Environmental Standard Operating Procedure

ESOP Name	Herbicide application			
ESOP Number	15			
Revision Date	22/02/2024			
Related ESOPs	4 Tree and scrub removal			
	16 Floating pennywort control			
	<u>17 Himalayan balsam control</u>			
	18 Parrot's feather control			
	19 Japanese knotweed control			
	20 Ragwort control			
	21 Australian swamp stonecrop control			
	22 Giant hogweed control			
	27 Riverside tree and scrub removal			



Aim

Control of invasive non-native species (INNS) and scrub through herbicide application is often vital to protect the conservation value of the Broads' landscape. Management and maintenance of recreation and mooring areas also requires periodic weed control.

This standard procedure aims to provide a best practice framework for the eradication or control of INNS and scrub such as willow and sallow on land and in or near waterbodies.

Standard Methodology

- Knapsack spraying to spot-treat plants or painting of glyphosate on cut stumps using a paintbrush.
- Herbicide use only by those who have gained the relevant NPTC certification of competence in most cases this should be PA6W.

Procedure

Pre-works

- Rangers and Operations Technicians, in consultation with responsible Ecologist, to identify target species distribution and species to be protected before commencing.
- If spraying on or within 3m of any watercourse, Environment Agency consent must be gained via an AquaHerb01 application, to be completed by the responsible Ecologist.
- In sensitive areas the Ecologist to carry out protected species surveys and identify whether or not the risk of herbicide use is justified. Within or near a SAC, SPA or SSSI Protected Sites Assent must be obtained from Natural England.

Operational

- Herbicides must only be used in accordance with guidance set out on the chemical label.
- Sprayer to adhere to COSHH regulations for herbicide and only take dilute herbicide onto site. Correct PPE and COSHH compliant equipment and practices to be used at all times.
- Sprayers to maintain spray log, in accordance with COSHH requirements, and pass a copy of completed logs to Ecologist for electronic storage.
- Herbicide to be applied in priority areas and not wholesale across a mooring. Always assess whether encroaching plants can be removed by mechanical rather than chemical means
- If an area for treatment is a new location and /or unsure if herbicide treatment has previously been used on a site, seek advice from Ecologist.

Consultation

- Anyone wanting to use herbicides (e.g. Rangers, Operations Technicians, Volunteers) is to inform an Ecologist within the BA prior to work being undertaken so permissions can be arranged if necessary.
- An AqHerb01 form must be completed and consent received from the Environment Agency prior to spraying on, or within 3m of water. Ecologist to coordinate submission of AqHerb01 applications.
- Protected Sites Assent will be required from Natural England if herbicide used in or near protected area e.g. NNR, SSSI, SPA, SAC. EO to consult with NE.
- Must have landowner permission before works completed. Sprayer or Ecologist to gain permission.

Risk Assessment	

Hazard		ial R	isk	Controls / Safeguards / Precautions		Revised Risk		
	S	L	R		S	L	R	
Harmful effect on water life in adjacent waterbodies	3	3	C	Follow Environment Agency guidelines and ensure an AquaHer01 is in place before work can begin. Herbicide application to be minimised to priority areas.	3	2	A	
Chemical drift to non-target plants	4	5	C	Avoid spraying in windy conditions.	4	1	В	
Chemical spillage	4	2	В	All operators must hold the correct level of qualification. Herbicide should be mixed at suitable sites away from the application area, with appropriate COSHH compliant equipment.	4	1	В	

Matrix

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

RISK	
	OK. Work to provisions in risk
А	assessment
В	Proceed with caution. Dynamically review risks.
С	Cancel task. Approach project in a different way.