivalent of over 2,500 full-time jobs in Scotland which are an important component of rural employment.

In England, Wales and Northern Ireland, deer are rarely primary management objectives and the contribution that deer make to the economy is not significant enough to ever have been measured in the same way as Scotland (2).

## **Venison Industry**

The venison industry is a product of deer management and recreational stalking. The sale of venison tends only to defray the costs of deer management, rather than to drive it. Despite the fact that wild venison is a very low-fat, free-range meat, demand amongst UK consumers is low. For example, up to 70% of venison produced is exported from Scotland at certain times of year. Academics researching the socio-economics of deer believe that an important factor limiting the venison market is a prevailing negative attitude towards game meat among the general public (2).

## **Conclusions**

Island woods are a precious resource with a character which is distinct from woodlands on the mainland. One of the most significant factors in the establishment and maintenance of this woodland resource is the absence of an established population of any species of deer.

There are overall benefits and costs to living and working in an environment where wild deer are established. In terms of biodiversity, forestry and agriculture the net effect is negative. Benefits, where any can be seen, are confined to public enjoyment; the provision of opportunities for commercial or recreational stalking, and venison processing.

Even imagining that deer caused no problems or damage, it is unlikely that any of these benefits could realistically be delivered on the Isle of Wight in the foreseeable future through a wild deer population. The landscape and particularly the land ownership patterns of the Island do not lend themselves to the large scale cooperative management methods that would be needed for a sustainable deer industry. What is more, there is clear evidence, particularly from Scotland, of the costs and risks of harbouring a wild population of deer. The clear advantages of a deer-free Island are more desirable than the very limited benefits and considerable costs of a wild deer population.

## ***IW BAP Position Statement***

**Goal:** to maintain the Isle of Wight's woodlands and wider landscape as an environment free from a breeding population of wild deer of any species.

**Policy:** to discourage the establishment and expansion of captive deer populations; and to encourage and support good husbandry and fencing of existing captive herds to minimise the possibility of escape

**Policy:** to support action to cull, recapture or otherwise remove any individual deer found in the wild

**Policy:** to record, assess and monitor any reports of wild or feral deer, and to review this position statement within five years

## ***References***

1. Putman, R. (2012). Scoping the economic benefits and costs of wild deer and their management in Scotland. Scottish Natural Heritage Commissioned Report No. 526.
2. Parliamentary Office of Science and Technology (2009), POSTnote 325
3. Wilson, C. J. (2003) Current and Future Deer Management Options, Report on behalf of DEFRA European Wildlife Division.
4. Langbein, J. (2007), National Deer-Vehicle Collisions Project : England 2003-2005.
5. Forestry Commission Scotland Woodland Expansion Advisory Group (2011), Briefing Paper WEAG 8e.
6. The Deer Initiative (2008), Fallow Deer.

## ***Citation***

This document may be cited as follows

- Isle of Wight Biodiversity Partnership, (2014); Isle of Wight Deer Position Statement.

This BAP Position Statement was agreed by the Isle of Wight Biodiversity Partnership in September 2014. Organisations represented on the IW BAP at that time included

- The Isle of Wight Council
- Natural England
- Forestry Commission
- Environment Agency
- Wight AONB
- Hants and Isle of Wight Wildlife Trust
- Country Land and Business Association
- RSPB
- Natural Enterprise
- Arc
- Peoples Trust for Endangered Species