Welcome to the Citizen Crane Year 10 Forum

10/10/2024

Working in partnership

Thames Water



Crane

Valley









Agenda

2:00pm	Introduction from JW - CVP	
2:10pm	Citizen Crane Update – Rob Gray	
2:30pm	Outfall Safari and the SWOP – Sam Facey (ZSL) and	
	Rachel Sargent (Thames Water SWOP Team)	
2:50pm	Who owns our rivers? – Lewis Elmes (Environment Agency)	
3:10pm	Morphology and river restoration – Helen Moggridge (Cartographer)	
3:25pm	Break	
3:40pm	Engaging new audiences in citizen science – Frances Bennett (LGOAL)	
3:55pm	New projects in Citizen Crane – Azra Glover (ZSL)	
4:10pm	A Volunteer Perspective - interactive with the CC team	
4:30pm	What's next – questions and wrap up - The CC team	





Introduction from the Crane Valley Partnership

John Waxman



Citizen Crane Update





Working in partnershi Crane Valley

(Thomas Weiter









Project Context

- 1. Major pollution: 2011 and 2013
- 2. Monitoring started in 2014
- 3. Volunteer led (over 70 trained)
- 4. Project team: ZSL, FORCE & frog environmental
- 5. Steering Group: CVP, EA + TW (meet quarterly)
- 6. Annual Report and Forum
- 7. Outfall Safaris: 2016, 2021 and 2024
- 8. Led to UK's 1^{st} urban SWC



Previous Findings

- 1. Upper reaches poor
- 2. WQ improves downstream
- 3. Poor morphology in middle
- 4. River is removing both ammonia and phosphate
- 5. Lower reaches near GES
- 6. SWOP + OS helped remove 100's of pollution sources
- 7. No overall improvement in the river over first 8 years





Ten Years of RMI

- 1. Year 10 Report available
- 2. Three new sites
- 3. Fairly consistent RMI for each site
- 4. Last two years equal or better than the previous trend
- 5. Local factors at some locations





EA Water Quality Data









Overview

Reasons to be cheerful:

- Outfall Safari, SWOP, CSO monitoring, Pollution Events, Yeading Brook East
- CWG and CIG
- River restoration and wetland projects
- Expansion of citizen science
- Communications
- Leading to improvements in river condition

Reasons to be cautious:

- New and persistent misconnections
- Ongoing cross connections and CSO spills
- Funding





Crane Valley Outfall Safaris

Assessing pollution entering rivers via the surface water drainage system

Sam Facey – Project Officer

Water quality for wildlife

 Lots of wildlife found in and around waterbodies, but these are vulnerable to pollution

The health of England's rivers in 2022



"none of England's river stretches are in good or high overall health"



Miss-connections/Crossconnections/Blockages/Failing assets



Not to be confused with **Combined Sewer Overflows (CSO'S)** pollution.



- A major threat to water quality in urban rivers is misconnection, blockages and failing assets.
- Occurs in regions with separate foul and surface water systems
 - Surface water rainwater siphoned off into the river untreated
 - Foul water siphons water off for treatment
- On average, 3 4% of properties in a catchment have misconnections.

Miss-connections/Crossconnections/Blockages/Failing assets



Polluted Surface Water Outfalls Discharge:

- Sewage
- Detergents
- Oils
- Industrial waste
- Rag

Directly in the river untreated



Separate and combined Sewer systems in London





Aims of the outfall safaris

- 1. Systematically inspect and record outfalls
- 2. Assess and report pollution
- 3. Build evidence of the scale of the problem
- 4. Raise awareness



Crane Outfall Safari Training

2 in-person training sessions held:

- Wednesday 6th March at Crane Youth Community Association.
- Tuesday 12th March at Whitton Community Centre, Trimble Lounge.
- Trained <u>22</u> volunteers in total.



Distances covered

56km of water body identified to be surveyed –

- ~25km surveyed
- ~10km no access/culverts
- ~19km un-surveyed



Status of outfalls within the Crane

- Number of outfalls spotted and assessed within the Crane <u>148</u>
- Total Score:

• 0	<u>114</u>
• 4	<u>1</u>
• 6	<u>21</u>
• 8	9
• >10	3

















What3Words - ///gangs.remain.plays











What3Words - ///Wages.start.entry







A happy outfall...







Crane vs other 2024 catchments





Crane vs Crane vs Crane







New outfall referencing system

- Each outfall has now been given a unique reference number.
 - Understand individual outfalls polluting record – pollution and remediation work.
 - Build and better understanding of the network/drainage catchment
- <u>What3Words</u> to be used simultaneously to indicate locations of <u>known</u> outfalls, and the unique reference number.







New outfall referencing system

- Total number of Thames water outfalls assigned reference numbers - <u>175</u>
- Expected number of Thames Water outfalls within the surveyed area – <u>102</u>
- Outfalls present and recorded with the W3W Thames Water reference number by the volunteer -<u>58</u>
- TW outfalls not found within the surveyed area <u>44</u>



New outfall referencing system

- Outfalls potentially mis-recorded as having no reference number but which could be TW assets (within 15m on the W3W location) - <u>15</u>
- Outfalls recorded that are not likely to be Thames Water assets (beyond 15m on the W3W location) -<u>73</u>





ZSL Outfall Safaris 2020-24



Amp 7 summary - 2020-24			
Vol No.	316		
Distance	399.1		
Outfalls assessed	2563		
>=6	338		
>=10	69		







Any Questions


SWOP and Misconnections Crane Catchment

Rachael Sargent Environmental Protection Advisor

Surface Water Outfall Programme (SWOP)

- Developed by Thames Water in partnership with the Environment Agency
- List of unsatisfactory outfalls suffering from multiple, widespread, intermittent pollution
- These PSWOs require a long-term investigation to identify the suspected thirdparty misconnections and urban diffuse pollution

AMP7 SWOP aims to significantly improve 200 PSWOs



How are PSWOs identified?

- River walks or outfall assessments
- From pollution events
- Local Authorities
- Environment Agency
- Stakeholder groups
- Outfall Safaris



What can cause an outfall to become polluted?







Poor housekeeping or tipping waste

What is a Misconnection?

- Foul water from toilets, kitchens etc must only flow into foul water sewers for treatment at a sewage treatment works.
- Where foul appliances or fixtures are mistakenly plumbed into the surface water sewer, this is a misconnection (FW > SW)
- Surface water in the foul network can cause the sewer to reach or exceed capacity in storm conditions. This could also be a misconnection (SW → FW)





Water Quality Impact

- Major threat to water quality
- Aesthetics affected by cloudy, discoloured water, sewage litter and a bad odour
- Pollutants including nutrients such as phosphorus and nitrogen can cause eutrophication, depleting oxygen for aquatic organisms
- Other pollutants microplastics in clothing (from washing machines), pharmaceuticals etc
- Results in watercourse having a poor rating



Misconnection Challenges

- Awareness
- Unresponsive property owners
- Limited enforcement powers in water industry
- Lack of enforcement from some Local Authorities
- Time and complexity of projects and catchments
- Help for vulnerable customers or those in financial difficulty



SWOP in the Crane Catchment

Project Work

Rayners Lane Culvert



6 Sub-Catchments

Civic Way Culvert



6 Sub-Catchments

Pump Lane Outfall



Completed October 2023

SWOP along the Crane

Properties with Pollution Sources	81
Total Misconnected Appliances	615
Rectified Properties	48
Other Defects	19



Misconnected Appliances



Newton Farm Ecology Park Culvert

Yeading Brook East





Thank you

Who 'owns' our rivers?

Lewis Elmes Catchment Coordinator – London Lea/Brent/Crane

lewis.elmes@environment-agency.gov.uk











gov.uk/guidance/owning-a-watercourse

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https://engageenvironmentagency.uk.engagementhq.com/your-watercourse-rights-and-roles



What is a 'watercourse'?

- A stream of water flowing in a defined channel.
- Water flowing in an underground pipe (culvert).
- Main rivers (EA) and ordinary watercourses (Local Authorities)



https://www.arcgis.com/apps/webappviewer/index.html?id=17cd53dfc524433980cc333726a56386



How do I work out who 'owns' a watercourse?





What are my rights if I'm a Riparian Owner?

- Receive water in its natural state, undiminished in flow, quantity, and quality.
- Protect your property from flooding (without increasing risk elsewhere).
- Use water in a watercourse for reasonable purposes that does not impact on the rights of other owners.





What are my responsibilities?

- Letting water flow naturally undiminished quantity and quality.
- Keeping all structures on your watercourse in good condition.
- Not disturbing species/habitats (e.g. birds/fish).
- Preventing the spread of INNS.
- Not allowing the watercourse to become polluted (e.g. garden waste, wastewater, chemicals etc.).
- Seeking the correct permits/permissions from the EA/Local Authorities.



Urban Watercourses

- Land ownership can be very complex (e.g. terraces).
- Authorities tend to use more permissive powers for maintenance.
- Many more culverts very expensive maintenance.
- Greater risk of causing flooding from poorly planned work.



Questions?







MoRPh (Modular River Survey): a citizen science tool for assessing the physical health of the River Crane



Helen Moggridge, Angela Gurnell, Lucy Shuker Cartographer training@cartographer.io



Modular River Survey









Physical habitat change is a major pressure in the Crane catchment





The MoRPh Survey: how to do it



MoRPh river width (m)	River length for each module survey (m)		
<5m	10 m		
5–10m	20 m		
10–20m	30 m		
20–30m	40 m		
Large (≥ 30 m wide), navigable rivers & canals	50 m		





3.1 BANK FACE - PROFILE			LB	RB	LB	RB	
Bank face - Profile	Natural / artificial	DOMINANT TYPE (V, Vo, Vu, Vt, St, Gt, Cm, Rs, Ts, Em, Sm, Pc)	Bank profile type			A/T/P/E	A/T/P/E
	profile	SUB-DOMINANT TYPE (see (i))	Bank profile type			A/P/E	A/P/E















MoRPh in the River Crane





MoRPh in the River Crane

- Four one-day training courses offered to citizen scientists to teach MoRPh surveying ('Stage 1') to date
- We have pioneered two more training events in the catchment:
 - Monitoring with MoRPh ('Stage 2') November '23
 - MoRPh-blitz at Little Park ('Stage 3') September '24





MoRPh 'Blitz' at Little Park



30m



30/09/2022



Can MoRPh data help explain invertebrate distributions?

Streamside

Headstone Manor





Can MoRPh data help explain invertebrate distributions?

VARIABLES	NO. INDIVIDUALS	NO. TAXA
WATER QUALITY: Dissolved oxygen	-0.643 🔻	-0.548
WATER QUALITY: Electrical conductivity	-0.738	0.333
RIPARIAN ZONE: Riparian vegetation structural complexity	-0.611 🔻	0.539
FLOW: Extent of rippled flow	-0.728	0.166
CHANNEL BED: Bed material (getting smaller)	0.762 🔺	-0.327
CHANNEL BED: Extent of clay across bed	0.764 🔺	-0.327
CHANNEL BED: Extent of patchy siltation	-0.856	0.511
PHYSICAL HABITATS: Number of pools	0.639 🛕	-0.183
PHYSICAL HABITATS: Number of riffles	-0.878	0.634 🛕
VEGETATION: Unvegetated extent on bank face	0.240	-0.671 🔽
VEGETATION: Shrubs/scrub on bank face	-0.695 🔻	0.060
VEGETATION: Saplings/trees on bank face	-0.683 🔻	0.323
VEGETATION: Emergent linear veg. on margin	-0.060	0.743 🔺
TREE FEATURES: Extent of discrete organic accumulation	-0.817	0.383



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Upcoming MoRPh training



MoRPh Field Survey Training

- What: One day training course to become a MoRPh surveyor
- When: Monday 14th October 2024 09:30-16:00
- Where: Shot Tower, Crane Park Island



• MoRPh Blitz: field day with MoRPh & Invertebrate Insights

- What: One day field surveying of Spider Park, with inveterate insights
- When: **Tuesday 15th October 2024** 10:30-15:00
- Where: Spider Park (Bridgewater Rd Fields)



For any questions, please email: training@cartographer.io









Let's take a break



Working in partnership





Crane Smarter Water Catchment: Reaching new audiences

2025-2025



Key aims for Community Engagement and Access

The community theme of the Smarter Water Catchment initiative aims to:

- achieve widespread recognition that the river corridors are valued by local communities and policymakers.
- place every section of the river corridors under community stewardship.
- establish an unbroken Crane Valley trail with visitor facilities at regular intervals.
- and encourage public use of the river corridor for recreation and health/wellbeing.







Opportunities for public engagement and awareness

The Public Engagement Strategy 2022-2023

developed by LGOAL and H&H made recommendations to encourage, engage and to benefit a wide range of audiences and developed a model of engagement. **Developing a Public Engagement Strategy** The development of a Strategy which includes an annual strand.

Supporting capacity building The development of a

network to communicate, share best practice and targeted advice.

Incubating new community stewardship

Fostering environmental stewardship in the geographical gap areas.

Working with new audiences New audiences engaged and identified.

Easy access to funding The Crane Project Fund and Crane community fund launched 2022.

Model of engagement


Reaching new audiences – Citizen Science workshops Cranford



Recent research has shown that it is unclear how diverse participants in citizen science were but:

- Men are more likely to participate than women
- People from white ethnic groups were more likely to participate than those from minority ethnic groups;
- Participation by women from minority ethnic groups is particularly low.
- Participation by those from white ethnic groups declined with socio-economic status
- Participation is lowest amongst the unemployed.

Lack of diversity has consequences for organisations including ZSL that rely on Citizen Science for monitoring and data collection because it:

- reduces rates of participation and therefore limits ZSL's capacity to deliver monitoring.
- leads to some areas geographic areas receiving less monitoring attention than others related to local demographics rather than environmental need.

This project sought to explore the motivations and barriers to engaging with Citizen science. There is an ongoing parallel project taking place as part of the London Pond and Wetland Champions project.

Become a Citizen Scientist: Exploring the Crane Corridor



Reaching new audiences – Citizen Science workshops Cranford

Spring/ Summer 2024

A series of citizen science workshops in partnership with ZSL as part of the Diversity and Inclusion work.

- Aimed at people who have **never taken part in citizen science** activities before. We recruited 15 participants, 12 completed 2 or more of the workshops.
- **Targeting the Cranford community**. An area of mixed ethnic heritage, high deprivation indexes and demographic churn.
- Targeted recruitment **in partnership** with working with 12 community-based organisations in Cranford and Heston.
- We worked with Meadowbank Adult Education College to deliver 2 workshops and used Waye Avenue Open Space for the 3rd Workshop.
- AQA Unit Award for participants to evidence their participation.
- Made **links to existing citizen science projects** including those taking place in the Crane catchment
- In autumn 2024 we have incorporated Citizen Science into Reclaiming the Riverside project delivery
 – working with Meadowbank, ZSL, and London Wildlife Trust officers.





Reaching new audiences – Motivations for engagement



The reasons for taking part closely reflect research on motivations for participating in conservation volunteering activities:

- An appreciation of being outdoors and environmental awareness. The workshops offered opportunities to explore the local area.
- Learning, training and skills: to expand understanding and knowledge either because it complemented their formal or informal learning.
- Learn something new: The opportunity to learn new skills and participate in practical activities
- **Rewarding attendance**: The workshops offered the opportunity to work towards AQA unit awards in citizen science topics developed for the project, that could be used when looking for jobs or professional development (CPD).
- **Personal contact and encouragement**: Some local organisations had suggesting to individuals that there was benefit for them in attending.
- Feeling part of a community: This was acknowledged by multiple participants. It may reflect the fact that many participants were already involved in other voluntary sector organisations and have a strong sense of community cohesion.

"the importance of conservation and creating an overall environment which is healthy and sustainable for all" "chance to be outside"



"to expand my knowledge and skills".

"to be part of the local community"

"my love of nature"

"Meeting like minded people"

Reaching new audiences – Barriers to engagement



- Not knowing what the opportunities are: The most significant barrier to taking part was identified as lack of information and an uncertainty about where to get information from to enable taking part in citizen science initiatives.
- Lack of exposure to, or understanding of, the environment.
- Lack of confidence: Participants discussed how prior to the workshop they had not understood what citizen science was, what was involved or what to expect. They suggested that this lack of knowledge led to a lack of confidence. "Being outside is not the barrier, it's the getting there and knowing about sessions."
- Lack of appropriate knowledge. There was a suggestion that the participants would not have the skills or knowledge to make a useful contribution to citizen science and that they would need significant support/time to develop their skills and knowledge.
- Unable to commit: One participant did not return after the first workshop as he believed that after having a better understanding of what citizen science was, he was not able to make the commitment.

"Being outside is not the barrier, it's the getting there and knowing about sessions."

"I can't make the required commitment!" "I would need someone who is able to identify the different species as I might not always know what they are."

Reaching new audiences – Barriers to engagement



"I would need to fit it in around my other work with local charities."

"not wanting to be out alone."

"I can't commit to regular activities but if there's ones that are not too often, I can try."

- **Cost and transport**. Payment of travel and other expenses paid and equipment provided is an important issue if low-income groups or disabled participants are to be more widely engaged.
- **Time.** Distance from home and travel time was mentioned as these two factors impact on the time constraints as competing demands for time was one of the key due to family/education and other volunteering commitments.
- Weather. Seasonal differences in temperature and bad weather were a limiting factor
- Lack of facilities/toilets. Lack of shelter in bad/hot weather and a lack of toilets should be considered when choosing sites for activities or arrangements made to overcome the barriers.
- **Concern for personal safety.** Several women in the group expressed concern for their personal safety and said that they would not be happy working alone.
- **Physical limitation and accessibility.** Participants talked about the need for citizen science projects to be accessible to those who face physical barriers or have mobility issues. They did not perceive this as a barrier to participation in the long term though they acknowledged that their involvement may be inhibited or limited in some ways.
- Low digital literacy and lack of access to technology. Hounslow has a high proportion of wards which are amongst the most digitally excluded in England and participants were interested in low technology solutions and tools that would enable them to take part – recording data on paper and using paper ID charts rather than online apps.

"I want to be part of a group thing not just for safety but as an opportunity for socialising and meeting others with similar interests and so on."

Reaching new audiences – Barriers to engagement

Options for diversifying recruitment could focus on different ways of developing projects. These include:

- Working with specific communities that reflect the demography of the area where the project took place, the languages and priorities of communities. It would require a good understanding of the community to be able to develop projects on these terms.
- **Providing alternative means of engaging and participating** to reduce barriers to participation by e.g. both online and hands-on. The disabled participant and women with children both highlighted this as a potential model for engagement.
- **Providing role models** from underrepresented audiences and using recruitment strategies specific to diverse audiences.
- Engaging younger audiences and families not traditionally recruited. Offering incentives that demonstrate engagement in the activities would offer a good motivations to engagement.
- Campaigns to promote the benefits of citizen science e.g. awareness days and educational activities.







"I wanted to thank you for the informative session about Citizen Science, I personally learnt a lot. I also wanted to thank you for sharing your knowledge of conservation and the goal of bringing more people out into nature."





Reaching new audiences – business

https://www.lgoal.org/river-crane-smarter-water-catc/working-with-businesses-in-the



Building on work begun last year LGOAL have mapped business and industry in catchment and begun to encourage engagement from business:

- "21 things to do" things to do in your lunch hour with a focus on health and wellbeing, how to get involved, simple citizen science activities for individuals. https://www.lgoal.org/assets/documents/21-things-for-employees-in-45
 An engagement plan has been developed with a theme of Make Nature Your Business
 - Dedicated email account to communicate with the businesses: <u>businesses@lgoal.org.uk</u>
 - Social media https://www.linkedin.com/company/crane-valley-partnership-for-businesses/
 - "Make nature your business" stickers to leave in local businesses
 - A survey for the small businesses to collect data and raise aware of community activities.

21 Things to Do in the

Grane Valley

During Your

unch Break

<u>Silvia.canalini@lgoal.org.uk</u> to get involved with the initiative or if you have contacts.



Reaching new audiences – business

<u>Click here</u> for the Let's Go Outside & Learn event calendar or see below the upcoming events and activities organised by our partners:

search	╳ < 07/10/24 >	Ţ
Events from Oct 7th		-calendar by Tockify
	Volunteer Sunday at Mill Road Twicke	nham

Sun 13th Oct 10:30am - 3:30pm

This Volunteer Sunday will be at Mill Road Twickenham. We shall meet at the Stag Beetle bench inbetween the two bridges. Activities will be : Clearing bramble and other growth Litterpicking Clearing t ...



Take Me to the River

Fri 18th Oct 2:00pm - 4:00pm Help us conserve the important river habitats along the River Crane! For more information and to sign up, follow this link: Take me to the River or scan the QR code. If you have any questions please e ...



Tree Planting Day

Wed 30th Oct 10:00am - 4:00pr

Please register for more details. Visit our website or call: 0790 8228 460 All welcome! Fun outdoor activity! Help the environment! Improve green local spaces! Plant trees in our parks! Meet new peopl ...



Wednesday Wander - Natures Harvest

Wed 13th Nov 10:30am - 12:30pm

Join Margaret Huitson of the Friends of Headstone Manor Park on this walk to discover Natures Harvest amongst the Trees and Hedgerows within the Park. Margaret is a local naturalist a member of Harrow ...

<u>Silvia.canalini@lgoal.org.uk</u> to get involved with the initiative or if you have contacts with business.



- Encourage practical interventions by making links between businesses and boroughs and/or organisations – e.g. litter picking, balsam picking, planting or simple citizen science activities. <u>https://www.lgoal.org/river-crane-smarter-</u> <u>water-catc/working-with-businesses-in-the</u>
- Link businesses to local community groups to encourage join working and collaboration over the long term. This method of engagement will explore the opportunities for corporate volunteering on small scale within the catchment. Events are listed on LGOAL website
- **Donations** e.g. to the Crane Fund for community activities within the catchment.

Reaching new audiences – young people

Engaging future citizen scientists:

Family learning activities Programme of 15 activities over the summer in 6 parks picked because of limited community engagement.



Exploring eels as part of the summer learning Summer 2024







School's workshops and 2nd Crane Schools Forum 4 workshops with 4 secondary schools to develop a social action followed by the Schools forum to report back.

Sarah.Austin@lgoal.org.uk for families and schools project delivery.



Thank you for listening!

Frances Bennett, Director frances.bennett@lgoal.org.uk

www.lgoal.org.uk

Citizen Science Feedback



We want you all to join in to help us answer some key questions to shape the way we work with our volunteers! Scan the QR code or type in the link below and you should be able to start giving your feedback!

https://tinyurl.com/5n6m9kyh





Exciting New Projects in the Crane



Citizen Crane Year 10 Forum 10/10/2024

Exciting Projects & Updates from the Crane



Citizen Crane Year 10 Forum 10/10/2024



Invertebrate Insights: Urban Wetland Performance Monitoring



Why are we interested in monitoring these systems?

Wetlands monitoring is expanding!

- Project stemmed from monitoring Headstone Manor Park in 2022/23 followed by pilot of new wetland monitoring methods in 2023/24.
- Now with GLA funding we have started the rollout to another site in the Crane(Newton Park) and Chinbrook Meadows to test our methods across London.

SUPPORTED BY

Citizen Crane Year 10 Forum 10/10/2024



Results of Pilot Investigation





Таха	BMWP	Abundance			
	Score	1-9	10-99	100- 999	1000+
Mayfly (Ephemeroptera)	10 (4)	1	2	3	4
Caddisflies (Trichoptera)	5-10	1	2	3	4
Dragonflies and Damselflies (Odonata) - Dragonfly (Aeshnidae) - Damselfly (Coenagrionidae)	6-8	1	2	3	4
Freshwater Shrimp (Gammarus)	6	1	2	3	2
Freshwater Hoglice (Aseliidae)	3	1	1	0	-2
Leeches (Hirudinea)	3	1	1	0	-2
 Fly Larvae (Diptera) Non-Biting Midge Larvae (Chironomidae) Mosquito larvae (Culicidae) Drone fly larvae (Syrphidae) 	_	1	1	0	-3
Worms (Oligochaeta)	1	1	1	0	-3

Wider Rollout & Next Steps

- This pilot will help us work with communities to track the performance of these nature-based solutions across London + a great way of getting local communities engaged with conserving their local area
- Trained over 20 volunteers in the new methods
- Data will be used to inform us of the health of the wetlands for future design, management and maintenance.
- If the project is successful, this method of monitoring could be rolled out as a systematic way to monitor more wetlands!





River restoration – how do we monitor success?

Location - Spider Park (Bridgewater Fields Open Space), Hillingdon

Background – The channel bed in this section of river currently lacks many of the physical structural habitats and vegetation that would be expected of a naturallyfunctioning river of this type.

However, there is potential at Spider Park to develop a more natural channel form and function.

With HS2 and SWC funding - London Borough of Hillingdon and ZSL will be restoring/improving a section of river in Spider Park. Improvements will include:

- reprofiling the channel two stage channel creation,
- adding meanders and improving in channel features to enhance ecological function through the addition of woody debris,
- Gravel addition and marginal planting.





Monitoring of restoration sites

- With this project (and others in the Crane) in mind – we are looking at strategic ways to monitor sites pre and post restoration to help inform management of these improved sites - but also help inform future projects in the catchment.
- Build a really nice before and after picture of the project through systematic monitoring by trained volunteers.
- MoRPh group monitoring session first test at Little Park went really well and now we want to try this at **Spider Park** before works begin to remeander the river. The plan is to go back after works are complete every ~6months to monitor change over time.
- Potential to take an Extended Riverfly samples before and after restoration to deep dive into biodiversity changes too.

Citizen Crane Year 10 Forum 10/10/2024

Water Voles in the Crane

London Borough of Richmond upon Thames (supported by funding from the Mayor of London, the EA and the CVP via Thames Water), collaborated with ZSL, FORCE, CVP, the EA, London Wildlife Trust volunteers, TCV and Wild Future to reintroduce water voles into Crane Park.

The two-year long operation began with wetland habitat restoration at Crane Park Island and Little Park and culminated in the release of captive-bred water voles along a 1km stretch of river and riparian habitat.

This work aligns closely with the work of the London Water Vole Recovery Programme which aims to:

- 1. Determine the current water vole status.
- 2. Facilitate the eradication of American mink.
- 3. Improve the monitoring of water voles.
- 4. Identify priority sites to protect and restore metapopulations.
- 5. Raise awareness and increase public engagement in recovering water vole populations.
- 6. Build the evidence base through research.
- 7. Unify stakeholders and share best practice.







Vole release details

In summary:

- 137 voles released in total (103 soft released, 34 hard released)
- 46 pens in total
- The Crane Park Island pens were the same sex sibling groups all the rest were pairs that had been together before arrival and so hopefully moved quickly towards breeding.

Post-release monitoring:

- Within release site, latrine rafts placed at every ~50m (~35 rafts).
- Outside of the core release are across 100m (~45 rafts) were deployed up to 1km from release project boundary.
- 3 National Water Vole Monitoring Programme transects were set up, one within the release site, and a further two 1km up and downstream of the release site to look for any signs of water voles (this includes feeding, breeding, pooping ...).





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Photos: CVP, Sam Facey, Wild Futures













Just kidding!!









Next steps for the voles of the Crane!

- Hopefully, further restoration and enhancement of the River Crane will improve habitat connectivity allowing the reintroduced voles to rapidly colonise adjacent areas and expand their range within the Lower Crane Valley.
- More releases on the cards.
- Potential future opportunity for people to volunteer to monitor the voles.



Development of a Citizen Science Portal

Feedback at last year's forum that citizen scientists in the Crane wanted:

- A space to communicate with each other, share images, data, questions
- A streamlined place to see events/volunteering opportunities
- A place to have discussions
- A single point of access to data and reports

Now working on this through SWC Initiative – trying to see if we can replicate the Crane portal as a space in which we can achieve all of this!



ZSL



Any questions?



A Volunteer Perspective

Interactive with the CC team

Whats next – Questions & Wrapping Up