EWCO grant woodland creation design plan (mock example)

Woodland Creation Design Plan

English Woodland Creation Offer (EWCO) Grant Application

Site Reference: WCP-2025-001
Application Date: 22nd September 2025
Applicant: [Applicant Name]
Site Name: [Site Name]
Grid Reference: [OS Grid Reference]
Total Area: [X] hectares

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1. Executive Summary

This Woodland Creation Design Plan outlines the proposed establishment of [X] hectares of new native woodland on [site location]. The project aims to deliver significant environmental benefits including carbon sequestration, biodiversity enhancement, natural flood management, and landscape connectivity whilst maintaining agricultural viability on surrounding land.

The proposed woodland will comprise predominantly native broadleaf species selected for their suitability to local soil conditions and climate projections. The design incorporates sustainable management practices and provides long-term benefits to local wildlife, water quality, and community access.

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2. Site Description and Assessment

2.1 Location and Context

The proposed woodland site is located at [location description], comprising [X] hectares of [current land use]. The site lies within the [relevant landscape character area] and forms part of the broader [river catchment/landscape designation].

2.2 Topography and Aspect

- **Elevation:** [X]m to [X]m above sea level
- **Aspect:** Predominantly [direction] facing
- **Slope:** Ranging from [X]% to [X]%
- **Notable features:** [Describe any significant topographical features]

2.3 Soil Conditions

Soil Type: [Dominant soil type based on soil survey]

- **pH:** [Range]
- **Drainage:** [Well-drained/poorly drained/seasonal waterlogging]
- **Fertility:** [Low/moderate/high]
- **Constraints:** [Any limitations such as compaction, erosion, or contamination]

2.4 Climate Data

- **Annual rainfall:** [X]mm
- **Growing season:** [X] days
- **Frost risk:** [Low/moderate/high]
- **Exposure:** [Sheltered/moderate/exposed]

2.5 Existing Vegetation and Ecology

Current habitat types:

- [Improved grassland/arable/rough pasture] - [X] hectares
- [Hedgerows] - [X] linear metres
- [Other features] - [Description]

Protected species records:

- [List any known protected species within 500m]
- [Reference to ecological surveys undertaken]

Designated sites:

- [Distance to nearest SSSI/SAC/SPA/RAMSAR]
- [Any local wildlife sites or ancient woodland within 500m]

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3. Design Objectives and Rationale

3.1 Primary Objectives

1. **Carbon Sequestration:** Establish woodland capable of sequestering approximately [X] tonnes CO_2 equivalent over [X] years
2. **Biodiversity Enhancement:** Create diverse native woodland habitat supporting local and regional wildlife priorities
3. **Natural Flood Management:** Reduce surface water run-off and provide upstream flood attenuation
4. **Landscape Integration:** Enhance landscape character and provide visual screening where appropriate
5. **Public Benefits:** Improve air quality and provide informal recreation opportunities

3.2 Design Principles

- **Climate Resilience:** Species selection considers projected climate change scenarios
- **Connectivity:** Design maximises ecological connectivity with existing woodlands and hedgerows
- **Edge Design:** Graduated woodland edges with transitional habitats

- **Access:** Sustainable public access incorporated where appropriate
- **Management:** Long-term management plan ensures woodland establishment and ongoing sustainability

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4. Species Selection and Planting Design

4.1 Canopy Species (80% of planting)

Primary Species:

- **Pedunculate Oak** (*Quercus robur*) - 30%
    - Provenance: UK sourced seed from local region
    - Spacing: 2.5m centres in groups of 5-15 trees
    - Justification: Native to site conditions, high biodiversity value, climate resilient
- **Ash** (*Fraxinus excelsior*) - 15%
    - Provenance: Disease-resistant varieties where available
    - Spacing: Mixed with other species at 2.5m centres
    - Justification: Suitable for soil type, declining locally due to disease
- **Silver Birch** (*Betula pendula*) - 15%
    - Provenance: UK native seed
    - Spacing: Pioneer species in groups on drier areas
    - Justification: Rapid establishment, improves soil conditions
- **Wild Cherry** (*Prunus avium*) - 10%
    - Provenance: Local provenance where possible
    - Spacing: Scattered individuals throughout plantation
    - Justification: High wildlife value, timber potential
- **Sessile Oak** (*Quercus petraea*) - 10%
    - Provenance: UK native seed from appropriate region
    - Spacing: Mixed with pedunculate oak in appropriate areas
    - Justification: Suited to more acidic soils, genetic diversity

4.2 Secondary Canopy and Understorey Species (15% of planting)

- **Field Maple** (*Acer campestre*) - 5%
- **Hornbeam** (*Carpinus betulus*) - 3%
- **Small-leaved Lime** (*Tilia cordata*) - 2%

- **Rowan** (*Sorbus aucuparia*) - 2%
- **Scots Pine** (*Pinus sylvestris*) - 2%
- **Beech** (*Fagus sylvatica*) - 1%

4.3 Shrub Layer (5% of planting)

- **Hazel** (*Corylus avellana*) - 2%
- **Elder** (*Sambucus nigra*) - 1%
- **Spindle** (*Euonymus europaeus*) - 1%
- **Guelder Rose** (*Viburnum opulus*) - 1%

4.4 Natural Regeneration Areas

Approximately [X]% of the site will be left for natural colonisation, particularly:

- Areas adjacent to existing woodland
- Wetland margins
- Steep slopes unsuitable for planting

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5. Planting Specification

5.1 Plant Stock

- **Size:** 40-60cm bare root transplants (60-80cm for oak species)
- **Quality:** Compliant with British Standard BS 3936
- **Certification:** All stock to be UK grown with Plant Health Certificate
- **Genetic diversity:** Minimum 5 parent trees per species lot

5.2 Planting Density and Pattern

- **Overall density:** 2,500 stems per hectare
- **Planting pattern:** Irregular groups with varying densities (1,100-4,000 sph)
- **Spacing:** Minimum 2m between plants, maximum 3m
- **Distribution:** 60% canopy species, 25% secondary species, 15% shrubs

5.3 Site Preparation

1. **Timing:** Ground preparation September-October preceding planting season
2. **Method:**
    - Selective herbicide application to reduce grass competition (glyphosate-based, applied under NPTC certification)
    - Subsoiling where compaction identified

    - No cultivation on slopes >20%
3. **Drainage:** Installation of land drains in waterlogged areas if required

5.4 Protection Measures

- **Tree guards:** 1.2m spiral guards or tubes for all plants
- **Stakes:** 1.2m treated stakes for plants >80cm
- **Fencing:** Stock-proof fencing around entire perimeter (post and wire with spring gates)
- **Rabbit protection:** Additional mesh guards in high-risk areas

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6. Habitat Creation and Enhancement

6.1 Woodland Rides and Glades

- **Total area:** [X] hectares (15-20% of woodland area)
- **Design:** Sinuous rides 8-15m wide with scalloped edges
- **Management:** Rotational cutting to maintain early successional habitats
- **Species:** Native wildflower seed mix on appropriate areas

6.2 Wetland Features

- **Ponds:** [X] small ponds (0.1-0.3 hectares each) in natural depressions
- **Construction:** Clay lining where necessary, shallow graduated edges
- **Planting:** Aquatic and marginal native species
- **Purpose:** Amphibian breeding, invertebrate habitat, water storage

6.3 Dead Wood Habitat

- **Retention:** All existing dead wood to be retained where safe
- **Creation:** Fallen log piles in sheltered locations
- **Standing deadwood:** Selected trees to be ring-barked after 10 years

6.4 Access Infrastructure

- **Footpaths:** 2m wide mown grass paths linking to existing rights of way
- **Interpretation:** 2 interpretation boards highlighting woodland development
- **Car parking:** Use of existing field gate access, no formal parking provision

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7. Establishment and Management Programme

7.1 Year 1 Activities

Autumn (October-November):

- Site preparation and herbicide application
- Fencing installation
- Tree and shrub planting (weather dependent)

Winter (December-February):

- Complete planting programme
- Install interpretation boards

Spring/Summer (March-September):

- Monthly establishment monitoring
- Spot weeding around newly planted trees
- Replacement planting as required (max 5% losses acceptable)

7.2 Years 2-5 (Establishment Phase)

Annual Activities:

- Vegetation control around trees (mechanical or chemical)
- Guard and stake maintenance/removal
- Fence maintenance
- Replacement planting (up to 10% total)
- Annual monitoring and photography

Management Interventions:

- Formative pruning of selected timber trees (Year 4-5)
- First ride cutting (Year 5)
- Pest and disease monitoring

7.3 Years 6-15 (Early Management Phase)

Management Activities:

- Selective thinning (removing 20-30% of stems)
- Ride management on 3-year rotation
- Coppicing of hazel areas on 7-year rotation
- Infrastructure maintenance

7.4 Years 16+ (Mature Management Phase)

Long-term Management:

- Commercial thinning opportunities assessment
- Continuous cover forestry principles

- Natural regeneration encouragement
- Veteran tree development programme

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8. Monitoring and Success Criteria

8.1 Establishment Success Measures

Year 1 Targets:

- 95% survival rate of planted trees
- Effective protection from browsing damage
- Minimal weed competition

Year 5 Targets:

- 90% establishment success
- Canopy closure beginning in high-density areas
- Evidence of natural regeneration

8.2 Long-term Success Indicators

Years 10-15:

- Development of woodland structure with distinct canopy layers
- Native ground flora establishment
- Breeding bird community appropriate to woodland habitat
- Natural regeneration of tree species
- Carbon sequestration targets being met

8.3 Monitoring Programme

Annual Monitoring (Years 1-10):

- Photographic monitoring from fixed points
- Tree survival and growth measurements
- Vegetation development assessment
- Wildlife observation records

Quinquennial Reviews:

- Comprehensive ecological survey
- Carbon stock assessment
- Management plan review and updating
- Stakeholder consultation

9. Environmental Benefits and Ecosystem Services

9.1 Carbon Sequestration

Projected Carbon Storage:

- Above-ground biomass: [X] tonnes CO_2 equivalent by year 50
- Below-ground biomass: [X] tonnes CO_2 equivalent by year 50
- Soil carbon enhancement: [X] tonnes CO_2 equivalent by year 50
- **Total estimated storage:** [X] tonnes CO_2 equivalent

9.2 Biodiversity Benefits

Habitat Creation:

- [X] hectares of native broadleaf woodland
- [X] linear metres of new woodland edge habitat
- [X] hectares of species-rich grassland in rides and glades
- Connectivity enhancement between existing habitats

Species Benefits:

- Breeding habitat for woodland birds (estimated 15-25 species)
- Foraging areas for bats and other mammals
- Invertebrate habitat supporting 200+ species
- Native flora development over 50+ plant species

9.3 Hydrological Benefits

Flood Risk Reduction:

- Reduced surface runoff by approximately [X]%
- Increased interception of rainfall
- Enhanced groundwater recharge
- Improved water quality through filtration

9.4 Social and Economic Benefits

Community Benefits:

- Informal recreation opportunities (provide examples: benches, loungers, sports equipment)
- Educational resource for local schools (provide examples: info displays with maps, tables, graphs and interactive educational materials)

- Landscape enhancement and property value improvement (provide examples: comparative RICS data, Zoopla, local councils)
- Local employment during establishment and maintenance phase (provide details of the skilled workers required to establish this new woodland)

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10. Risk Assessment and Mitigation

10.1 Establishment Risks

Weather-related Risks:

- **Drought:** Irrigation systems for first two years, drought-tolerant species selection
- **Flooding:** Drainage improvements, species selection appropriate to wet conditions
- **Storm damage:** Diverse species mix, gradual woodland edges

Biological Risks:

- **Pest damage:** Integrated pest management, resistant varieties where available
- **Disease:** Species diversity, appropriate spacing, monitoring programme
- **Browsing:** Effective fencing and guard systems

10.2 Long-term Management Risks

Climate Change:

- Species selection considers climate projections to 2080
- Genetic diversity maintained through varied provenance
- Adaptive management approach

Economic Risks:

- Diversified funding sources for long-term management
- Potential for sustainable timber income
- Grant funding for ongoing management activities

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11. Budget and Funding

11.1 Capital Costs (Years 1-2)

Item	Unit Cost	Quantity	Total Cost
Site preparation	£[X]/ha	[X] ha	£[X]
Tree/shrub stock	£[X]/plant	[X] plants	£[X]
Planting labour	£[X]/ha	[X] ha	£[X]
Protection (guards, stakes)	£[X]/plant	[X] plants	£[X]
Fencing	£[X]/m	[X] m	£[X]
Infrastructure	Lump sum	-	£[X]
Total Capital Cost			**£[X]**

11.2 Annual Management Costs (Years 3-15)

- Maintenance and monitoring: £[X] per annum
- Vegetation control: £[X] per annum (Years 3-5)
- Thinning operations: £[X] (Years 8-12)

11.3 Funding Sources

- **EWCO Grant:** £[X] ([X]% of total capital cost)
- **Applicant contribution:** £[X] ([X]% of total cost)
- **Additional grants:** [Details of any other funding sources]

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12. Compliance and Permissions

12.1 Statutory Requirements

- **EIA Screening:** Not required (site <[X] hectares)
- **Planning Permission:** Not required for forestry use
- **Environmental Permits:** None required
- **Protected Species Licences:** None required based on current survey data

12.2 Good Practice Standards

- **UK Forestry Standard:** Full compliance with all guidelines
- **Forest Stewardship Council:** Management principles adopted
- **Biodiversity Action Plan:** Contributes to local BAP targets
- **Water Framework Directive:** Management supports WFD objectives

12.3 Certification and Quality Assurance

- **Plant Health:** All stock certified disease-free
- **Contractor Certification:** NPTC qualified operatives for all specialist work
- **Insurance:** Full public liability cover for all activities
- **Health and Safety:** Risk assessments for all operations

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13. Conclusion

This Woodland Creation Design Plan presents a comprehensive approach to establishing [X] hectares of high-quality native woodland that will deliver significant environmental, social, and economic benefits. The design incorporates best practice in species selection, establishment techniques, and long-term management to ensure the woodland develops into a resilient, biodiverse ecosystem.

The project directly supports national and local policy objectives for climate change mitigation, biodiversity conservation, and sustainable land management. Through careful planning and committed long-term stewardship, this woodland will provide benefits for current and future generations whilst contributing to the UK's net-zero carbon commitments.

The applicant is committed to delivering this project to the highest standards and welcomes the opportunity to discuss any aspects of this proposal with Natural England officers.

Appendices

Appendix A: Site Location Plan (1:25,000 scale)
Appendix B: Detailed Planting Plan (1:2,500 scale)
Appendix C: Species Composition Charts
Appendix D: Ecological Survey Reports
Appendix E: Soil Analysis Results
Appendix F: Climate Data and Projections
Appendix G: Management Prescription Maps
Appendix H: Photographic Record of Current Site Condition
Appendix I: Consultation Responses
Appendix J: Quotations from Contractors

Document prepared by: [Consultant Name and Qualifications]
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This document should be read in conjunction with the EWCO application form and supporting technical drawings.