

Open Habitats Implementation Plan for The Forestry Commission, Thetford Public Forest Estate, 2014 Onward.

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Purpose

The plan details the policy and evidence base for the creation of open space in Thetford Forest from 2014. It provides the ecological, operational and economic rationales for the creation of 751ha of new priority open habitats.

Executive Summary

Government Policy

- There is a strong guide in government nature conservation policy for the re-creation of priority open habitats from afforested land where appropriate and practicable.
- This Government policy direction is driven by the UK Biodiversity Action Plan.
- A landscape approach to habitat restoration is now explicitly supported by Government through the adoption of the Lawton Report (2010) recommendations in the Government's Natural Environment White Paper (2011) and Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011).
- Regional and district spatial planning strategies recognise Thetford Forest as a core biodiversity area

Forestry Policy

- The framework for deforestation is embedded in the: When to convert woods and forests to open habitat in England: Government Policy, produced by the Forestry Commission (2010).
- The evidence base of current, planned and potential open habitats on the Public Forest Estate is provided in the report of Spencer and Edwards (2009)
- The mechanisms for the re-creation of open habitats on the public forest estate have been developed in the Forest Enterprise England's "A Strategy for Open Habitat Policy Delivery on the Public Forest Estate" (2013).

Forestry Standards

- Both the UK Forestry Standard (2011) and the UK Woodland Assurance Scheme (2012) require 10% of forest units to be open space for biodiversity, cultural or recreational purposes.

Thetford Forest Open Habitats

- Thetford Forest is situated in Breckland, East Anglia and is the largest man-made forest in lowland UK at 18,730ha
- Current open space in Thetford Forest totals 1,128ha (6.02%).
- Thetford has a diverse range of open habitats, ranging from ungrazed linear rides to extensive calcareous and acidic grassland grazing units and open wetland and fen areas. 320ha of lowland heathland and acid and calcareous grassland habitats were created in Thetford Forest in 2000.

- 17,653ha (94%) of Thetford Forest is designated for its national and international conservation interests, which are mainly associated with open habitats.
- Another 750ha of open space is required in Thetford Forest to meet with Forestry Standards.

Ecological Evidence Base

- To provide the evidence base for the open habitats plan, identifying which are the key species to conserve within Breckland, their management requirements and therefore how the open space should function, the Forestry Commission initiated a study in 2008.
- A commissioning partnership was formed, which published the Breckland Biodiversity Audit (BBA) (Dolman *et al* 2010).
- The BBA identified: At least 12,845 species have been recorded from Breckland; of these 2,149 are priority species for conservation in Breckland; 28% of all priority BAP species in the UK occur in Breckland; 72 species have their UK distribution restricted to or have a primary stronghold in Breckland.
- This confirms the exceptional biodiversity importance of Breckland to the UK, especially as Breckland represents only 0.4% of the UK land area.
- More priority species for conservation in Breckland depend on physically disturbed conditions in ungrazed and grazed contexts and these were considered significantly more at threat of extinction than other priority species
- The BBA and other supporting studies suggest the creation of 'Invertebrate Super Highways' between the key locations identified in the study and that these corridors should be unshaded and provide a continuity of bare sand, disturbed margins and early successional vegetation to support priority species.
- The open habitat network will be created through a programme of widening the existing forest ride infrastructure.

Planning Rationale

- The open habitat network will be integrated into the 12 Thetford Forest Design Plans (FDPs) in consultation with Forest Services.
- The creation of the new open habitat network will involve the spatial re-allocation, to the network of 501ha of open habitat currently planned in FDPs, but yet to be realised.
- Approximately an extra 250ha of open habitat will also be created bringing the total area of open habitat in the forest to approximately 1,879ha, equivalent to 10.03%.
- With 751ha of new open space to be allocated to widening rides by an average of 27m, to a width of 40m this would give a potential ecological network length in the region of 278km.

Operational and Implementation Rationale

- The open habitat network will be created over a number of years, dependent on funding and will be implemented via planned felling at economic maturity and opportunistically, felling before economic maturity, through the five year cycle of the forest thinning programme
- Following clear felling, all litter, brash and tree stumps will be removed to expose bare ground to be managed successional, on a three to six year cycle.
- The open habitat network will be maintained by normal forest operational activity and will provide areas for stacking and forwarding, increasing operational efficiency.
- The open habitat network will decrease road maintenance and increase the fire breaking capacity of the ride system.

Economic Rationale

- Forestry Commission staff costs for the creation of 750ha including plan design, contract supervision and monitoring and are estimated at £50,000.
- Felling before economic maturity will incur a revenue forgone cost. This cost will be dependant on the rate of plan implementation and the age at which crops are felled. Faster rates of implementation will incur higher costs.
- Post-harvest capital costs for the creation of 750ha, including archaeological survey and organic residue removal are estimated in the region of £3,500/ha.
- On-going management costs will be minimized as normal forest operational activity is anticipated to maintain the network habitats. This will require monitoring and review.

Design Methodology

- The open habitat network will be designed by a GIS analysis that identifies key biodiversity locations within and adjacent to Thetford Forest and prioritizes linkage routes between them.
- Important biodiversity sites are identified using key guild locations identified in the BBA , historic and extant locations of conservation priority plants and sites with conservation designations.
- Linkage routes are identified using biological and environmental data layers including soils, open habitats, forest ride, fire and utility routes and historic land-use. Routes on calcareous soils will be prioritised.
- The open habitat network will be designed during October 2014

Consultation

- A range of statutory, local government, conservation NGOs and other relevant stakeholders will comment on a draft plan during Autumn 2014 and Winter 2015 prior to approval of the final draft.

Evaluation and Monitoring

- Monitoring will inform of the plan's implementation and progress towards targets for priority habitat creation.
- Monitoring will provide an evaluation of the networks ecological functioning by considering its use by target species.
- On-going management of the bare ground succession will be monitored to ensure it qualitatively meets the needs of the target species.

Timing

- Plan production, including consultation will take place during Autumn 2014 and Winter 2015
- The plan should be approved Spring 2015.
- Implementation of the plan should take place from Summer 2015. The rate of implementation is dependent on cost incurred and funding availability.
- Evaluation reports will be produced 5 yearly.