

Brown Moss - Freshwater Habitats Trust – Pete Case presentation 21st March 2017

NOTES:

- Ponds support 70% of all freshwater biodiversity
- Ponds support 10% of all priority biodiversity species
- 92% of ponds are in poor condition.

Scheme - People, Ponds & Water

- £1.3M HLF funded
- Engaging people
- Protecting best of the best
- Data collection – Pond Net
- Funding available for habitat management

Volunteer participation in People Ponds & Water Project – clean water for wildlife

- Kits available to sample water quality, specifically nitrates and phosphates.

Brown Moss Key Species

- Mud snail (*Omphiscola glabra*)
- Floating water plantain (*Luronium natans*)
- Channelled crystalwort (*Riccia canaliculata*) (only site in England, pool 6 edge)
- Tubular water dropwort (*Oenanthe fistulosa*) (umbelifer) (pool 5)
- Great crested newt (*Triturus cristatus*) (look for folded leaf ends under water) eDNA surveying kits for GCN. Costs £100, 99% successful. Pools 2, 2a, 3a, 3b, 4, 6, 7, 8 and 11 were found to have GCN

Pond Mud Snail (14 -25mm)

- only Shropshire site
- needs low water nutrient levels
- snail will burrow into mud to survive dry periods

Water violet doesn't grow in polluted water.

Lost Species

- Floating water plantain – last seen in 2006, pool 6
- Pillwort (fern) – last recorded in 1962
- Lesser water plantain
- Shoreweed – last seen in 2006

These species are thought to have been lost by increased tree cover / leaf litter and water pollution.

These species need drawdown zone and variable water levels

Invasive Species

- New Zealand pigmy weed (*Crassula helmsii*). First recorded pool 6 in 1990. Thrives in nitrate and phosphate eutrophication.
- Water fern (*Azolla filiculoides*). Biological control using mites is possible? Frost will have an effect on this species.

Photos of key species for reference

Larionium natans (Floating water plantain)



Omphiscola glabra (Pond mud snail)



Riccia canaliculata (Channelled crystalwort)



Oenanthe fistulosa (Tubular water dropwort)



Great Crested Newt (*Triturus cristatus*)
Female



(*Triturus cristatus*)
Male



GCN egg in folded leaf

