

Editorial note. The WILDCOMS newsletters have changed format and, rather than focus on particular issues or contaminants, will largely report recent newsworthy items and publications from its member partners.

Major new collaboration on Scottish raptors

Gaby Peniche of the Royal (Dick) School of Veterinary Studies, University of Edinburgh, has begun work on a project, in conjunction with Scottish Natural Heritage, on assessing raptor health in Scotland and using this as an indicator of ecosystem health. Gaby is working in close collaboration with various WILDCOMS partner schemes, such as Science and Advice for Scottish



<u>Agriculture (SASA)</u> and the <u>Predatory Bird Monitoring Scheme (PBMS)</u>) over the collection of Scottish raptor carcasses and subsequent sharing of samples. A recent <u>appeal</u> outlining who should be contacted over collection of any birds of prey carcasses found in Scotland has recently been published by the <u>Scottish Raptor Study Group</u>.

Wildlife Translocation and Disease Risk

The risk from disease in undertaking translocations will be the topic of a special issue of the journal Ecohealth in 2016. Several of the <u>WILDCOMS</u> schemes were involved in a two-day Zoological Society of London Symposium in May 2015 titled Health and Disease in Translocated Animals and scientific papers derived from some of the 23 talks at the



symposium form the basis of this special issue. The talks traversed the delegates through the translocation process and included the important concepts to consider in risk from disease at each stage, commencing with selection of species, working through planning a translocation, monitoring during a translocation, and post-release health surveillance.

Natural England highlights the value of the PBMS

Natural England (NE) Principal Specialists recently highlighted how the Predatory Bird Monitoring Scheme (PBMS) works in partnership with NE to provide datasets addressing evidence needs related to chemicals impacts on wildlife. Their talk "Natural England: Evidence needs and opportunities for



<u>collaboration</u>" was part of a meeting covering the Natural Environment Research Council's Environmental Science Impact Programme. The presentation discussed how long-term monitoring, as conducted by the PBMS: (i) contributes to NE's ability to measure stewardship effectiveness of emergency authorisation, (ii) provides early warning signs for new chemical risk.

WIIS-Scotland

The latest results from WIIS-Scotland are published quarterly and can be viewed here.

Tick Surveillance Scheme

Public Health England's Tick Surveillance Scheme records tick distributions on a national scale. The scheme enhances knowledge on the distribution of endemic tick species, monitors their activity, provides information on host preference, and helps detect rare or imported species. Overall, the scheme gathers data to support the assessment of the public health risks posed by ticks and tick-borne



diseases. The scheme relies on submissions from the public, health and veterinary professionals, wildlife groups and amateur entomologists. WILDCOMS has promoted the scheme amongst its network partners to help boost submissions to the scheme. Individuals can also help by sending in ticks themselves; details of how to get involved are provided on the scheme's website.

New collaboration to assess impacts of lead in predatory birds

The debate surrounding releases of lead (Pb) into our environment needs to be informed by datasets on the exposure to this toxic metal in predatory birds. The Predatory Bird Monitoring Scheme has started a new collaboration with the RSPB and the University of the Highlands and Islands to measure the levels of Pb in the tissues of predatory birds, particularly buzzards (Buteo buteo) which may consume Pb shot present in un-retrieved shot game birds.



Marine contaminants - accurate assessments by Cefas and successful regulation

Cefas have undertaken marine contaminants monitoring and assessments for many years, recently publishing a case study to assess whether contaminants are at a level not giving rise to pollution effects. This will help the UK to determine whether our seas have 'Good Environmental Status' under the Marine Strategy Framework Directive. Additional published papers include a spatial and temporal status assessment of contaminants in sediments around the English and Welsh coastlines which highlights that some estuaries including the Thames estuary still show levels above environmental assessment criteria. Another paper on imposex in the dogwhelk Nucella lapillus shows how policy regulations have successfully reduced the effect of TBT (tributyltin) in English and Welsh estuaries.

PAW Scotland – Annual bird of prey crime maps

Data from WIIS-Scotland have been used by the Partnership for Action Against Wildlife Crime (PAW) Scotland to compile the Annual bird of prey crime maps which can be view <u>here</u>

20 bird of prey crimes were recorded in 2015 including six poisoning incidents. Poisoning was the most frequently recorded bird of prey crime, but there were also five shootings, five cases of disturbance, three trapping or attempted trapping offences and one chick theft.

The hotspot map and associated background data for the confirmed poisoning incidents reported to SASA from January 2011 to December 2015 is shown here and the 2015 data only here.

The WILDCOMS network, together with the specific work of some of its partner schemes that focus on wildlife disease surveillance and disease risk in wildlife translocations, was featured in the March 2016 issue of "inpractice", the bulletin of the Chartered Institute of Ecology and Environmental Management http://www.cieem.net/in-practice.

News from DRAHS

DRAHS recently published a paper in Ecohealth which provides more detail and clarifies our method to conduct disease risk analysis for conservation translocations, using translocations of smooth snakes, pool frogs, adders and sand lizards as examples. In the paper we describe how ecological and geographical barriers between the source and destination sites affect the risk from disease to the translocated animals and species at the destination. The paper (Bobadilla Suarez et al., 2015) will help practitioners to consider modifications to translocation pathways in the future which will reduce the risk from disease.

Accidental poisoning of otter with rodenticide

An occurrence of accidental rodenticide poisoning of an otter in Wiltshire was reported to the Cardiff Otter Project in April, highlighting the need to encourage the public to use rodenticides responsibly by: only using them if necessary; avoiding attracting rodents by denying them access to food and places to live (including cleaning up around bird feeders); using trained pest control technicians if possible or following the instructions carefully if they use rodenticides and to use bait boxes. The incident was reported in the local Swindon News

http://www.swindon24.co.uk/news/marlboroughs-rare-resident-otter-killed-by-rat-poison/ and Dr Liz Chadwick from the Cardiff Otter Project went on BBC radio Wiltshire, to discuss the case.

Wildcoms stakeholder meeting

<u>Cardiff University Otter Project</u> hosted a <u>WILDCOMS network</u> event inviting policymakers and those who actively inform policymakers on wildlife disease and contaminants. see http://www.cardiff.ac.uk/news/view/215319-gathering-of-experts-spark-new-directions-for-wildlife-disease-and-contaminants-monitoring.

New publications

Bobadilla Suarez et al., 2015. Using Qualitative Disease Risk Analysis for Herpetofauna Conservation Translocations Transgressing Ecological and Geographical Barriers. Ecohealth 12/2015 DOI 10.1007/s10393-015-1086-4

Brown MJF et al., 2016. Bringing back a healthy buzz? Invertebrate parasites and reintroductions: a case study in bumblebees. Ecohealth DOI 10.1007/s10393-015-1093-5

Espín S, et al., 2016. Tracking pan-continental trends in environmental contamination using sentinel raptors—what types of samples should we use? *Ecotoxicology* **25** 777-780 http://dx.doi.org/10.1007/s10646-016-1636-8 is a review of which types of raptor samples are most suitable for tracking trends in environmental pollutant concentrations at a pan-European scale. The paper, published as part of the activities of the "Research and Monitoring for and with Raptors in Europe (EURAPMON) network, is open access.

Fountain K, et al., 2016. The Influence of Risk Factors Associated with Captive Rearing on Post-Release Survival in Translocated Cirl Buntings (Emberiza cirlus) in the UK. Oryx. doi:10.1017/S0030605315001313

Hopkins TH, et al., 2015. Scanning electron microscopy and energy-dispersive x-ray spectroscopy (SEM-EDX) confirms shooting of a hen harrier (Circus cyaneus). Veterinary Record Case Reports 3:e000241. doi:10.1136/vetreccr-2015-000241



Lyons B, et al., 2015. Determining Good Environmental Status under the Marine Strategy Framework Directive: Case study for descriptor 8 (chemical contaminants). MPB. http://www.sciencedirect.com/science/article/pii/S0141113615300908

Nicolaus, E.E.M., Barry, J., 2015. Imposex in the dogwhelk (Nucella lapillus): 22-year monitoring around England and Wales. Environ. Monit. Assess. 187, 736pp. (doi:10.1007/s10661-015-4961-0)

Nicolaus, E E M, et al., 2015. Spatial and temporal analysis of the risks posed by polycyclic aromatic hydrocarbon, polychlorinated biphenyl and metal contaminants in sediments in UK estuaries and coastal waters. Mar. Pollut. Bull. 95, 469-479. <u>doi:10.1016/j.marpolbul.2015.03.012</u>

Peniche G, et al., 2016 Protecting free-living dormice: molecular identification of cestode parasites in captive dormice (Muscardinus avellanarius) destined for reintroduction. Ecohealth DOI: 10.1007/s10393-016-1108-x

Sherrard-Smith, E.et al. 2016. Distribution and molecular phylogeny of biliary trematodes (Opisthorchiidae) infecting native *Lutra lutra* and alien *Neovison vison* across Europe. *Parasitology International* 65(2), pp. 163-170. (10.1016/j.parint.2015.11.007). Cardiff Otter Project recently published a paper describing the distribution and phylogeny of biliary trematodes from across Europe. These parasites are found in the gall bladder of otters in the UK, and there has been speculation over their potential non-native status.

van den Brink. et al., 2016. Use of terrestrial field studies in the derivation of bioaccumulation potential of chemicals. Integrated Environmental Assessment and Management 12 135-145. http://dx.doi.org/10.1002/ieam.1717 highlights how data from terrestrial field studies can be used to assess the likely bioaccumulation of environmental contaminants and is open access.

Contact us:

If you would like to see a particular topic in the WILDCOMS newsletter, contact us about other WILDCOMS related matters, or be added to our mailing list please e-mail the WILDCOMS coordinator Jacky Chaplow (mailto:jgar@ceh.ac.uk).