

Environmental Standard Operating Procedure

ESOP Name	Reptile Mitigation
ESOP Number	11
Revision Date	22/02/2024
Related ESOPs	3 Bankside sediment disposal 9 Reed rond creation



Aim

The Broads flood banks and surrounding areas provide suitable habitats for four species of native British reptile; common lizard, grass snake, slow worm and adder. All are UK Biodiversity Action Plan (BAP) priority species. Working practices aim to comply with the protected species legislation which protects all species against killing and injury.

This standard operating procedure describes how mitigation actions are undertaken to avoid the killing or injury of reptiles whilst undertaking works on flood banks, grazing marshes and heaths.

Standard Methodology

- Sites surveyed in the summer preceding works/translocation period to determine reptile interest
- Where reptiles are found, vegetation to be removed after hibernation and before breeding sites are chosen
- First vegetation cut to be between February and March and down to 15cms in height; all arisings to be raked off and removed from active works area to avoid providing habitat piles.
- Direction of cut to be from centre of works area outwards
- Leave area for 48hrs before the second cut to ground level and removal of arisings in suitable weather conditions as above
- Carry out further cutting to maintain bare ground as above
- For repeated cuts (from May to mid-September), only hand operated machines can be used, and this must only occur when ambient temp > 15°C, sunny with no rain, usually between 10am and 4pm
- Ecologists will have determined whether translocation of reptiles needed

Procedure

Pre-works

- March or September – identify work areas
- March to October (optimal months April, May, June) - Ecologist to carry out at least 30 reptile surveys of works area(s) and determine mitigation requirements

Operational

- Mitigation most likely to be exclusion if other suitable habitat adjoins the works area but under some circumstances, translocation might be required (see below)
- For exclusion, vegetation cutting is used to displace reptiles in spring (ideally Feb-March), with follow up monitoring by Ecologists and regular cutting to maintain a short height of vegetation.
- Artificial refuges to be used to attract reptiles to a new area
- Translocation can be carried out if reptiles need to be moved to another site – this is likely to apply where existing habitat is being permanently affected, i.e. bank removal (NE should be consulted as best practice). If fencing is required, this to be erected during February and March, before capturing starts in April.
- Mid-September to October – commence works when reptiles excluded

- Translocation:
 - Suitable receptor site identified prior to translocation
 - Installation of fencing and pitfall traps by BA operatives in February/March under supervision of ecologist
 - Reptile capture over 30 days (small population) to 90 days (large population)
 - Maintenance of fencing during works
- Surveys should be carried out a year after the works to ensure no detrimental impacts to reptile numbers

Consultation

The following must be confirmed by the Ecology team before works commence:

- Landowner consent if working on private land.

Risk Assessment

Hazard	Initial Risk			Controls / Safeguards / Precautions	Revised Risk		
	S	L	R		S	L	R
Killing and injury of reptiles during active summer and winter hibernation periods	4	5	C	Pre-survey and exclude reptiles from works areas prior to, and during work, via cutting regime or translocation programme Identify any hibernaculum and mark locations.	4	1	A
Loss of overall reptile habitat through permanent habitat change or loss	4	4	C	Identification of translocation receptor sites that provide similar (& additional) suitable habitat. To be identified & in place in advance of translocation & monitored post project	2	3	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.