

Environmental Standard Operating Procedure

ESOP Name	Riverside Tree and Scrub Removal
ESOP Number	28
Revision Date	22/02/2024
Related ESOPs	2 Biosecurity 13 Breeding bird mitigation 14 Bat mitigation for tree removal works 15 Herbicide application



Aim

Trees and scrub provide important habitats for a wide range of species. Sympathetic management of these areas can have a positive effect on European Protected Species including bats and otters. Tree roots and overhanging limbs provide significant cover for fish from predators as well as spawning habitat and shelter from extreme temperatures in the summer months. Breeding birds, amphibians and reptiles are also commonly associated with trees and scrub and are at risk from unsympathetic management. As such many species associated with trees and scrub are protected by law under the Wildlife and Countryside Act 1981.

This standard procedure aims to maintain navigation access, so that vessels can enjoy safe passage in the Broads, through selective management of trees and scrub along the river banks, whilst avoiding killing, injuring or disturbing a species protected by law, or the destruction of their habitat.

Delivery Method

- For designated sites, complete consultation with **Natural England** if clearance of scrub is on or within 100m of a statutory designated site e.g. SSSI, SAC or NNR. Assent will be required from NE through the completion of a Habitat Regulations Assessment
- Consultation with the **Forestry Commission** confirms that the Broads Authority is exempt from requiring a felling licence under The Forestry Act 1967 (as amended) for 'Felling trees obstructing the works of statutory undertakers'. Permission has received for tree management within a 3m zone from the river edge in order to deliver navigation management;
- Complete AqHerb01 Licence application with **Environment Agency** if treating stumps within 1m of water's edge or if the area floods;
- Complete WFD assessment with **Environment Agency** for riverside scrub clearance and Waste Exemption Registration form with Environment Agency for burning waste in the open;
- If within Planning Conservation Area or if trees have a Tree Preservation Order complete 'Application for Tree Works' form and send to **Planning Department**;
- Identify potential impacts on species and habitats in surrounding area, survey & advise on mitigation;
- **TIMING** – Tree and scrub removal to be completed between **1st October & 28th February**. Breeding bird check must be completed if clearance works undertaken outside this window.
- **Emergency works for Hazard trees in the navigation channel is part of the BA statutory responsibility. These trees to be removed in an appropriate time period and Ecologist advice obtained when potential protected species maybe be at risk of harm.**

Standard Procedure

Pre-works

- Forward plan for riverbank sites will identify areas for tree & scrub clearance. These are to be confirmed at least two months in advance.
- A month in advance of works, Landowner Agreements must be in place and all associate documentation supplied.

- Site visit to be undertaken prior to works to ascertain any specific access or management conditions;
- One week prior to commencement of works, provide method statement/map taking account of any necessary mitigation or constraints and marking area to be managed and landowner notified of start date;

Operational

- **Stumps** must be cut as close to ground level as possible at a shallow angle to allow future cutting of cleared areas & where beneficial treated with Roundup ProActive 360/herbicide to prevent regrowth. Stumps with roots protruding into river left untreated;
- **Burning** of cut wood and brash should not take place directly on the bank surface; tin sheets or fire sledge should be used and where possible situated on perimeter banks, with ash spread thinly and away from water unless otherwise specified;
- Fire sledge should be regularly moved to avoid heat scorching into the peat. Sledge should be moved using hand power winches where suitable trees are present or using the iron horse. The iron horse is a tracked vehicle and care should be taken to avoid tracking over the same ground and over very wet soft peat;
- **Stacking** of cut wood may be permitted and should be stacked neatly within existing wooded or shaded areas. Do not stack cordwood in open areas of vegetation;
- Depending on location, brash can be stacked on bank edge to create an artificial hedge
- **Ecological features** which are to be retained are mature/veteran trees, young trees for future mature specimens, trees with roots in the water and 20% over-hanging vegetation;
- **Selected trees to be felled using chainsaws or mechanical tree shears where appropriate.** Trees shears particularly suitable for clearing tree/scrub in and over the water and those within 1m of the river;
- When felling and cutting brash/cordwood, ensure timber does not fall into river, any material that falls into the water to be removed immediately to prevent causing a hazard for vessels; and
- Management to be monitored by Ecologist during and after work.

Consultation

- Landowner permission will be required for any work to be undertaken on land not belonging to the Broads Authority
- Natural England assent is required for work being undertaken in or near a protected site.

- Broads Authority Ecologists will need to undertake protected species surveys and mark trees before the work can be undertaken.

Risk Assessment

Hazard	Initial Risk			Controls / Safeguards / Precautions	Revised Risk		
	S	L	R		S	L	R
Disturbance, killing or injury of protected species including bats, otters, water vole and breeding birds.	4	4	C	Ecologist to undertake protected species survey before works commence and ensure that suitable mitigation is in place.	4	1	B
Removal of wooded habitat resulting in impacts upon shade and temperature along the river edge; direct impacts on habitat for fish.	3	3	B	Selective tree removal and retention of 20% overhanging vegetation in any managed stretch, particularly those trees with roots in the water. Prioritisation process identifies sections of bank for management over a 5-year period. This allows for creation healthy age structures and retention of cover for fish.	3	1	A

Matrix

		LIKELIHOOD				
		Very unlikely	Unlikely	Moderately likely	Likely	Very likely
SEVERITY		1	2	3	4	5
Low (minimal, short-term disturbance levels and negligible damage to native habitats.)	1	A	A	A	A	A
Medium (moderate, short-term disturbance levels, some damage to native habitats/species. Regenerates quickly.)	2	A	A	A	B	B
High (high disturbance levels over a longer period and displacement of species. Damage to native habitats. Significant time to regenerate)	3	A	B	B	C	C
Very High (Long-term disturbance with displacement/death of species. Significant damage to native habitats that takes a significant time to regenerate.)	4	B	B	C	C	C

RISK	
A	OK. Work to provisions in risk assessment
B	Proceed with caution. Dynamically review risks.
C	Cancel task. Approach project in a different way.