Baggs Bottom SSSI: Integrated Blackthorn Management Strategy

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Site Context: Baggs Bottom, Stonesfield

Baggs Bottom, part of the Stonesfield Common, Bottoms and Banks SSSI in West Oxfordshire, is a rare chalk grassland ecosystem. With its complex topography, spring-fed slopes, ancient pollards, and upright brome-dominated grassland, it represents a landscape shaped by centuries of human interaction. It is now under increasing pressure from recreational encroachment and blackthorn (Prunus spinosa) succession. The site holds great importance for numerous butterfly species, bats, and chalk-specialist flora. The management of such landscapes must honour ecological complexity, cultural continuity, and future resilience.

Ecological and Cultural Roles of Blackthorn

Blackthorn serves as a structural and ecological keystone within chalk grassland margins. It offers dense overwintering sites for invertebrates, vital early spring forage for pollinators, and a host plant for Lepidoptera including Thecla betulae. From a cultural lens, it features in folklore, hedgerow farming, and traditional boundary formation (Rackham, 1986). Its expansion must be balanced to avoid grassland loss, guided by the ecological ethics advocated by Aldo Leopold, who reminds us that 'a thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community' (Leopold, 1949).

Historical Ecology and Rackham's Influence

Oliver Rackham’s interpretations of wood-pasture, pollarding, and scrub ecology are central to this strategy. Management here adopts the temporal mosaic of coppicing, grazing, and veteran tree care he described. Baggs Bottom, with its ancient willows and open-grown blackthorn, echoes these past land uses. Conservation here thus becomes not only ecological but archival: a memory landscape held in living form (Rackham, 2006).

Community Involvement and Biocultural Knowledge

The people of Stonesfield have long stewarded their local ecologies. Their generational knowledge contributes phenological records, invertebrate sightings, and management histories that deepen scientific observations. Inspired by the views of Robin Wall Kimmerer, we acknowledge that ecological knowledge is enriched when it grows in

relationship and reciprocity. The management team from Blenheim Estate will work in co-governance with local communities, ensuring that formal monitoring frameworks are continuously informed by those who live close to the land. This partnership embraces the co-creative ethos of citizen science, fostering a landscape where local observations catalyse broader conservation outcomes (Lepczyk et al., 2020).

Blackthorn Management Strategy

Scrub control will follow a rotational model, mimicking traditional coppice and wood-pasture structures. Scalloping (curved-edge) clearance every 4–7 years prevents uniform successional gradients and maximises edge diversity. No blackthorn will be cut during flowering (March–April), preserving early forage for Osmia, Andrena, and Bombus species. Sloes will be left for autumnal food for thrushes and mammals. Veteran willow pollards will be protected through light clearance and monitoring of root zone compaction and shade load. No herbicides will be applied at any stage.

Monitoring Framework

The use of community-weighted mean (CWM) traits such as plant height, specific leaf area (SLA), clonal spread, and leaf nitrogen content enables detection of functional shifts under scrub encroachment. Vegetation plots (10 x 10 m) will be permanently marked, revisited annually, and assessed with photographic baselines. Citizen observations, as shown in the Ancient Tree Inventory and National Bat Monitoring Programme, will form a core part of phenological and habitat tracking (Wright et al., 2023; Mathews et al., 2018).

Adaptive Thresholds for Structural Intervention

Indicator	Threshold	Management Trigger
Blackthorn cover	>25% in key grassland zones	Coppice scallop; assess succession risk
Hairstreak egg density	<0.2 per twig avg	Retain mid-aged thickets, monitor recovery
Veteran tree shading	>30% canopy overhang	Clear adjacent scrub in 5 m buffer
Tor grass encroachment	>30% cover	Increase sheep grazing; scalp margins
CWM SLA	>15 m²/kg	Open canopy via selective cutting
Trait variance (CWM height)	declining >2 years	Enhance heterogeneity with staggered cuts

Ethics and Future Landscapes

This plan recognises that landscapes are not static but evolve in dialogue with people, pollinators, plants, and pressures. Inspired by the biophilic philosophies of E.O. Wilson,

the ecological democracy of Severn Cullis-Suzuki, and the interspecies compassion of Dr. Helen Caldicott, this management strategy seeks to preserve not only biodiversity, but the cultural and ethical threads that make conservation enduring. As John Muir said, 'When we try to pick out anything by itself, we find it hitched to everything else in the universe.'

Notes:

I have placed a request for a TVERC data set incorporating the area around Stonesfield.

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