

Wildlife Trusts Wales - A Possible Role For The Public Estate

INTRODUCTION

1. The Public Forest Estate is a tremendous national asset loved by the nation. It has the potential, if managed sustainably, to deliver extensive benefits for both people and wildlife and at a local and landscape scale.
2. However, to achieve this, the estate has to be seen as much more than just a vehicle to just to grow wood for either wood products or energy. Instead, an ecosystems based approach needs to be adopted to recognise the potential for the estate to act as a carbon sink, to increase tourism, to alleviate flooding, to enable recreation and to increase well-being and biodiversity. We have an opportunity to make a difference to the quality of life for the citizen of Wales, not just today, but tomorrow and for future generations - emphasising the 'right tree in the right place principle'.
3. **This inquiry is an opportunity to lead a new era in forestry management in Wales, one where green infrastructure and the multifunctional benefits it brings are grasped.** If not, we will have let a pivotal moment slip through our fingers.

FORESTRY BENEFITS

4. As one of the most important components of green infrastructure (including trees, woodlands and wildlife friendly open space), forestry can provide numerous environmental, economic and social benefits, contributing enormously to the health and welfare of everyone. For example:
5. **Economic benefits** including flood management and alleviation to reduce the risk of flooding, enhancing property values (property uplift of up to 34%), and increasing the draw of the area to local visitors and tourists. Other examples include example,
 - a) Coed y Brenin was the first forest to be developed for the sport of mountain biking and to this day retains its reputation as the sport's premier location. However, it trades not only on its forest location but on the *"breathtaking scenery, with views across to Cadair Idris, glaciated valleys, wild untamed rivers, an expanse of forest and all in the heart of Snowdonia National Park"*.
 - b) Other opportunities include market access through certification schemes that reassure the environmentally-aware customer; long-term health and viability of the managed forest ecosystem; reduced costs of intensive management.
 - c) Visitor numbers to Nant Yr Arian before **red kite feeding** (1999) were approximately 30,000 per year - Visitor numbers after 5 years of feeding project (2004) were approximately 110,000 per year (this was before the opening of the new centre and bike trails) (NRW pers comm).
 - d) The Wildlife Trusts **Dyfi Osprey project at Cors Dyfi was a confer plantation but now is a mosaic of wetland habitats that attracts 40,000 visitors per year, bring up to £500,000 to the local economy per year** and generates over 1.7m unique visits from 50 countries to their live streaming of nesting ospreys.
 - e) The Wildlife Trusts and NRW are looking **reintroduce beavers to Wales**. Among the many potential benefits of a beaver reintroduction was as an attraction for wildlife tourism. According to a study by University of Oxford, **a beaver release would bring up to £2 million to the local economy**.
6. **Environmental benefits** including climate control through air cooling in summer months, acting as a carbon sink, provision of habitats and migration routes for wildlife, reduction of surface water flooding and filtration of pollutants. Coniferous woodlands are last refuges of some iconic Welsh wildlife such as red squirrels and black grouse. However, deciduous woodlands are significantly more important for biodiversity. Trees next to rivers and streams also reduce water temperature, which increases oxygen levels and the right trees in the right place help to improve biodiversity including commercial spawning grounds. Strong evidence to support the use of broadleaved woodland creation in appropriate locations

is presented in the report published by the Forestry Commission and Environment Agency in July 2011 "*Woodland for Water*".

7. **Social and cultural benefits** including outdoor areas for recreation, transport, education and relaxation. There is a fundamental value to biodiversity, and its preservation for future generations – a moral or ethical argument linked with concepts of stewardship.
8. **Health and well-being** - It is well understood that views of trees and nature are known to help significantly improve mental wellbeing (Kaplan and Kaplan, 1989) and also help with recovery from illness (Ulrich, 1984). It has been shown that humans derive pleasure from trees (Lewis, 1996). Other research has also shown that outdoor spaces with trees facilitate greater interactions among local residents, which improves neighbourhood socializing (Kou *et al.*, 1998). In England, they are working on **NHS Forest** where they look to make sure that health centres are also environmental health centres. The Wildlife Trusts are working with NHS Cymru to bring this concept into Wales.

IMPOSING FORESTRY

9. Coniferous, non-native plantations can have a detrimental impact upon our water supply, biodiversity and our landscape. Poor forest plantation management can lead to degradation of riparian habitat, soil erosion, nutrient runoff, pollution from pesticides, exacerbation of surface water acidification and flooding.
10. Conifer plantations can be dark, imposing places that have little wildlife value except for a few notable species such as red squirrel which use them as refuges from grey squirrels. Those plantation forests that do have wildlife value are often those conifer plantations have been planted on former ancient semi-natural woodland sites following the clearance of broadleaved species. Therefore, where conifers have been planted on an ancient woodland site, evidence often remains of the former plant woodland communities especially around woodland rides or glades where light is allowed to penetrate. Where conifer plantations are planted on or adjoin heathland, clearings are also used by other UK BAP priority species such as the nightjars and woodlarks but again, this is due to the remnant or nearby habitat rather than the plantation¹.

FORESTRY POTENTIAL

11. There is much more to do to build on the potential of the Public Forest Estate and Wildlife Trusts Wales are calling on the Government to invest in Welsh woods and forests to secure nature's recovery. Our forests are an important element of what needs to become a resilient ecological network across Wales.
12. Conifer woodlands, which cover 12% of the land area of Wales include significant areas on former ancient woodland sites and internationally important open habitats such as peatland. In some places there is a legacy of over-emphasis in commercial forestry on land better suited to other public benefit (such as on blanket bog / heathland / deciduous landscapes). **This represents huge potential for large-scale habitat restoration and ecosystem service delivery if they are restored to their original wildlife-rich state of heathland, bog or native deciduous woodland.**
13. Indeed even the current public forest estate already includes a large amount of land that is not wooded. Many of the environmental assets that are currently cared for by the NRW are open, lightly-wooded ecosystems as well as wetlands and water bodies. In some areas NRW and partners including the Wildlife Trusts are restoring open habitats such as the Tywi Forest Wildwood².
14. The Public Forest Estate has the potential to help achieve the objectives set out in The State of Nature report, Biodiversity Action Plans, the Pollinator Action Plan and the National Ecosystem Assessment.
15. A positive future for the public estate would be to ensure it gives nature; people's enjoyment of woodlands; and sustainable woodland management a higher priority. This raises a number of questions,
 - a) Is there a better use(s) for that forested or un-forested parcel of land (recreation, tourism, flood alleviation, landscape, deciduous forest, reversal of habitat fragmentation and isolation, biodiversity increases)?
 - b) Could techniques be used to promote biodiversity potential of that woodland?;

¹ HUMPHREY, J.W., FERRIS, F. AND QUINE, C.P. eds. (2003). *Biodiversity in Britain's Planted Forests*. Forestry Commission, Edinburgh. i-vi + 1-118pp

² <http://news.bbc.co.uk/1/hi/wales/8239249.stm>

- Thinning in both upland and lowland forests can promote greater understorey development as a result of improved light, moisture and temperature conditions
 - retention of a greater proportion of stands beyond financial maturity would help improve the biodiversity of upland conifer forests (Shelterwood) or Low Impact Silvicultural systems (LISS) particularly continuous cover – promoting the feel and wildlife of old growth forests.
 - restoring peatland or heathland habitats on unproductive woodland
16. However, commercial forestry, historically, is one of the areas of work that has been extraordinarily single-output led and single minded about their mission. For example, the Mid Wales Red Squirrel Project has demonstrated for many years how red squirrel conservation can be achieved by tweaking forest management and Forest Design Plans without negative impact on the primary aims of the woodland (i.e. income through commercial forestry). However, despite this it is very hard to get the necessary changes implemented.
17. Whilst there have been improvements with increasing recognition of the importance of leisure and tourism, there is still work to do to truly embrace multiple outcomes. For example, ‘we’re doing red squirrel work in north Wales so we don’t need to do it in mid Wales’ or ‘we’re doing all our open habitat restoration in the Tywi Forest so in this area we’re just doing commercial plantation’.
18. Each area, or each forest should look to achieve multiple benefits.

COHERENT OVERALL STRATEGY FOR THE PUBLIC ESTATE

19. The Public Forest Estate should be an exemplar of sustainable management. A role for the public forest estate should emerge from a coherent overall strategy for the country’s natural environment. This concept is set out in A Living Wales³, to be enacted through the proposed Environment Bill and purpose of NRW to take an ecosystems based approach to land management.
20. Within this, the public forest estate should be one aspect of the wider public estate (i.e. not just the forests) including other public land such as; MoD estate, NRW wider estate, Welsh Government land holdings, Local Authority estates and farms, NHS Wales land holdings, Welsh water / Dwr Cymru (Glas) owned land and reservoirs.
21. A statement is therefore needed that sets the scene for the role of the public estate. This should fit in with the drivers influencing the Living Wales agenda, i.e. the Lawton Review, National Ecosystem Assessment, The State of Nature, The Convention for Biological Diversity, and the Pollinator Action Plan.
22. If the themes of these initiatives are picked up then a role for the public estate could be as follows:

The purpose of the public estate is to contribute to realising the full potential of Wales’s current and future ecological network, so that it provides an enhanced level of the ecosystem services (multi-purpose land management) on which we depend.

23. This sets the context or purpose of a land management strategy. A public estate will best deliver those aspects of ecosystem services that are not adequately valued in traditional economic terms and so not easily delivered by the private sector. A public estate strategy should include the following elements:
- support services, particularly the underpinning ecological processes such as soil formation, nutrient cycling and the biodiversity and the ecological interactions that form ecosystems
 - cultural services such as access, recreation, sense of place and wild species.
 - regulating services such as local climate amelioration, flood risk reduction and water resource management.
 - the development of Native Broadleaved Commercial Forestry in Wales, as a long term venture, only the Public Estate could really invest in it, but once operational (in 60-80 years time) is far more lucrative than conifer commercial forestry.
24. In practice this will require space for nature, therefore
- the public estate should be a major contributor to the areas based Natural Resource Management Plans particularly in relation to roles not well achieved by the private sector.

³ Sustaining a Living Wales A Green Paper on a new approach to natural resource management in Wales Welsh Government Consultation Document Date of issue: 30 January 2012

- A public estate should develop policy and practice for ecological restoration and sustainable management as a major contribution towards delivery and to demonstrate methods for wider adoption.
 - Managers of the public estate will have a particular requirement and ability to work in partnership with private and the third sector to deliver a coherent ecological network.
25. The expertise within NRW and the environmental NGOs could be utilised for multiple ecosystem service delivery in a wider public estate. The tradition and skill-set of current NRW staff is likely to be well-placed to develop management approaches that adopt a wider economic valuing of the goods and services (wider than just timber) that are provided by the public estate.
 26. A positive future for the public estate should be to deliver ecosystem an ecosystem approach, based on the Convention of Biological Diversity 12 principles. The public estate should deliver multiple goods and services.
 27. It is critical that the Government takes this opportunity to release this potential within the Public Forest Estate.

RECOMMENDATIONS

28. A coherent ecological network (Space for Nature) is the physical means by which ecosystem services are delivered. Biodiversity, physical attributes and natural processes are what constitute ecosystems and the products we get (timber, recreation, health, sense of place, wild species, economic development etc) are the services we get from functional ecosystems.
29. We need to think differently about how we can make the most of the smartest, greenest resource we have. It is not just NRW budgets that should be used, budgets from other portfolios including health, education, infrastructure, tourism and business development budgets within Welsh Government should also be properly incorporated.
 - a) The Public Forest Estate primary focus should be on the provision of other public benefits including nature.
 - b) There should be more opportunities for people to enjoy and be inspired by woodlands and forests – by increasing public awareness of and involvement with woodland biodiversity conservation
 - c) The Public Estate (forested or un-forested) should be an exemplar of sustainable management
 - d) Forestry should be part of a coherent strategy for all public land that achieves multiple uses
 - e) Natural regeneration and tree planting should be encouraged to buffer, extend and link existing woodlands. In all cases, a ‘right tree in the right place’ principle should be adopted along with the prevention of further entry of alien and invasive organisms.
 - f) Existing coniferous woodlands could be richer in wildlife and should be brought to life by appropriate, sustainable woodland management. For example, through increasing tree species diversity, increasing structural diversity, extending rotation lengths, introducing alternative silvicultural systems such as shelterwood and Low Impact Silvicultural systems (LISS)
 - g) NRW should look to mimic natural processes utilising their knowledge of natural disturbance regimes such as increasing open space, stand retention, thinning, and incorporation of deadwood. This can increase habitat quality and help to reverse declines in woodland wildlife.
 - h) Areas of heathland, blanket bog, deciduous forests, meadow and other internationally important habitats planted with conifers must be restored with urgency!
 - i) Reintroductions of lost species, e.g. beaver should be prioritised.
 - j) There should be stronger protection and correct resourcing for existing woodlands, especially ancient woodlands, and more urgency in the restoration of open habitats.
 - k) Conserve and where practical enhance the overall populations and natural ranges of native species, and the quality of wildlife habitats and ecosystems within woodlands especially internationally and nationally important and threatened species, habitats and ecosystems and of natural and managed habitats.
 - l) Ensure that the effects of tree planting (including those as part of the Welsh Government’s 100,000 ha woodland creation target) are fully evaluated to maximise benefits whilst avoiding negative impacts e.g. reversing fragmented ancient woodlands.
 - m) The Forest and Water Guidelines should be reviewed and strengthened to protect and benefit the water environment, including discontinuing forestry pesticide (cypermethrin) spraying and large scale clear felling.

- n) Any scheme receiving grant funding from the Welsh Government should have to follow the strengthened Forest and Water Guidelines.
- o) Better engagement between the forestry sector and NGOs should be promoted by NRW to assist collaborative working to improve the natural environment. This should include active input by NGOs into Forestry Management Plans – this may require some resourcing.
- p) Implement the recommendations of the report “*Woodland for Water*” to meet Water Framework Directive objectives
- q) A public estate should best deliver those aspects of ecosystem services that are not adequately valued in traditional economic terms and so not easily delivered by the private sector . For example, the development of Native Broadleaved Commercial Forestry in Wales, as a long term venture, only the Public Estate could really invest in it, but once operational (in 60-80 years time) is far more lucrative than conifer commercial forestry.