

Biosecurity when working in freshwater habitats

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Reducing the Impact of Non-native Species in Europe www.rinse-europe.eu





WE are all potential Biosecurity Hazards!

Invasive or native, moving plants and animals is easy

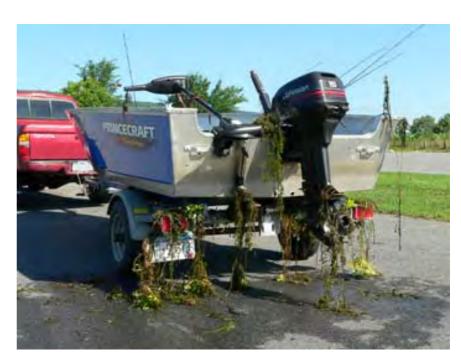






Many NNIS are moved from place to place attached to or contained within recreational equipment





For every project or operation consider:



- Where has the equipment come from
 - Will it arrive clean, is it possible, does it need cleaning before entering site?
- What is it working on / in / near
- Where is it going?
 - Does it need cleaning before leaving site, what could it be taking with it to another site.

Clean IN Clean OUT
This also applies to volunteers!

Broads best practice: Biosecurity case studies





BESL / Halcrow: Compartment 3, Broads Flood Alleviation Project

Broads best practice: Biosecurity case studies



Mitigation measures

Piling removal and storage:

- •Extracted piles stacked and allowed to dry for 16 days
- Ongoing monitoring during the drying period

Machinery and pumps:

- •All plant inspected before arrival on site.
- •Hot water pressure washed before leaving site
- •Use of Bunded pumps to contain water
- •Use of rigid pipes where possible to ease drying and inspection

Workers

- Signage put up around site
- Toolbox Talks
- Boot cleaning stations between work sites





Broads best practice: Biosecurity case studies



Broads Authority: Phoslock

Equipment moving between Killer shrimp (Dikerogammarus villosus) infested waters and isolated Broad

All boats and equipment hot water pressure washed before moving sites.

Hot water (above 43°C) kills Dv on contact



Conservation Groups and NGO's



- Introduce basic biosecurity for volunteers
 - Check, Clean, Dry
- Build biosecurity into standard operating procedures
- Contractors
 - Add biosecurity to method statements
- Hire Machinery
 - Clean IN and clean OUT

Duty of Care: Waste



 If you have waste, YOU have a legal duty of care to ensure the waste is transferred to an authorised person AND that it is disposed of or recovered properly. **Duty of Care: Waste**



If you give your waste to someone else:

- Check they are authorised to carry it
- •Ensure the waste goes to a proper site (appropriate waste management licence or exemption)
- Use waste transfer notes and keep copies

Duty of Care is one of the main ways to combat fly tipping





The annual cost of treating Japanese Knotweed on England's Highways is £8.60 per Km

That's £3.5 million per year!

It is this simple



No Biosecurity:

Himalayan balsam seeds picked up on mower and tractor tyres, Spreads into road verge as tractor moves off site





It is this simple



With Biosecurity:

Simple boot washing before moving off site prevents transport of plants and animals to other places







With good biosecurity, in the future there should be no need to pay so much to preserve our native wildlife.

