# The story of a Froyle wildlife pond

- · Planning, Funding, Construction
- Species biodiversity

and it's not just about the newts

Barry Clark

BEFORE Grazed field with short grass



AFTER: Pond and meadow area 2017



# The story of a Froyle wildlife pond

- Froyle Parish Plan 2013. -survey support for new pond project by 118 villagers
- Location agreed with Froyle Park (NJG)
   60m x 40m area but had buried pipes
- EHDC grant £20,000 from \$106 developer contributions
- Froyle Parish Council support commissioned topographical survey
- Detailed Planning Application
  300m², 25m x 15m, 1.5m deep, shallow edges
- Contractor quotes 2015

Construction: Removing the turf April 2016



Construction: Digging the hole



Construction: unrolling liner & membrane



Construction: Positioning the liner



Construction: Anchor trench for liner





Construction: Filled to brimming April 2016



## Location map of pond area near Gid Lane



Wildflower meadow seeded onto bare ground



## British native seed from Emorsgate

- Bare ground rotovated and prepared
- Various wildflower seed mixes for chalky, damp, pond edge, tussock meadow
- Broadcast sown by hand Autumn 2016
- Perennial weeds needed controlling thistles, nettles and docks
- Many hours of work by volunteers

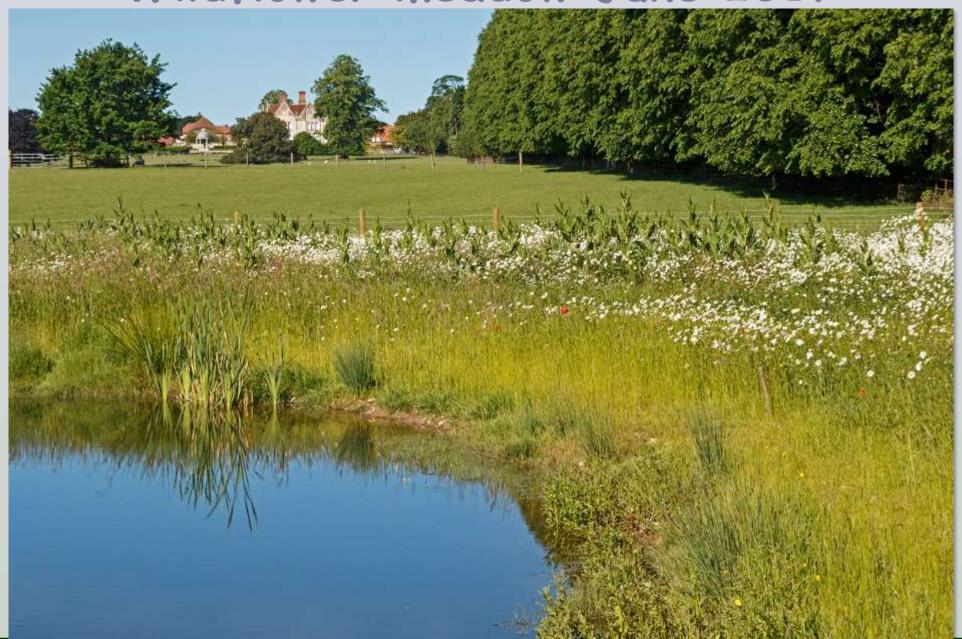
Volunteers removing sallow seedlings



Volunteers weeding the sown meadow



Wildflower meadow June 2017



#### Wildflower meadow June 2020



Tufted vetch, wild carrot, bird's-foot trefoil



Wildflower meadow June 2023



Meadow Crane's-bill and Hedge Bedstraw



Habitat addition: building Log pile



#### Habitat addition: Hibernaculum construction



### Habitat addition: Hibernaculum



First Great Crested Newt Aug 2016



#### Habitat addition: Hibernaculum



# Species biodiversity

- Pond allowed to colonise naturally
  no fish, aquatic species or pond plants added
- Clean water from rain only
   no stream, ditch or agricultural run off
- Manage pond vegetation and meadow bulrush and reedmace invasive
- Dragonflies found pond in first summer now 17 species of dragonfly and damselfly

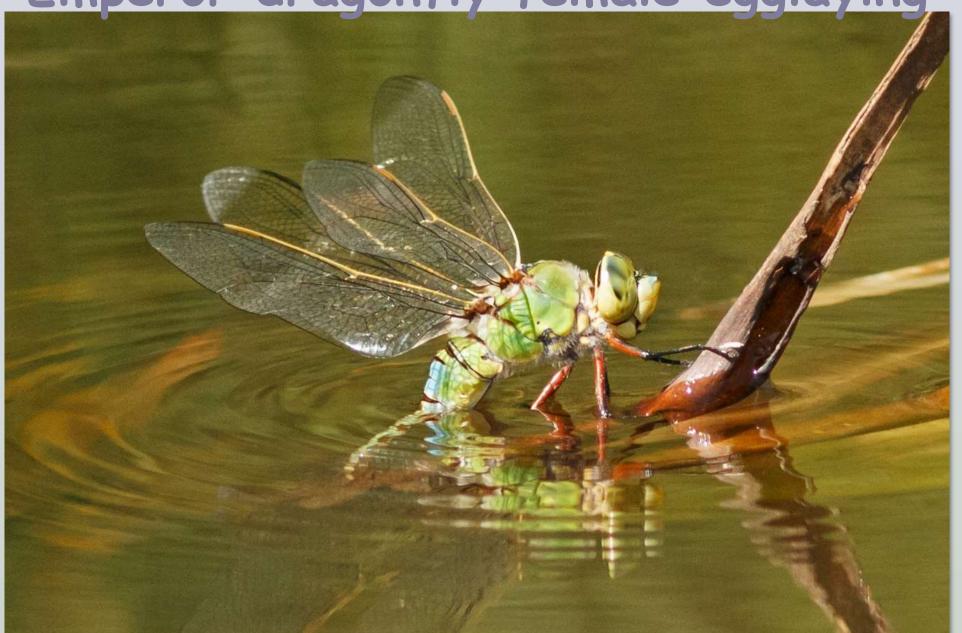
Emperor dragonfly male



Emperor dragonfly in flight



Emperor dragonfly female egglaying



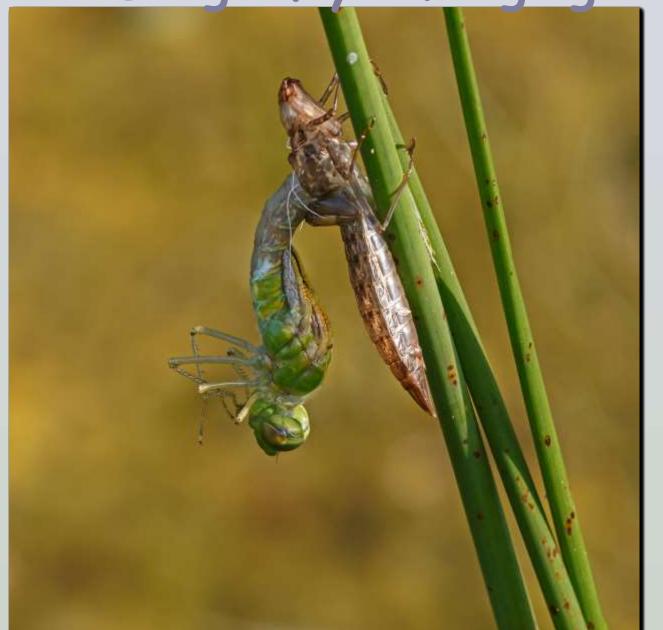
Dragonfly larva



Exuvia



Emperor Dragonfly emerging in June



Common Darters egglaying in pond



Azur Damselflies egglaying on water crowfoot



## Azur Damselflies egglaying on water mint





### Migrant Hawkers Orb-weaver spider



## Wasp spider

# Tetragnatha extensa





Longhorn beetle on Ox-eye daisy

Hoverfly callicera aurata (nationally scarce)



Resident wren at pond area



Juvenile mute swan



Heron eating newt



# Species biodiversity

- Four amphibian species recorded toad, frog, smooth newt and great crested newt
- Great Crested Newts protected species an offence to intentionally harm
- Evidence of breeding in pond meta population in Upper Froyle
- Esso pipeline construction surveys maximum count 28 great crested newts

Great Crested Newt egg on water mint



## Great Crested Newt larvae



#### Male Great Crested Newt



### Female Smooth Newt



Mating toads in pond shallows



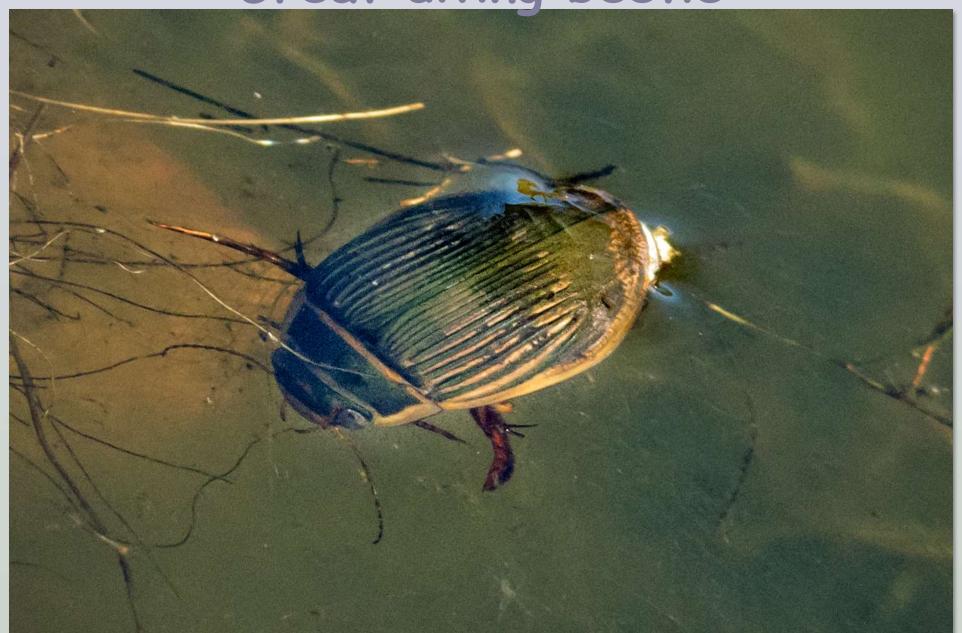
Amphibian larvae food -microorganisms



#### Greater water boatman (backswimmer)



Great diving beetle



## Pond Skater



#### Water Stick Insect



Caddis fly larva inside case



# Species biodiversity

- Record sightings, take photos expert ID if needed, observation timing
- Butterflies and Moths indicators health of the natural environment
- Small things are basis of food chains
   more insects than higher species
   e.g. Beetles, Hoverflies, Bees, Wasps, Ants, Bugs, Crickets

Habitat Habitat Habitat

Species recording at pond



#### Water Avens



## Water Figwort



Figwort sawfly larva



Caterpillars on nettle



# Peacock on Water Mint



Clouded Yellow on knapweed



### Common Blue on bird's-foot trefoil



Lamp attracts moths after dark



## Privet hawkmoth



# Bufftip

## Burnet moth larva



Elephant hawkmoth











# Acknowledgements

- Froyle Wildlife members and volunteers community lead project
- East Hampshire District Council developer contribution grant, councillor's grant
- Froyle Parish Council support and grants
- Froyle Park Ltd and NJG
   permission for pond

Visit the pond area any sunny day

