

Environmental Standard Operating Procedure 5

Dyke de-silting

Water channels of the Broads have unique and important plant communities supporting a valuable freshwater ecosystem. Regular de-silting is vital to conserve the open water and prevent filling in of the dyke.

Aim

To remove enough silt to give a depth of water between 50cm–75cm as well as removal of any solid growth of emergent vegetation filling the middle of the dyke.

Environmental Risk

Impact	Likelihood	Mitigation
Disturbance, injury & death to water voles	High	Follow ESOP 10b
Removal of invertebrates	High	Dispose close to bank & retain some existing sediment
Spread of non-native invasive species	Medium	Pre-works survey; clean machinery between jobs
Cutting or damaging rare/protected aquatic plants	Medium	Pre-works survey
Creation of floating material	Low	None required with BA equipment



Delivery Method

- 360 diggers working alongside dykes, supported on flotation mats to avoid damage to ground or getting stuck.
- Where dykes are mainly affected by rapid growth of water plants, a weed bucket can be fitted which does not target sediment removal.
- Where dykes are wide, use of a floating weed cutter may be appropriate.

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- Any scrub removal to be carried out prior to works, see ESOP 4
- Water vole mitigation carried out before commencing works, see ESOP 10
- Work from one side of the dyke leaving the opposite bank and some sediment undisturbed, or
- Remove sediment from the centre of the channel only, leaving a narrow margin of undisturbed vegetation and sediment on both banks (only possible on wider dykes)
- Where rare/protected species occur, such as stoneworts, avoid removing all of the dyke silt from the channel
- In sensitive areas, avoid digging in the peak of the bird breeding season between April and August
- Use existing spoil heaps for sediment or remove off site
- Spoil can be spread to create either a low but wide bank, or a higher but narrower bank. All spoil banks should have break or low points situated every 30–50m to maintain water to flow on/off the marsh
- De-silting should not take place more than once every 5 years and in most cases will be required on a 7–10 year rotation
- HLS Agreement sites will have timing of works prescribed. Typically this activity is consented from October to February. Derogation may be required for work outside of this window.

Consultation Required

- Natural England – if outside an HLS agreement or if planned works deviate from HLS prescriptions
- Environment Agency – if impacting a main river
- Broads Internal Drainage Board – if impacting a main drain

Further Information

Natural England Water vole prescriptions

<http://www.naturalengland.org.uk/ourwork/regulation/wildlife/species/europeanprotectedspecies.aspx>