



NEWSLETTER // WINTER 2022



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ON THE COVER

Common eider (*Somateria mollissima*)

Cover photo by **Josh Jaggard**, wildlife photographer.

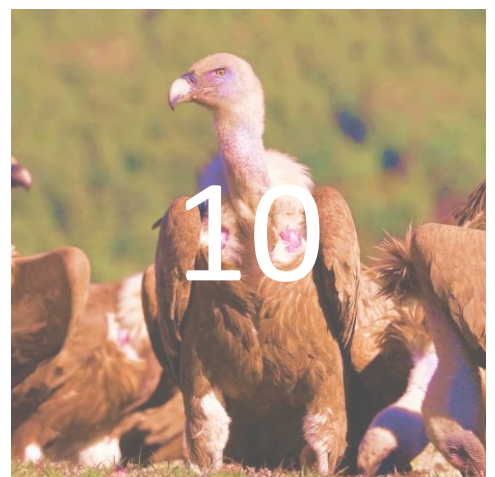
Website: [click here](#)

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Disclaimer

The editors have tried to put this non-citable bulletin together as carefully as possible and apologise for any errors or omissions may have been committed.



President's Corner



The 15th Conference of the Parties to the Convention on Biological Diversity just ended with an agreement for the global protection of nature – it will depend on all of us whether changes will take place.

After two years of virtual existence – kept afloat by a most memorable and equally remarkable joint WDA/EWDA online conference organised by our Spanish colleagues around Fran Ruiz (for which they should be forever praised given all the complications that arose during the pandemic) – the transition to the new board was again the first happy EWDA *in person* occasion of meeting a group of people in one room and to connect at least hybrid with all the others. At this point let me express a big “Thank you” to Karin Lemberger who, as immediate past chair, together with Emmanuelle Gilot and Philippe Berny organised this meeting in such a pleasant way at the Vet School in Lyon. Two days starting with meetings of the different EWDA committees, followed by the board meeting and leading up to the EWDA annual general meeting marked the way again hopefully to more personal contact and discussion in the near future.

On behalf of all the newly elected board members, I would also like to thank all EWDA members who participated in the 2022 election and supported the candidates through their vote. We are all honoured by your trust and will do our best to serve the interests of EWDA.

In the meantime, another of our board meetings has taken place and it is exciting to see that once again a group of enthusiastic people has come together to actively work for the EWDA and its aims and mission. More on this can be found e.g., in the contributions of the EWDA committees in this newsletter.

Under the impression of the UN Convention on Biological Diversity Conference, I wish that we all may succeed in addressing and positively influencing the importance of wildlife health in our home regions.

Along with the other WDA sections EWDA is part of the WDA council, which is another opportunity to realise that Wildlife Health and Diseases are global issues. The last council meeting was held in early December at which new communications officer Lyndell Whyte, who is active on several social media channels to publicise WDA interests, highlighted that it would be much appreciated if members were willing to provide short video sequences showcasing their work or interests in wildlife issues. Since so many of us have the smartphone ready at hand, please kindly see if you would like to share a short sequence or two – I am sure there are already many great things out there waiting to be seen ! ☺

Have a happy New Year !

Gudrun Wibbelt

Leibniz Institute for
Zoo and Wildlife Research,
Berlin, Germany
ewda.chair@gmail.com



Transformative changes in wildlife health research

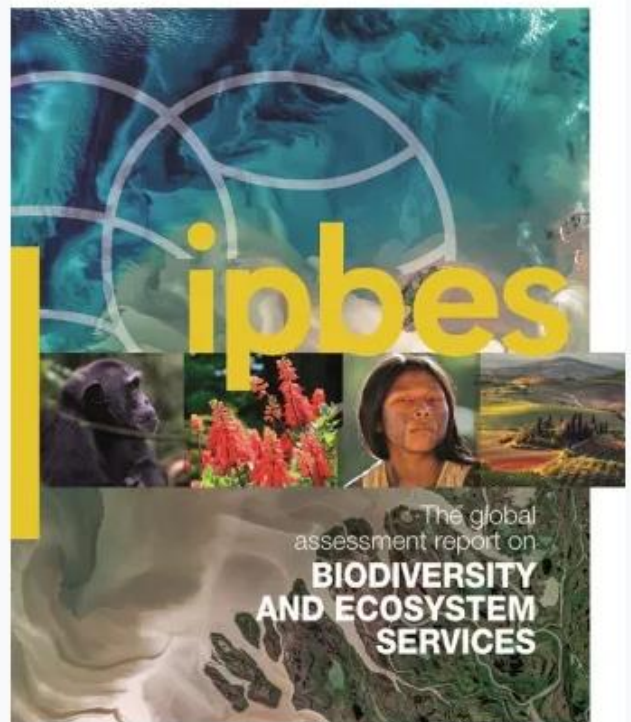
“By transforming the way that we perform wildlife health research, we can help to make the transition to a sustainable human society.”

Goals for conserving and sustainably using nature and achieving sustainability cannot be met by current trajectories, and may only be achieved through so-called “transformative changes”. We show how such transformative changes could be implemented in wildlife health research.

The unparalleled alteration of the biosphere and rapid decline of biodiversity are undoubtedly of concern to all of us in the wildlife health community. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) published an authoritative global report on the state of nature in May 2019 (<https://ipbes.net/global-assessment>). IPBES concluded that *“goals for conserving and sustainably using nature and achieving sustainability cannot be met by current trajectories, and goals for 2030 and beyond may only be achieved through transformative changes.”* By transformative changes, they meant a fundamental, system-wide reorganization of human society across technological, economic, and social factors, including paradigms, goals and values.

In the EWDA Sustainability Committee, we discussed how to implement such transformative changes in our work as wildlife health scientists. We shared the results of our discussions at the 2020 EWDA/WDA conference in Cuenca in the oral presentation “Thinking about transformative changes in wildlife health activities.” As a result, a larger group from the (E)WDA community met twice for discussions in the course of the past year.

We thought a good starting point for making transformative changes might be to gauge what are the paradigms, goals and values we aspire to, that promote a sustainable way of living and conserve nature.



After looking through the IPBES report, we realised that our own WDA Charter of Values provides suitable guidance (<https://www.wildlifedisease.org/PersonifyEbusiness/About-Us>).

These eight statements represent the basic, common goals and values that WDA members hold in common:

Transformative changes in wildlife health research

- That the conservation of biological diversity is of benefit and essential to human societies now and in the future;
- That the health of wild animals, humans and domestic animals are interconnected and interdependent within a shared environment ('One Health');
- That wildlife health is a global challenge transcending cultural and political boundaries and demanding international integration and cooperation of the scientific community, stakeholders and society;
- That knowledge of wildlife health is best achieved through rigorous science, recognition of other accumulated forms of knowledge (e.g., traditional, experiential, professional), and open and respectful debate;
- That our Association is most effective by being multidisciplinary, diverse, inclusive, fair and equitable;
- That communicating the science of our members and values of our Association through advocacy and outreach is integral to achieving our mission;
- That the future of our community and accomplishment of our mission depends on the fostering of student and early career learning and professional development;
- That our Association should conduct its business according to principles of environmental sustainability.

In above Charter of Values, the goals and values of the WDA are eloquently defined.

However, these goals and values only become meaningful if we act accordingly, for example in our research. But ... how to do so? To support you, we made a **triage protocol** that can help you to design a wildlife health study according to the WDA Charter of Values (See page 5, with thanks to Beatriz Rubio Alonso).

Please note: this protocol is a work in progress, and still being discussed with other WDA members.

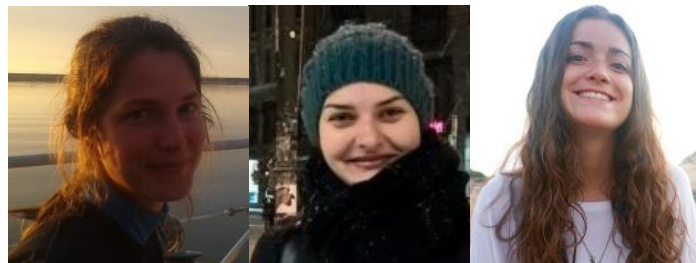
We realise that the constraints of current society may not allow you to actually carry out your research according to this protocol. However, by going through this exercise, you may have a better idea what the ideal wildlife health study would look like, and so provide you with a 'dot on the horizon' to aim for. By transforming the way that we perform wildlife health research, we can help to make the transition to a sustainable human society.

Thijs Kuiken, DVM PhD DACVP
Erasmus University Medical Centre,
Rotterdam, The Netherlands. Email:
ewda.sustainability@gmail.com

**On behalf of the EWDA
Sustainability Committee:**



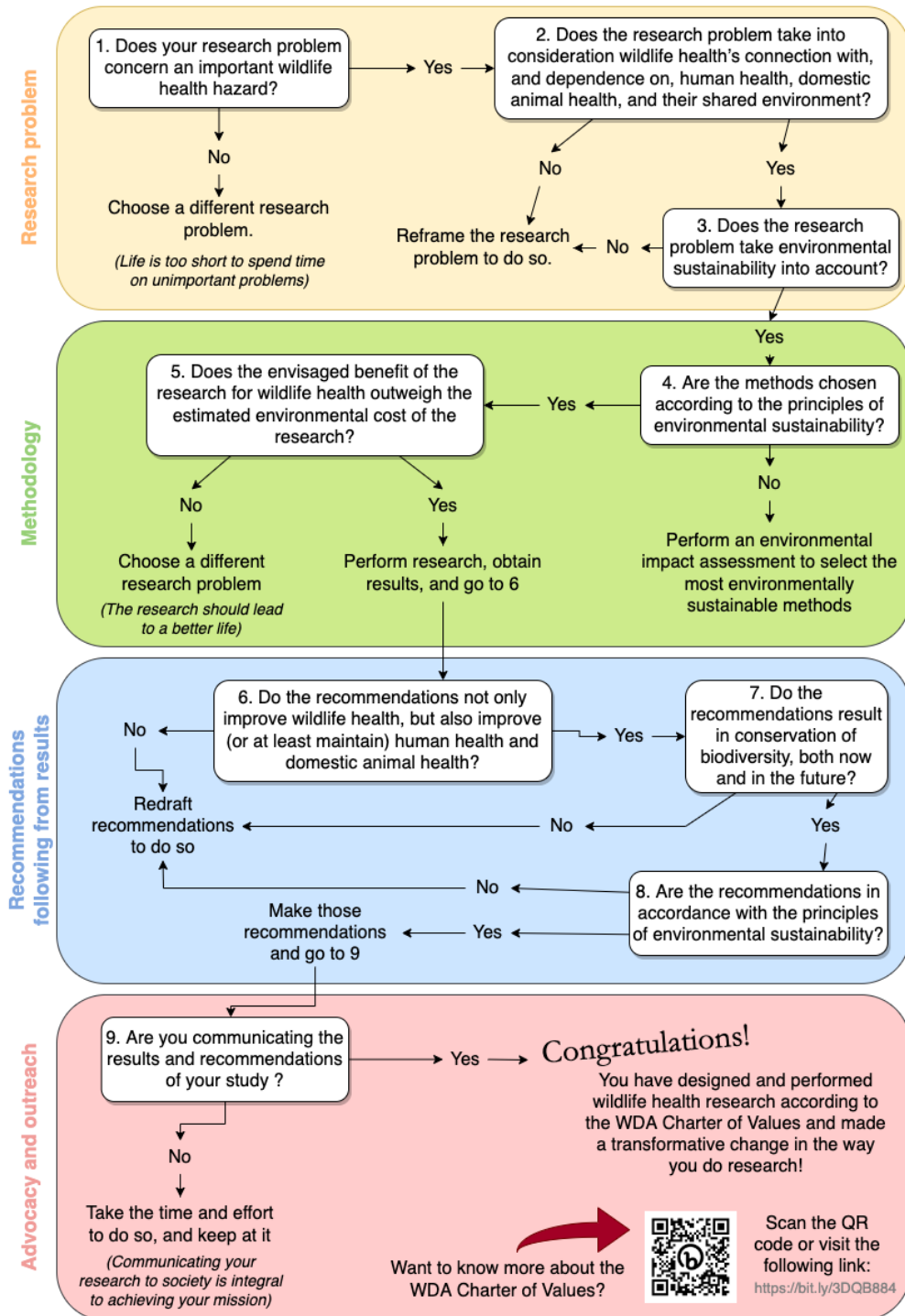
Lineke Begeman, Ana Vale, Beatriz Rubio Alonso



Graham Smith, Barbara Vogler, Karin Lemberger



Transformative changes in wildlife health research



EWDA Network for Wildlife Health Surveillance



“Our priorities are to develop additional online resources, explore how we can support students training in WHS, and plan for an in person meeting in 2024.”

Since its inception in 2009, the EWDA Network has worked to promote Wildlife Health Surveillance in Europe: here we review progress and achievements to date, and outline future plans

The **EWDA Network for Wildlife Health Surveillance** (WHS) was formed in 2009 with the following goals:

1. To improve exchange of information among WHS programmes in Europe
2. To develop standard operating procedures for diagnostic investigation and common criteria for diagnosis
3. To share specialist expertise and provide training opportunities

To help ensure that the history of our Network and a record of its achievements are maintained, and to raise awareness of the resources available, we have recently created a timeline of key activities and outputs which is available @ <https://ewda.org/ewda-network-reports/>. Over the past 13 years, our Network committee has arranged nine meetings, often affiliated with EWDA annual conferences or held with project partners. These have focused on a wide variety of topics, most recently on capacity and methods development, for example ‘How to Start Up a National Wildlife Health Surveillance Programme’ in 2018 and ‘Expanding the field network of Wildlife Health Surveillance’ in 2021. Project reports and related open access peer-reviewed publications are available to download on this webpage.

Collation of this information prompted our Network committee to review how our various activities have helped us achieve our goals to date. Our aim is to use this opportunity to develop plans for the future in an effort to fill important and outstanding information gaps.

Our Network supports information exchange, training and sharing of specialist expertise in a number of different ways. The EWDA Google group is a dynamic forum that provides EWDA members and those directly involved in the field of WHS with a means to disseminate recent findings and seek rapid feedback from the community. The EWDA WildList is an open access networking tool that enables users to contact scientists with expertise in certain taxa and disease conditions. Our regular WildList Mailings provide recipients with information on job and training opportunities. Finally, our annual meetings provide attendees with a chance to exchange ideas through presentations and peer discussion. Our libraries of Diagnosis Cards and Species Abundance Cards are valuable resources to promote standardisation of methods to facilitate information sharing.

Our priorities for 2023 are to develop additional online resources, to explore how we can support our EWDA Student Chapter and other student training in WHS and we hope to arrange an in person meeting in 2024 – more details to follow! In the meantime, we encourage EWDA members to get in touch via EWDA.Network@gmail.com and to share suggestions of future topics we might cover, or resources that you would find useful. Many thanks!

Becki Lawson

Chair of the
EWDA Network Committee
EWDA.Network@gmail.com



EWDA Student Chapter News



More info on the 2023 Workshop and reaching out across Europe

2023 Student Chapter Workshop

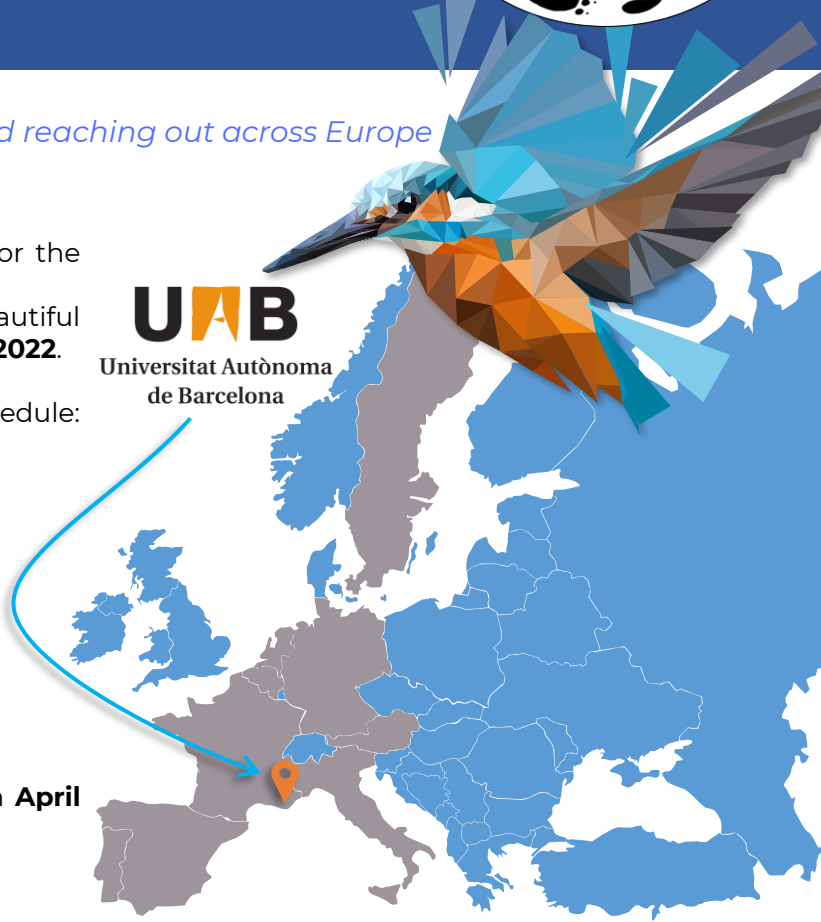
We hope you're as excited as we are for the 2023 Student Chapter workshop! This will be an in-person event set in beautiful Barcelona, Spain from **1st to 4th of April 2022**.

Here is a first look at our preliminary schedule:



UAB

Universitat Autònoma de Barcelona



Are you with us? We welcome you as a:

- **Passive participant**
Enjoying all of our speaker's talks on **April 1st and 2nd**

OR

- **Active participant**
Enjoying speaker's talks on **April 1st and 2nd** as well as participating in the **'hands-on' Disease Outbreak Scenario Investigation** on **April 3rd and 4th**.

Register now!

We will be revealing detailed info about speaker backgrounds, activities planned, and of course, our fantastic host city Barcelona on our social media over the upcoming months!

So keep your eyes and ears open for more information!

Reaching out across the continent

We are still looking for more **Country Representatives** to join the growing EWDA Student Chapter network!

If you see your country highlighted in **blue** on the map above – this might just be your opportunity to step into the role of Country Rep!

As a Country Representative you can get even more involved by organising events for your fellow students and interacting with professionals in the field of wildlife health.

Interested to hear more? Just drop us an email at ewdastudent@gmail.com!



EWDA Research Grants: €12,000 available in 2023

“Wildlife research grants – three categories are available from the EWDA - please apply by September 15th 2023”

We will again be offering three categories of research grants. Each grant is for 3000 Euros. We are very fortunate this cycle to be able to offer two grants in the Wildlife Conservation category. The grants are:

1. Wildlife Conservation Research Grant

The focus of this grant is conservation. This grant cycle, we will be offering **two** grants in this category, the second grant is funded by a French endowment fund.

2. Wildlife Health Research and Education in Eastern Europe Grant

3. The Amanda Hawkswood Wildlife Health and Welfare Research Grant

The focus of this grant is welfare.

We have been busy updating the grant application process to hopefully make it clearer for applicants. This year the grant application form includes a section on the need for sustainable use of resources in research.

All applications should be made on the EWDA Research Grant application form.

All the details are on the website: <http://ewda.org/ewda-small-grants>

2021 research projects supported by EWDA:

Wildlife Conservation Research Grant:

Helena Costa, Norway.

“Non-invasive respiratory pathogen screening of free-swimming North Atlantic humpback (*Megaptera novaeangliae*) and sperm whales (*Physeter macrocephalus*).

Grant for Wildlife Health Research and Education in Eastern Europe:

Tamara Szentivanyi, Hungary and Romania.
“The effect of host blood meal on pathogen presence and diversity in bat-associated ticks”

The Amanda Hawkswood Wildlife Health and Welfare Research Grant:

Simone Pisano, Switzerland.

“Optimizing a non-destructive field-based sampling method for the detection of *Aphamoyces astaci*, the causative agent of the crayfish plague”.

Paul Holmes, *Animal and Plant Health Agency, England*

On behalf of the EWDA Small Grants Committee:

Helle Bernstorff Hydeskov, Gábor Czirják, Emmanuelle Gilot-Fromont, Ignasi Marco, Alessandra Gaffuri and Duro Huber



The science behind seal entanglements



“Seal entanglements in the Netherlands have increased 4 fold in 11 years”

Researchers from Sealcentre Pieterburen in collaboration with ASeal, Ecomare, and the Max Planck Institute for Psycholinguistics, have found that the number of seals affected by marine debris has quadrupled in eleven years

Last August, a team of researchers from the three seal rehabilitation centres in the Netherlands, in combination with researchers from the Max Planck Institute, published an article regarding entanglements and ingestion of marine debris in Dutch seals in eleven years time.

This article summarizes the information of all the Dutch coast during these 11 years. The researchers looked at several details including: the species, age and sex of the affected animals, the type of entanglement and the material causing it; and the location where the animal was found.

The main findings of this research are:

- The number of entanglements has quadrupled during the study period.
- Grey seals (*Halichoerus grypus*) are more affected than harbour seals (*Phoca vitulina*).
- Animals younger than 3 years of age are the most affected ones.
- The majority of the entanglements were located around the neck of the animals.
- Harbour seals had a higher incidence of ingested debris when compared to grey seals.
- Almost 90% of the material was originated from boats or fishing industry.

The researchers state in the article that although the explanations for such results might be difficult to find, several hypothesis and facts need to be taken into account:

- The amount of (plastic) debris in the Wadden Sea has increased in the last decades.
- Grey seals are more curious and playful than harbour seals.
- Young animals are more curious than adults and tend to swim further away to avoid competition.
- Differences in foraging techniques between these two species could explain why harbour seals tend to ingest more debris than grey seals.

These facts could bring seals in close proximity with human activities and discarded debris increasing their chances of becoming entangled.

Furthermore, an increase in public awareness and in the facility to report entanglements could explain an increase in the number of reported animals.

The researchers conclude that more research is needed to assess further the effects of marine debris in the ecosystem and that a decrease of marine debris is crucial to the future survival of whole species.

Salazar-Casals A, et al.
Increased incidence of entanglements and ingested marine debris in Dutch seals from 2010 to 2020. *Oceans*. 2022; 3(3):389-400.
<https://doi.org/10.3390/oceans3030026>



SCAN ME

Anna Salazar Casals, DVM

Sealcentre Pieterburen and
Max Planck Institute for Psycholinguistics
Ulrum, the Netherlands

9 anna.salazarcasals@zeehondencentrum.nl



Griffon vultures carry AMR bacteria of public health concern



“The majority of isolates showed resistance to at least one antimicrobial.”

Wild Eurasian griffon vultures in north-eastern Spain are carriers of widespread AMR zoonotic *Salmonella* and *Campylobacter*, which in some instances may have an anthropogenic origin, due to their scavenging feeding habits. Many isolates found, such as monophasic *Salmonella Typhimurium*, are of public health concern and the amount of AMR to critically important antimicrobials for human medicine is worrying.

The emergence and spread of **antimicrobial-resistant (AMR) bacteria** is one of the greatest threat to public health worldwide. This situation reduces our ability to effectively treat infectious diseases, raises health care costs, and could be responsible for up to 10 million deaths annually worldwide by 2050. While the occurrence of AMR in livestock has been extensively studied, the role of wild animals in their maintenance and transmission is still poorly understood. In general, free-ranging wildlife does not naturally come into contact with antimicrobials; however, AMR bacteria can be acquired from human and livestock sources such as agricultural facilities and refuse dumps. In that sense, **scavengers**, due to their feeding habits and their position in the food chain, are expected to be more prone to carrying AMR bacteria, facilitating their dissemination in the environment.

Spain is home for 90% of the European population of **Eurasian griffon vultures** (*Gyps fulvus*). Vultures are particularly exposed to AMR bacteria due to the frequent consumption of infected livestock carcasses in supplementary feeding stations (established to boost their recovery after a critical decline in the 1980s due the indiscriminate use of poison) and organic waste in landfills.

In this study, we assessed the prevalence and potential anthropogenic origin of ***Salmonella* and *Campylobacter***, as well as the presence of AMR isolates in cloacal swabs (n = 218) from

a population of griffon vultures in north-eastern Spain. In the EU, both bacteria are leading causes of human gastrointestinal infections.

We found numerous emergent isolates that are of public health concern, including **monophasic *Salmonella Typhimurium*** which is causing a global public health emergency. Genotyping analysis revealed that these monophasic *S. Typhimurium* strains were also shared by gulls, livestock, and even humans. Therefore, wild Eurasian griffon vultures in north-eastern Spain are carriers of widespread zoonotic bacteria, which in some instances may have an anthropogenic origin due to their scavenging feeding habits. We also described the first report of ***Campylobacter lari*** in an avian scavenger in the northern hemisphere.

Concurrently, a significant proportion of both zoonotic bacteria isolates were resistant to critically important antimicrobials for human medicine (e.g., **ciprofloxacin**), which is worrying. However, more in-depth studies are still needed to understand the potential risk of spill-over from wild birds to humans.

Espunyes J., *et al.* (2022) Eurasian griffon vultures carry widespread antimicrobial resistant *Salmonella* and *Campylobacter* of public health concern. STOTEN 844, 157189.

Johan Espunyes, DVM, PhD.
Wildlife Conservation Medicine
Research Group (WildCoM),
Autonomous University of Barcelona,
Spain.

Johan.Espunyes@uab.cat

