**Ecology Working Group WCP**

**Summary Notes and Action Plan updates November 21st**

**ACTIONS**

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| **Objective** | **Who** | **When** |
| **Riverfly**  Email to assess current & active RF monitors  Recruitment Drive for new RF monitors (public access)  Draft Proposal drawn up to fund RF training in 2023  Training of Trainers  Training for new RF monitors | KA/JH  Ecology Group members  KA/SG  DH, Dan Hoare, Geoff Philips  Managed by new trainers? | Dec 2022  Feb/March 2023  Jan 2023  22 April  May/June 2023 |
| Present **State of Wensum Spreadsheet** to WCPSG to use as baseline evidence on river stretches | KA | December 1st 2022 |
| **Research**  Continue support for bioaccumulation and fish health research  Support otter scat project | Tim Ellis, ecology WG members | By March 2023 |
| **Fishery Recovery**  **Restocking –** Include fish density surveys  **Fishery Plans** -Walkovers and preparation of fishery recovery plan for Swanton Morley (Dec 2022- Aril 2023) | KA and small working group | **(Dec 2022- Aril 2023)** |

1. **Develop and grow Riverfly monitoring scheme**

* KA/GH have sent email to all current RF monitors to assess level of interest. Dennis: It seems few of the previously trained volunteers are active. Gary Adabra (Tud new recruit) mentioned he’s had little communication from RF since he signed up but is still keen. Hope that now we have a coordinator the motivation of RF monitors will increase.
* John: Proposed that new volunteers go out with existing samplers whilst waiting for full training to maintain interest and engagement.
* Agreement to follow basic riverfly 3 groups and not riverfly + until there is adequate coverage of the Wensum, and the team is confident and trained.
* Steve Brooks from Riverfly to authenticate David Harper, Geoff Phillips and Dan Hoare as Riverfly trainers on 22nd April 2023 (tbc) at Sculthorpe Visitor Centre. This means that there will be 3 riverfly trainers in Norfolk to support the growth of the Wensum RF scheme.
* DH will monitor Pensthorpe, Fakenham (u/s STW), Sculthorpe, Tatterford (Tat) and Raynham/Helhoughton (Wensum) from April with a recruitment of new RF monitors. Also plans to run an upper Wensum bioblitz in 2023.
* Query about Riverfly scores and what is a good level for chalk streams?

John F: Scores of 13 is fairly good for chalk streams, where (flat bodied mayflies and stoneflies) are unlikely to be super abundant. Trigger level is 6 in large parts of the Lark (a somewhat degraded chalk stream) and scores there might typically be about 7-9.

1. **State of the Wensum Ecology Spreadsheet (See draft copy attached)**

Kelvin will present spreadsheet for discussion/adoption by the Wensum Catchment Partnership Steering Group meeting on Dec 1st

New column for invasive plant species surveys added to existing contents including fish, plants, inverts., chemicals etc

KA check that EA electrofishing survey on the Wensum (6 locations in September) is sent, and will lead on the development of the Recovery Plan.

1. **Research Projects**

**Fish Health and bioaccumulation -** University of Nottingham: -: John has located 5 years of Environmental Quality Standards Directive (EQSD) data using samples of roach tissue analysis to monitor various pollutants, including ‘forever chemicals’ prone to bioaccumulation. Shared with U. of Notts PhD and will be able to distribute it to interested people. The link to the site can be found here: https://www.gov.uk/guidance/water-framework-directive-assessment-estuarine-and-coastal-waters

John has also arranged for the EA in December to do more roach sampling and send to Brampton labs for analysis.

Proposed new project: U of Nottingham (Vet school thesis) 4–6-week survey

Collect otter scat for dietary analysis, DNA sequencing to identify specific otters, and DNA sequencing of the parasites present; as well as trace metals (in addition to Calum’s existing otter bone analysis) . Purpose to ascertain if scats could be used as markers of contamination. Thesis could serve as a pilot project for potential future work on the river.

1. **Fishery Recovery (stocking, predation, catch returns)**

**Restocking (restocking river from lake fish populations)**

* Roger queried the position and acceptable procedure from the EA on fish transfers (mainly roach), as he is interested in moving fish from his club lake to restock the River Wensum. Also stated that no one wants to move fish that will suffer or fail to form stable populations, so an assessment of habitat and fry habitat/refuges will need to be done where restocking is proposed. (See Fisheries Recovery below)
* Kelvin has already analysed 10 years of EA electrofishing surveys on Wensum, Gipping and Ouse with the Wensum showing a drastic drop from the 1970’s. Does the ecology group need a definition of a sustainable roach population?
* Ezra stated that NE doesn’t necessarily have a formal policy as such on fish stocking as this is an EA matter, but would probably support stocking to create a sustainable population.
* Kelvin: Spoke to the EA on Friday 18/11/2022. Their position is that river the fish population density must first be determined and show very low figures, before re-stocking of the river could be allowed. Any restocking needs to be accompanied by a fisheries recovery plan (see below) to ensure that restocked fish would be able to form a sustainable population.

**Fishery Recovery Plans**

Three new stretches under consideration due to low fish density/populations and poor roach health from tissue samples.

1. Swanton Morley Stretch covering Swanton Morley to Elham Mill, including 500m around the confluence of Blackwater and Wensum at xx.
2. Carrick’s
3. Hellesdon Mill (EA to collect samples and analyse)

1. Swanton Morley- Elham. Over-widened and not natural but historically good for roach, now dominated by chub, pike and signal crayfish. –

John provided information on how crayfish can suppress the growth and possibly densities of fish too small to eat them, by competing for food/eggs etc. whilst allowing large fish that to persist. This there is potential for crayfish to squeeze recruitment.

Blackwater-Worthing plan requires clearing out by machine every 3 years for work, but in 2020 this was disrupted by Covid.

Priority Site - Small team to form to cover the following:

* Plans for walk over with EA to assess habitat, check for refuges in need of rehabilitation
* prepare a fishery recovery plan for this stretch.
* Recovery plan to be shared with local landowners before work commences for their input/agreement.

2. Start conversation at Carrick’s stretch for fishery improvement in 2023.

Ezra mentioned that bypassing Swanton Morley Mill would help to restore flow at Carrick’s.

1. **Explore wider biodiversity monitoring opportunities**

Ezra had been due to attend a NE course on assessing naturalness, but this was cancelled.

Ascertain if signal crayfish surveys are routinely being held and who holds this data?

**AOB**

Bintree Mill - Morphology group mentioned that they are monitoring water levels post restoration work to breach to ensure the post work river flow is adequate. Bintree Mill committee trout club are satisfied with the work done so far.

Kelvin has been in touch with Arni Warsop (new EA fisheries officer). He will be invited to future Ecology Group meetings.

Roger requested that it be noted, and Ezra agreed that Natural England position was currently that there will be no new cormorant licences for the Wensum.

Water Quality: High nitrate and phosphate readings on the Blackwater- how to get in touch with landowners for access? EA can currently only respond to higher severity incidents.

Post meeting note- Sarah: As funds are secured to expand Citizen Science WQT on the whole Wensum, there will be more support for volunteers along the catchment (2023-2025)