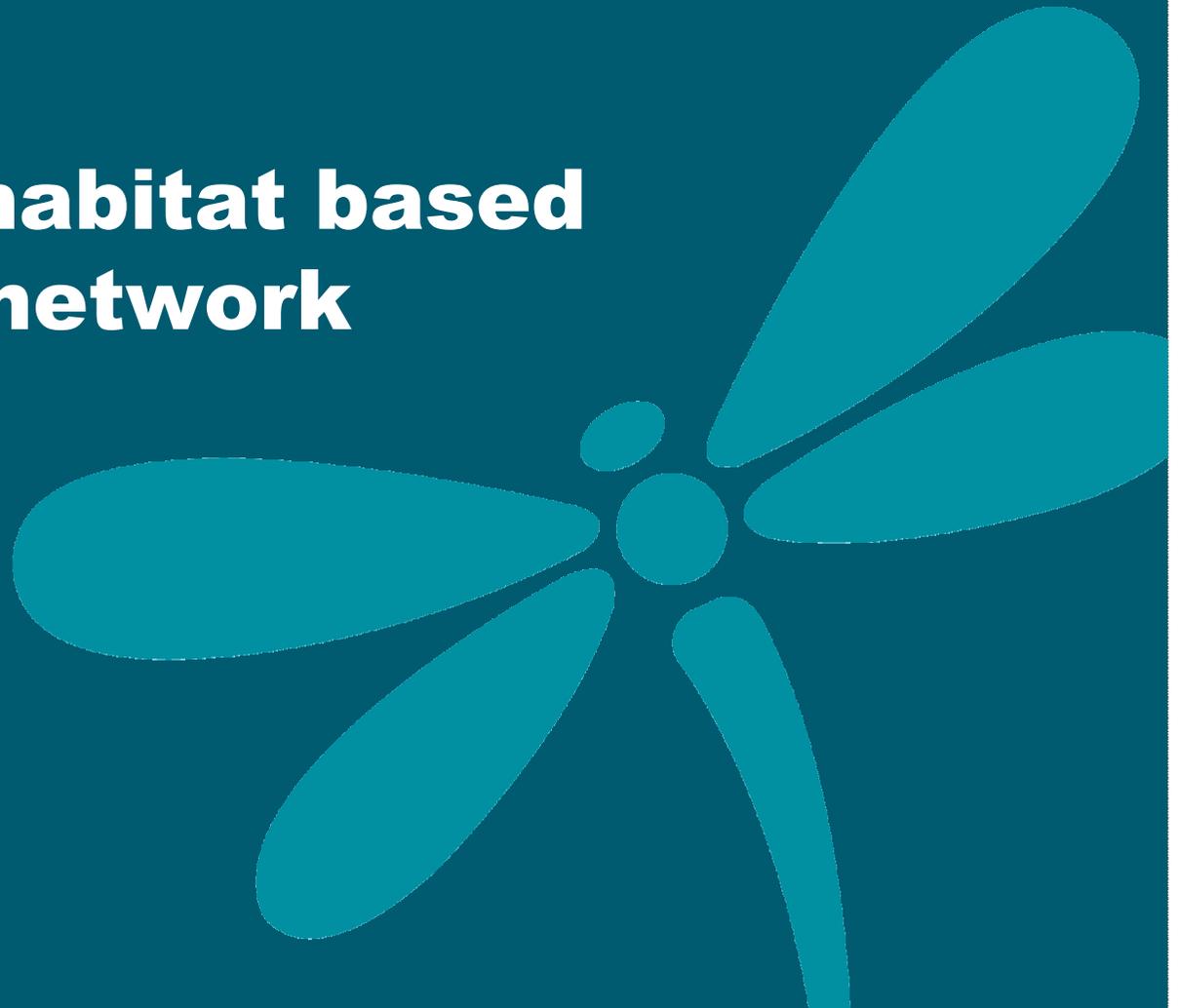




PondNet:

**Delivering a habitat based
surveillance network
for ponds**

Dr Naomi Ewald
MTSS Workshop 2014



Overview



PondNet aims:

To provide statistically robust data to identify trends in pond quality and pond species.

Using a habitat-based approach; recording a range of plants and animals.

Record environmental data; to explain the reasons for changes in biological quality

To use these data to protect and manage our freshwater resource.

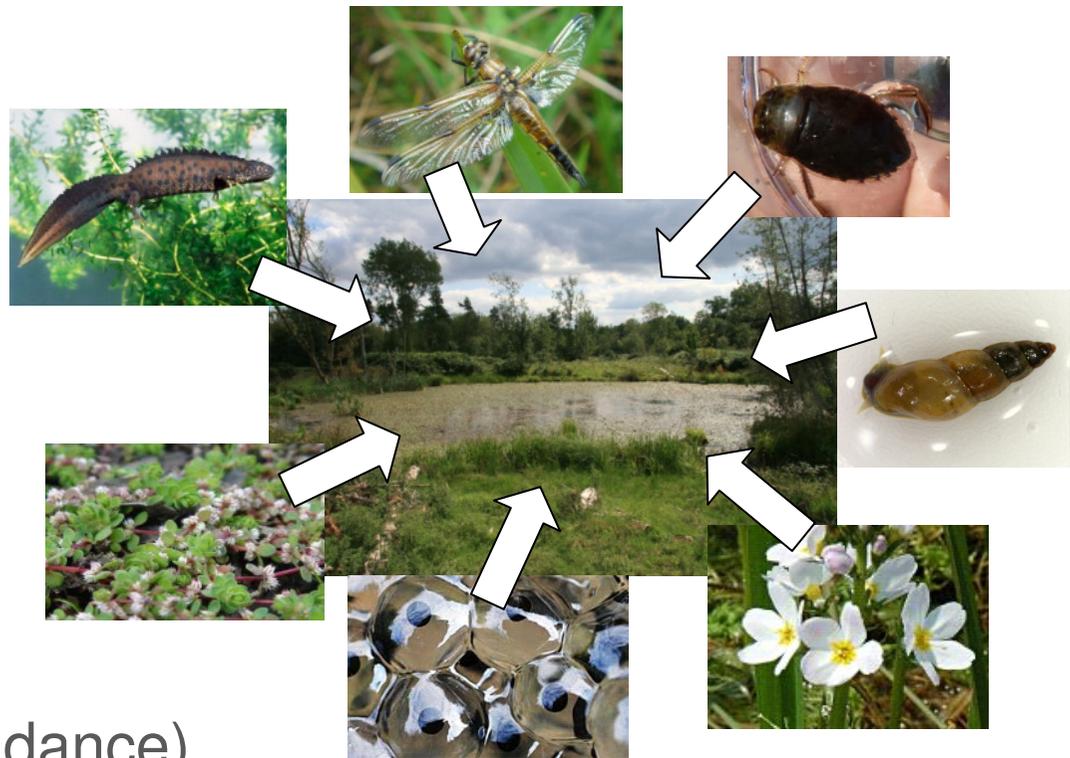


Working with local specialists and volunteers to gather pond data

What does PondNet record?



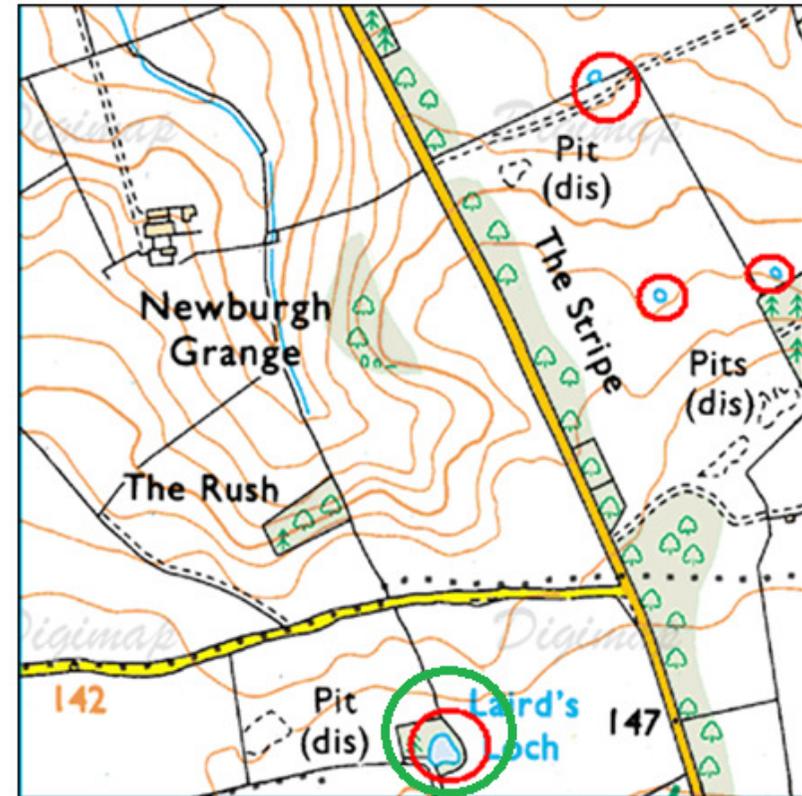
- Environmental variables
- Amphibians
- Dragonflies
- Wetland plants (metric)
- Invertebrate families (metric)
- Wetland birds
- BAP plants (abundance)
- BAP invertebrates (abundance)



What do volunteers do?



- Each 1km square has a 'focal pond'.
- Different volunteers gather species/ environmental data at the same focal pond.
- Using standard repeatable methods.
- Amphibian recorders survey all the ponds in the square taking both environmental and species records.



Pond



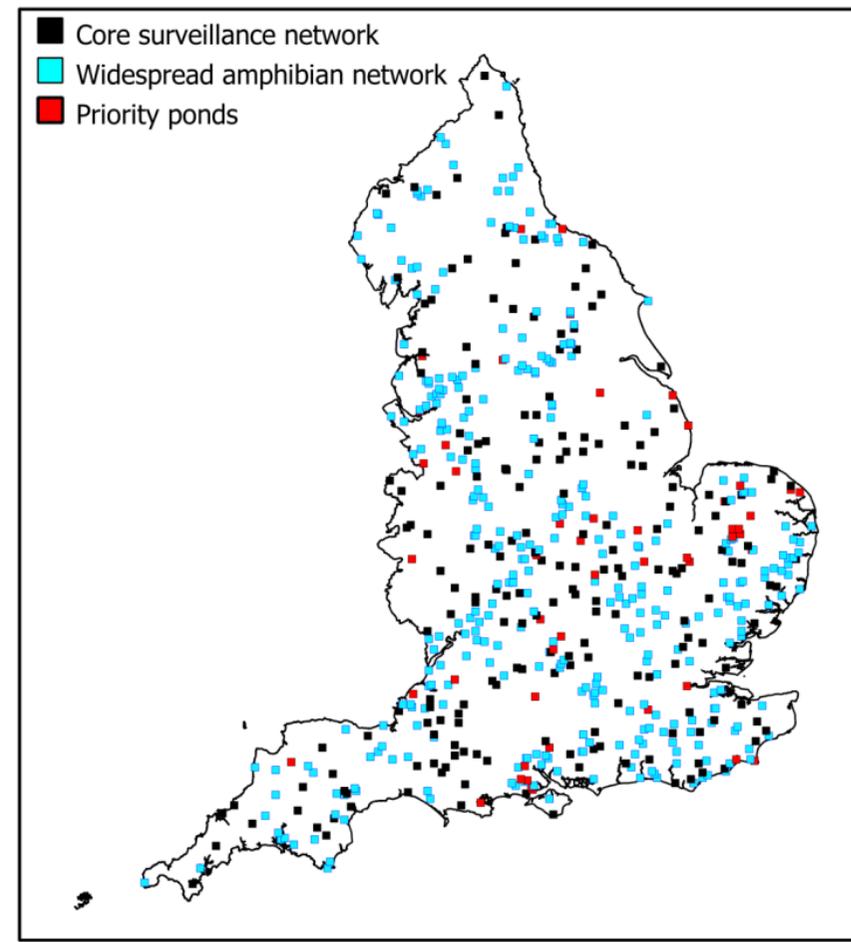
Focal Pond



National roll-out Widespread network



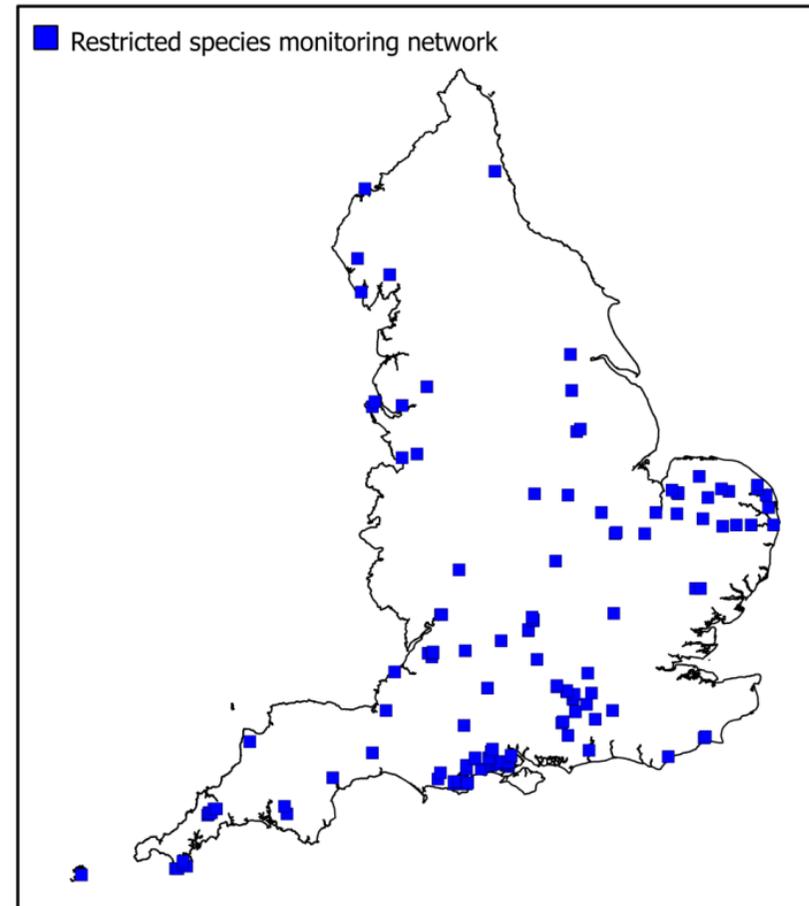
- c.200 squares randomly selected for general surveillance.
- c.550 squares for surveying widespread BAP amphibians (GCN and Toad).
- 50 squares provide information on Priority Ponds (highest quality sites).



National roll-out localised network



- Ponds identified which are known to contain a rare localised species.
- > 50 additional ponds per species.
- Monitoring targeted to sites where the species are known to occur.
- Record abundance of these localised BAP species at each pond.
- And presence/ absence at adjacent ponds.



National roll-out - real example



Comparison with the national network	Hampshire TOTAL
Random squares	17
Great crested newt squares	13
Common toad squares	13
Priority ponds	8
TOTAL	36

- More than double the number of sites
- 23 BAP ponds
- 13 training courses
- 51 volunteers
- Additional self-selected squares

A possible shape for the network



- **Core network**

Statistically robust network for monitoring stock and change of key species and habitats

- **Incl. BAP/ SOCC network**

Statistically robust network for monitoring change in populations of species of conservation concern

- **Peripheral network (self-selected sites)**

Existing / new sites selected by individuals or groups

- included in analysis to answer key questions, e.g. trends in high quality sites

- encourage multi-taxa approach

Going forward



- **Central coordination**

Freshwater Habitats Trust HLF bid, starting Spring next year (2015), will be used to support PondNet development.

+ Incl. water quality monitoring and flagship sites

- **Local coordination**

The exact structure of the PondNet framework is still flexible.

One option (being explored this year) is through regional partnerships with LRCs (what barrier need to be overcome to make this possible?).

Species groups role in the network clearly beneficial but how can this be supported?

Network activities



Co-ordination activities fall into 3 main categories:

- **Network development:** understanding the PondNet approach to ensure statistically robust, valid results collected to a standardised methodology.
- **Site selection:** setting up the network to identify sites, gain on-going site permissions and compiling site information to allow volunteers to make informed decisions about the sites they want to survey
- **Volunteer support:** volunteer recruitment, training and support to ensure correct use of methodologies, understanding of environmental metrics and up-skilling of species identification

Network development



Training the trainers

- To ensure a consistent approach in each of the regions, all levels need a clear understanding of the PondNet approach in terms of:
 - Site selection
 - Species methodologies
 - Steps required pre and post training
 - Data input and data flow

Site selection



Interpreting national targets at a local level

- Network set-up is key to providing statistically valid results:
 - Validating site selection
 - Overlap with existing initiatives
 - Gaining landowner permissions
 - Preparation of site survey packs
 - Uploading information onto shared website – map tool

Volunteer support



Volunteer engagement and mentoring

The level of volunteer engagement and support is directly proportional to the quantity and quality of data received.

- Advertising and engagement with local recording community
- Training in each taxonomic group
- Pick-your-own site web tool
- Equipment
- Mentoring
- On-going queries
- Random QA

Acknowledgements

