







THE OFFICIAL MAGAZINE OF THE INTERNATIONAL ORNITHOLOGISTS' UNION VOLUME 5 · ISSUE 4 · NOVEMBER 2023

IN THIS ISSUE More fascinating insights into the captivating and complex world of birds!



The President's Message	1	
The Immediate Past President's Message	5	
Editor's Note	9	
Meet Our Amazing Members	11	
- Sascha Rösner: The IOU Webmaster	11	
IOU Working Group	13	2
- Birds as Peacemakers	13	P. S
IOU Insider	15	Min I
- A Win-Win Partnership! Members' Discounts	15	
- Fly Into the World of Birds: The IOU on social media	16	
- Can You Identify These Renowned Ornithologists?	16	Due 09 12
The Ornithology Forum	17	
- Mexican Ornithologists and Birdwatching Volunteers Celebrate their Annual Meeting	17	
Species Snapshots	20	
- Why We Need to Track the Endangered 'Ua'u	20	
The Editor's Top Picks	22	
- The Impact of Plasmodium relictum Infection on Stress Response and Immune	22	
Function in House Sparrows		
- The Hidden Threat: The Impact of Rodenticides on Owls and other Nocturnal Birds	24	
Birds News Roundup	26	at the second
- A Novel Sarcocystis Parasite Found in the Endangered Bearded Vulture	26	5
- The Mystery of the Hissing Blue Tit: A Study of Female-Female Aggression	28	
Conservation and Research: A Vital Partnership	29	
- Tracing the Flight Paths of North American Swallows using Multi-isotope and	29	
Morphometric Analysis		
- Differential Gene Expression in the Brain of the Semipalmated Sandpiper During	30	
Autumn and Spring Migration		
New Horizons in Ornithology	32	
- How to Tell a Goose From a Goose: The Secrets of Facial Recognition in Greylag Geese	32	
- Innovative Monitoring Technique Reveals Insights into Endangered Bird Species	33	
Fascinating Ornithological Experiments	34	
- Goffin's Cockatoos: The Master Craftsmen of the Bird World	34	
In Loving Memory	35	
- Masashi Yoshii (1921 - 2012)	35	- BAB
Book and Film Reviews	38	
- The Amazing World of East African Birds: An Ecological and Cultural Exploration	38	VULTURE
- Ecology and Conservation of Mountain Birds	39	The Story of the Beanfed Vulnare
- Vulture: The Story of the Bearded Vulture	40	1
The Noticeboard	41	101 CURIOUS TALES OF
- Conferences, Courses, Workshops, Webinars, Jobs, Grants, Fellowships, Awards,	41	EAST AFRICAN
Internships		פטאום
- Nominate a New Member	46	SV TO
LONTRIDUTE 200 LONDOCT	17	The same of the sa

Cover: Barn owl (Tyto alba), James Wainscoat, Unsplash.

PRESIDENT'S MESSAGE



Prof. Zheng Guangmei



Prof. Zheng Guangmei (third from left) with colleagues in the Conference Center during the 22nd IOCongress held in 1998 in Durban, South Africa. Zhang Zhengwang (far left), Xu Weishu (fourth from left), Secretary-General of the 23nd IOCongress, Ding Changqing (middle back), Fang Yun (fifth from right), Han Lianxian (fourth from right), Sun Yuehua (third from right), Lei Fumin (second from right), Li Fengshan (far right).

WE MOURN THE LOSS OF OUR ESTEEMED COLLEAGUE,

Professor Zheng Guangmei, a distinguished expert in Chinese ornithology. He left us on October 3, 2023, in Beijing, aged 91.

Prof. Zheng was a distinguished Senior Fellow of the International Ornithologists' Union (IOU, previously known as the International Ornithological Committee). He served as the president of the World Pheasant Association and was a consultant to the International Crane Foundation. His life was devoted to his passion for ornithology. Alongside his Chinese colleagues, he attended several International Ornithological Congresses (IOCongresses), including the 22nd IOCongress in Durban, South Africa, in 1998; the 23rd IOCongress in Beijing, China, in 2002; and the 24th IOCongress in Hamburg, Germany in 2006. As chairman of the China Organizing Committee and an ex officio member of the Scientific Program Committee, he played a pivotal role in successfully hosting the 23rd IOCongress in Beijing from August 11 to 17, 2002. Under Prof. Zheng's leadership, the China Organizing Committee ensured that the 23rd IOCongress was a tremendous success. The event featured 10 plenary talks, 40 symposia, around 200 talks, and 600 posters spanning various biological sciences. It attracted over 1,000 delegates globally, along with three satellite meetings. A special symposium on the origin of birds, known as the 'Presidential Debate' initiated by Prof. Zheng
devoted his life to
his passion for
ornithology and
conducted rigorous
scholarship and
groundbreaking
research in various
fields of avian
ecology in China



(From left to right) Dominique Homberger, Immediate Past President of the IOU greeting Lydia Chen Cheng and Prof. Zheng at the 23rd IOCongress reception, Beijing, 2002. (Photo: Dominique Homberger)

Walter. J. Bock, the IOCongresses president and the president of the IOCommittee (now the IOU), facilitated in-depth discussions and exchanges. This symposium included a plenary lecture by Prof. Zhou Zhonghe, a member of the Chinese Academy of Sciences and an IOU Fellow elected during the 26th IOCongress in 2022. One of two memorable special events was a "Fossils Show", which displayed the extraordinary Mesozoic fossil bird, *Confuciusornis* sp., discovered in China.

The plenary lectures were published in 2004 (Bock and Schodde, 2004) and the Proceedings in 2006 in Acta Zoologica Sinica, now called Current Zoology (Schodde, 2006) https://www.internationalornithology.org/iocongress-proceedings. The China Organizing Committee also sponsored 20 senior scientists and many graduate students from all parts of China, covering all or some of their registration fees, accommodation, and meals during the congress. Prof. Zheng hosted a warm welcoming ceremony and reception on the evening of the first day (11 August 2002). The event was attended by members of the local academic communities and government officials. A special gift was given to Prof. Zheng - 'A complete checklist of species and subspecies of the Chinese birds' edited by the late Cheng Tso-Hsin (1906-1998), the father of modern Chinese ornithology and the honorary president of the previous 22nd IOCongress in Durban, South Africa, in 1998. The gift was from Lydia Chen Cheng, the widow of Prof. Cheng. Additionally, a set of beautiful postage stamps featuring Chinese endemic and endangered bird species was issued during the Congress. The crested ibis (Nipponia nippon), which used to be thought extinct, was chosen as the symbol of the IOCongress. The species was rediscovered with only 7 individuals in 1981 in Yangxian County, Shaanxi Province. It is a global example of bird conservation and population recovery. Today, its population has increased to over 9,000 birds, and its habitat range covers various provinces in China, Korea, and Japan.

We are grateful to Prof. Zheng and the China Organizing Committee for making the 23rd IOCongress in Beijing a historic event as it was the first IOCongress to take place in an Asian country. It also earned high acclaim as one of the most successful IOCongresses, as Walter J. Bock, the President of the 23rd IOCongress, said in his Presidential address: "The 23rd Congress marked the beginning of the third century of the International Ornithological Congresses, which evolved from a small European colloquium with a main focus on migratory routes of birds into a major international conference encompassing a wide range of avian biology."

Prof. Zheng was born in 1932 in Heilongjiang Province and lived in Beijing. He obtained his bachelor's degree from the Department of Biology at Beijing Normal University in 1954 and continued his postgraduate studies at Northeast Normal University, Changchun, China from 1956 to 1958. He became a professor at Beijing Normal



Cheng Tso-Hsin, the father of modern Chinese ornithology and the honorary president of the 22nd IOCongress in Durban, South Africa. Photo provided by Zhana Jianshe.

His love for ornithology lasted throughout his life







A Chinese team led by Prof. Zheng (centre left) during the 24th IOCongress, Hamburg, Germany, 2006. Ding Ping (second from left), Lei Fumin (far left), Ding Changqing (centre right), Zhang Zhengwang (second from right), Deng Wenhong (far right).

Prof. Zheng's research and methods have had a lasting impact on the development of ornithology, especially in the area of endangered pheasant ecology and conservation

Prof. Zheng Guangmei (centre left) with colleagues in front of Beijing International Convention Center during the 23rd IOCongress, Beijing, China, 2002. Ding Ping (far left), Song Jie (second from left), Ding Changqing (far right), Zhang Yanyun (second from right), Zhang Zhengwang (centre right).

University in 1986 and was elected as a member of the Chinese Academy of Sciences (academician) in November 2003. His love for ornithology started with his career at Beijing Normal University in 1954 and lasted throughout his life. He initially concentrated on the breeding ecology and conservation biology of pheasants. Prof. Zheng devoted his life to rigorous scholarship and conducted groundbreaking research in various fields of avian ecology in China. His research and methods have had a lasting impact on the development of ornithology, especially in the area of endangered pheasant ecology and conservation (e.g., Cabot's Tragopan, Tragopan caboti). Prof. Zheng is one of the most accomplished scientists in the history of Chinese ornithology. He made enormous contributions to ornithology, ecology, and conservation sciences with several fundamental reference works. His four editions of "A Checklist on the Classification and Distribution of the Birds of China", - are the most widely used bird checklists in China. His textbooks "Ornithology" and "General Zoology" are popular textbooks used at Chinese universities. Many other books are equally influential, such as "Red List of Endangered Animals in China (Birds Volume)", "Red List of Biodiversity in China - Vertebrates (Volume 2: Birds)", "Chinese Pheasants", and many more. He published over 100 research papers and received several national and provincial-level awards, including the Second-Class Prize of the State Scientific and Technological Progress Award and the Ministry of Education Science and Technology Progress Award.

Prof. Zheng occupied numerous prominent positions and made remarkable contributions to the fields of ornithology and animal ecology. He has been the Vice-Chairman of the China Zoological Society, Chairman and Honorary Chairman of the China Ornithological Society, Executive Director of the China Wildlife Conservation Association, Deputy Director of the Discipline of Biology at the Ministry of Education's Committee for Science Education Guidance, Member of the Fifth Editorial Committee of "Fauna Sinica", Committee Member of the Endangered Species Scientific Committee of the People's Republic of China, Editor-in-Chief of "Avian Research" and "Bulletin of Biology", Deputy Editor of "Acta Zoologica Sinica", and more.

He also played a pivotal role in the reform and development of zoological education in China. He received many national awards for his contributions to teaching and education. He wrote several influential textbooks, which have been recognized as national-level planned textbooks and national high-quality textbooks. Prof. Zheng had a deep passion for teaching and mentored many students. He was an excellent mentor and supervisor, encouraging students and young scholars to pursue careers in ornithology. Many of his former postdoctoral and doctoral students have become prominent ornithologists in the academic world.

Prof. Zheng Guangmei has left a lasting legacy for the advancement of Ornithology in China and the world as well as at the IOU. With his passing, IOU has lost one of its most respected Fellows, an accomplished ornithologist, and a profoundly distinguished professor. His scientific achievements and spirit will remain with us forever!



Lydia Chen Cheng (right) showing a book gift 'A Complete Checklist of Species and Subspecies of the Chinese Birds' to Walter J. Bock

(left). Photo provided by Zheng Huaijie.

Prof. Zheng in front of a statue of Prof. Fu Tongsheng, a renowned ornithologist at Northeast Normal University, during the 15th conference of China Ornithological Society in 2019, Changchun, Jilin Province, China

lei bui

PROF. LEI FUMIN

President

International Ornithologists' Union www.internationalornithology.org

REFERENCES

Bock, W.J., and Schodde, R. (eds.) (2004). Plenary Lectures 23rd International Ornithological Congress, Beijing, 11 - 17 August 2002. *Acta Zoologica Sinica* 50: i + 880 - 1001. Plenary lectures in pdf.

Liu, L. Y. and Zheng, G. M.(edit). (2009) (4th edition). General Zoology. Beijing: Higher Education Press (in Chinese).

Ma, L., Li, X., Zhai, T., Zhaig, Y., Song, K., Holyoak, M., and Sun, Y. (2021). Changes in the Habitat Preference of Crested Ibis (*Nipponia nippon*) during a Period of Rapid Population Increase. *Animals (Basel)* 11(9): 2626. doi: 10.3390/ani11092626; PMCID: PMC8465559; PMID: 34573592.

Schodde, R. (ed.) (2006). Proceedings of the 23rd International Ornithological Congress, Beijing, 11 - 17 August 2002. *Acta Zoologica Sinica* 52: xvi + 1 - 706. Complete proceedings in pdf.

See also on $\underline{\text{https://www.internationalornithology.org/iocongress-proceedings.}}$

Zhang, Y. Y., Zheng, G. M. (2021). China's Red List of of biodiversity: vertebrates (Volume II: Birds). 1st ed. Beijing: Science Press (in Chinese).

Zheng, G. M. (edit). (1995). Ornithology. Beijing: Beijing Normal University Publishing House (in Chinese).

Zheng, G. M. (2015). Pheasants in China. 1st ed. Beijing: Higher Education Press (in Chinese).

Zheng, G. M. (edit). (2023) (4th edition). A checklist on the classification and distribution of the birds of China. Beijing: Science Press (in Chinese).

IMMEDIATE PAST PRESIDENT'S MESSAGE



Challenges of a Multicultural and Multilingual Science Enterprise in Ornithology

A RECENT ARTICLE IN *Ornithological Applications* (Inzunza *et al.*, 2023) caught my attention. Having devoted more than a quarter century to the internationalization of ornithology through the IOU, I am well aware of the issues that were raised in this article. But for today's message, I am going to focus on the current use of English as the *lingua franca* of science and ornithology.

Having grown up in Switzerland, I spoke French at home, Swiss German with everybody else, and Standard German at school. Like most of my compatriots, I never thought much about growing up trilingual, learning Latin and English in high school, and later studying both at French-speaking and German-speaking universities because it was unremarkable in a country with four official languages and numerous distinctive dialects. All textbooks were available in French or German, and most relevant papers for me were written in German, the *lingua franca* of vertebrate morphology for the first half of the 20th century - even Japanese and Russian authors published in German. When I arrived in the United States as a postdoc, I realized that my ability to read Macbeth in the original language in high school had ill-prepared me for writing scientific papers in modern English. I eventually managed to do so, partly by reading a library's worth of literary fiction to absorb the vast English vocabulary and a clear writing style. Hence, I can empathize with the linguistic and cultural challenges that so many colleagues from non-English-speaking countries face.

At a time when science publishing was multilingual about 50 years ago, doctoral students in America had to pass proficiency tests in two foreign languages to get their degrees. These requirements were softened and eventually dropped as the technical training of scientists became more time-intensive and as more non-English-speaking scientists switched to publishing their work in English starting in the 1970s-1980s - a transition I undertook myself. Still, until recently, my doctoral students had to learn at least some basic German to access the vast background literature in vertebrate morphology.



DOMINIQUE G. HOMBERGER Immediate Past President, International Ornithologists' Union

when I arrived
in the United States
as a postdoc,
I realized that my
ability to read
Macbeth in the
original language in
high school had
ill-prepared me for
writing scientific
papers in
modern English















The many languages of birds, Unsplash.



Multilingual sign, Masoala Zoo, Zürich, Switzerland, Wikimedia Commons.

However, with the globalization and anglicization of the scientific enterprise, the supremacy of English as the current *lingua franca* of science has been questioned and remedies to concomitant issues have been sought. For example, it was suggested to have more articles published in Spanish (Inzunza *et al.*, 2023) even though these articles would become less accessible to scientists not fluent in Spanish, Portuguese, or Italian. Or it was suggested that non-English speakers "simply" learn English and use the help of English-proficient colleagues and the language services offered by journals (Andrew, 2020). In my own experience as an editor of various journals, however, even articles written by native English speakers are not always well-organized, grammatically and stylistically polished, and free of unnecessary jargon.

Before looking for solutions beyond common-sense recommendations, let's consider some of the serious disadvantages of Anglo-Saxon monolingualism for science. (A) The absence of local information on biodiversity and conservation, which are published mainly in local languages (Amano et al., 2023). (B) Authors in non-high-income countries and with lower English proficiency face greater challenges in having their manuscripts accepted in prestigious English science journals (Andrew, 2020; Fox et al., 2023). (C) Limitations in global access to science (Márquez and Porras 2020). (D) The English language acts as a gatekeeper of thoughts and scientific approaches (Woolton and Osório, 2019; Márquez and Porras, 2020). (E) All non-English books and articles over the past half-millennium since the Renaissance have become inaccessible, leading inevitably to a "reinvention of the wheel" as I have observed in my field of vertebrate morphology (see also Zenn et al., 2023). (F) Syntheses and reviews of particular research areas consider only English papers and books and, thereby, miss important developments and achievements by non-Anglo-Saxon scientists (Zenn et al., 2023). (G) The near impossibility of finding non-English research publications through internet searches unless one is in command of a large vocabulary of synonyms in the foreign language (see also Zenn et al., 2023). For example, searches for "avian drinking" in German provide different results when searching for "trinken" or "Wasseraufnahme". Interestingly, even with a search for German terms, for example, publications in English are pulled up, possibly as a result of an internal connection with Google Translate (?), and almost none of the pre-1985 German papers are retrieved.

Even articles
written by native
English speakers are
not always
well-organized,
grammatically and
stylistically polished,
and free of
unnecessary
jargon



Sandhill cranes (Antigone canadensis) have a wide vocalization repetoire and will call in unison when mating. Cole Marshall, Unsplash.



Multilingual prohibition sign, Celerina, Grisons, Switzerland. Wikimedia Commons.

The Flutter
is considering
various ways on
how to support
multilingualism in
ornithology

Fortunately, there are technological and AI advances to help with some of the root causes of the acknowledged symptoms of Anglo-Saxon monolingualism in science. The internet provides apps, such as Google translate, that are getting better and better and provide rough translations as a basis for further analysis and clarification with the help of online dictionaries, thesauruses, and apps correcting grammar, style, and spelling, as well as online language tutoring for the longer term. Even though this approach is cumbersome and demanding, it is incomparably much easier than what scientists needed to do to understand publications in a foreign language before the Internet revolution.

In general, English (besides mathematics) seems to be wellsuited for information transfer in the sciences possibly because of its precise vocabulary and straight-forward grammar (although I personally miss the flexibility of German with its inbuilt capacity to create instant neologisms to describe new ideas or facts). Even though, to take advantage of the great diversity of information generated globally, proficiency in non-English languages is indispensable. In this respect, ornithologists from non-English speaking countries enjoy a distinctive advantage and can provide translating services to Anglo-Saxon monolinguists. Ornithologists from non-English speaking countries also ought to feel responsible for translating or reviewing papers and books that are published in their countries. In addition, communications with colleagues in non-Anglo-Saxon countries need to be nurtured. For example, a vast background literature in vertebrate morphology is published in Russian and, therefore, is inaccessible to most Western scientists, including me, but international contacts and collaborations can bridge linguistic barriers (see, e.g., https://www.international ornithology.org/avian-morphology).

The IOU is keenly aware of the global gross inequities with respect to access to high-speed/high-volume Internet which is a fundamental requirement for taking advantage of the technological innovations helping in accessing non-English publications. The IOU is currently considering various approaches of fund-raising to assist in alleviating at least part of this problem. In addition, *The Flutter* is considering various ways on how to support multilingualism in ornithology.



Some robins mimic the calls of other birds which they incorporate into their own songs. European Robin (Erithacus rubecula). Amee Fairbank, Unsplash.





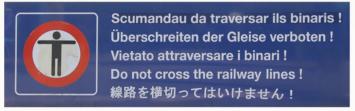
The many languages of birds, Unsplash

Finally, although recent intensive discussions have focused on the challenges and disadvantages that are faced by non-English speakers in science, it is worth keeping in mind that bilingualism and multilingualism have been shown to provide multiple cognitive, professional/economic, and cultural advantages to individuals and entire societies (Diamond, 2010; Chibaka, 2018) and are gaining ground in our more globalized world. At the IOU, most Council members and probably the majority of IOU members are at least bilingual if not multilingual and multicultural. The webinar series "Fridays4Birds" [see "Friday4Birds marks one year with a new Instagram account" https://www.international ornithology.org/iou-newsletters-flutter, The Flutter, 5 (3):12] is another example of a successful adaptation to multilingualism as it provides presentations in English with live translations in French by colleagues in Switzerland or Côte d'Ivoire. If we scientists consider multilingualism a personal and cultural asset, we will have the motivation and courage to master languages other than our own mother tongue and to consider this mastery part of being a scientist.

With best wishes and kind regards,

DOMINIQUE G. HOMBERGER

Immediate Past President (2022 - 2026) International Ornithologists' Union www.internationalornithology.org



Multilingual prohibition sign, Mustér railway station, Switzerland, Wikimedia Commons.

REFERENCES

Amano, T., Berdejo-Espinola, V., Akasaka, M., de Andrade Junior, M. A., Blaise, N., Checco, J., ... and Zamora-Gutierrez, V. (2023). The role of non-English-language science in informing national biodiversity assessments. Nature Sustainability, 1-10. https://doi.org/10.1038/s41893-023-01087-8

Andrew, N. R. (2020). Design flaws and poor language: Two key reasons why manuscripts get rejected from Austral Ecology across all countries between 2017 and 2020. Austral Ecology. 45: 505-509. https://doi.org/10.1111/aec.12908

Chibaka, E. F. (2018). Advantages of bilingualism and multilingualism: Multidimensional research findings. Multilingualism and bilingualism, 15. InTech. https://doi.org/10.5772/intechopen.74625

Diamond, J. (2010). The benefits of multilingualism. Science, 330(6002), 332-333. https://doi.org/10.1126/science.1195067

Fox, C. W., Meyer, J., and Aimé, E. (2023). Double-blind peer review affects reviewer ratings and editor decisions at an ecology journal. Functional Ecology. 37: 1144-1157. https://doi.org/10.1111/1365-2435.14259

Ruelas Inzunza, E., Cockle, K. L., Núñez Montellano, M. G., Fontana, C. S., Cuatianquiz Lima, C., Echeverry-Galvis, M. A., ... and Miño, C. I. (2023). How to include and recognize the work of ornithologists based in the Neotropics: Fourteen actions for Ornithological Applications, Ornithology, and other global-scope journals. Ornithological Applications, 125(1), duac047. https://doi.org/10.1093/ornithapp/duac047

Márquez, M. C., and Porras, A. M. (2020). Science communication in multiple languages is critical to its effectiveness. Frontiers in Communication, 5: 31. https://doi.org/10.3389/fcomm.2020.00031

Woolston, C., and Osório, J. (2019). When English is not your mother tongue. Nature, 570(7760), 265-267. https://doi.org/10.1038/d41586-019-01797-0

Zenni, R. D., Barlow, J., Pettorelli, N., Stephens, P., Rader, R., Siqueira, T., ... and Nuñez, M. A. (2023). Multi-lingual literature searches are needed to unveil global knowledge. Journal of Applied Ecology. 60: 380-383. https://doi.org/10.1111/1365-2664.14370

EDITOR'S NOTE





Turkey Vulture (Cathartes aura). Matthew T Rader, Wikimedio

Embracing the Wings of Change

DEAR FELLOW ORNITHOLOGISTS,

Welcome to the latest edition of The Flutter, the magazine of the International Ornithologists' Union (IOU). In this issue, we delve into various aspects of the captivating realm of avifauna. As I moved to Canada from India, I found myself captivated by the majestic flight of the turkey vultures (Cathartes aura). These enigmatic creatures, the most widespread of the New World vultures, paint a striking picture against the sky, their range extending from southern Canada to the tip of South America. Displaying a preference for open habitats, such as grasslands, and savannas, turkey vultures are known for their ability to adapt to various environments, including rural, suburban, and urban areas. This adaptability has undoubtedly contributed to their enduring presence throughout the continent. As an ardent ornithologist and birdwatcher, my curiosity was piqued by their exceptional characteristics, ecological importance, and the distinctions they held in comparison to the Old World vultures of my homeland.

One of the most striking features of the turkey vulture is its distinctively soaring flight pattern, which allows it to cover large distances with minimal effort. Its sizable wingspan and graceful aerial maneuvers are a result of its natural thermals, the rising columns of warm air that provide lift. By tilting its wings slightly, the turkey vulture can adjust its direction and speed, creating its iconic silhouette in the sky.

Despite their relatively stable population, turkey vultures face challenges that require scientific intervention. Encounters with man-made structures, such as power lines and wind turbines, along with the accumulation of harmful pesticides and rodenticides in their bodies, pose significant threats. Studying

Turkey Vulture (Cathartes aura). Sketch by Vidya Padmakumar



Fueling my passion for ornithology, Alaska, USA.

As I moved to
Canada from India,
I found myself
captivated by the
majestic flight of the
turkey vultures



Indian Vulture (Gyps indicus), Shantanu Kuveskar, Wikimedia.

these impacts and implementing conservation measures are crucial steps towards securing the future of this vital scavenger species.

By contrast, the Indian vulture (*Gyps indicus*) is a magnificent species that survives in southeast Pakistan and peninsular India. Majestic in flight, with a wingspan of up to 2.6 meters and weighing as much as 9 kilograms, it has a black head, a yellow bill, and a pristine white body. It soars at high altitudes, scanning the ground for carcasses, its powerful bill and gizzard making short work of feeding.

I was first introduced to the Indian vulture during a visit to a conservation center during my school in 2015 in Rajasthan, India. This species is currently classified as Critically Endangered. A drastic population decline of over 97% in the past few decades, primarily due to the veterinary drug Diclofenac, has left the species on the brink of extinction. This drug, given to cattle and other livestock to reduce inflammation and increase productivity, induces kidney failure and death in vultures that feed on the carcasses of these animals. Despite a ban on this drug since 2006, the vulture population still struggles to recover.

I was profoundly moved by the tireless efforts of the conservationists working to pull the Indian vulture back from the brink. Through captive breeding programs, health monitoring, and reintroduction into the wild, they strive to secure a future for these birds. They also actively educate locals and farmers about the importance of vultures and the dangers of Diclofenac. Their dedication fuels their optimism, fostering the hope that this symbol of India's avian wealth will once more flourish.



Turkey Vulture (Cathartes aura), Dori Faulder, Wikimedia.

The tale of these two vultures, one from the New World and one from the Old, serves as a potent reminder of our deep connection to the natural world and the role we play in its preservation. As we continue to learn about these remarkable creatures, we are reminded of the intricate balance of nature and our responsibility to safeguard it. Whether it's the graceful flight of the turkey vulture across the Canadian sky or the determined efforts to save the Indian vulture in Rajasthan, these stories inspire us to appreciate and protect our avian co-inhabitants.

As scientists and stewards of avian conservation, it is our collective duty to promote awareness and understanding of these remarkable birds and the threats they face. Collaborative efforts between researchers, local communities, and authorities are essential in safeguarding the future of these magnificent birds. By fostering partnerships and engaging in comprehensive research, we can gain further insights into their behavior, migration patterns, and population dynamics.

May our collective efforts soar high, just like the birds, as we strive to protect and understand the fascinating world of avifauna. Wishing you fruitful research and rewarding encounters with our winged companions.

Warm regards,

VIDYA PADMAKUMAR Editor, The IOU Flutter

flutter@internationalornithology.org

MEET OUR AMAZING MEMBERS



SASCHA RÖSNER IOU's Webmaster



Dr. Sascha Rösner

DR. SASCHA RÖSNER, born in 1973, is a research fellow at the University of Marburg, Germany. Sascha holds a degree in biology, with a focus on animal ecology, geography, and conservation. As a member of the conservation ecology group, his research focuses on avian ecology and conservation ranging from population approaches and parasite-bird interactions to movement and community ecology. In his research activities, he combines classic field ornithological methods with modern techniques, such as GPS telemetry, stress physiology, and population genetics.

When asked to provide a brief self-description, Sascha Rösner responds concisely: "I am a wildlife ecologist and conservationist" ... and ... "I love to combine my research with my passion for technology.", he adds. Further, he expresses his gratitude for growing up in a rural environment, which allowed him to connect with nature at an early age. The interaction between wildlife and the cultural landscape appears to have ignited his passion for research from a young age. His journey into ornithological research was almost inevitable, and his interest in nature photography naturally accompanied his pursuits as a technical element.

Currently, he and his team study how structural characteristics of and resource distribution in forests shape passerine communities by examination of stress and endo-parasite load as well as hematological methods. To evaluate the impact of forestry,



I am a
wildlife
ecologist and
conservationist ...
and ... I love
to combine
my research
with my
passion for
technology

recreation, and natural disturbance dynamics on the population dynamics of the endangered Western Capercaillie (*Tetrao urogallus*), he combines intense fieldwork and laboratory work in two European national parks. In recent years, Sascha has focused on bird banding and GPS tracking of avian raptors to understand how landscape composition and land-use shape movement patterns in space and time.

Within his teaching activities at Marburg University, Dr. Rösner shares his expertise and experience in conservation ecology and ornithology as well as his fascination for wildlife to biology students. He teaches B.Sc., -and M.Sc., -students the fundamentals of animal ecology as well as practical skills for species identification and conservation practice. His own research examples cover various aspects of conservation in the context of agriculture or forestry in seminars, practical exercises, and excursions.

Dr. Rösner further volunteers in nature and species conservation efforts [e.g., the local population of barn owls (*Tyto alba*) and little owls (*Athene noctua*)]. Over the past two decades, he has been entrusted with the creation and maintenance of websites for numerous NGOs and research projects; including the relaunch of the IOU's website and its maintenance.



Common Buzzard (Buteo buteo) © Sascha

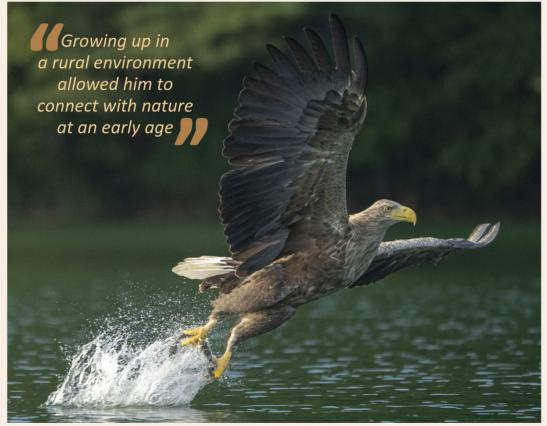
KEYWORDS
Animal ecology,
Applied Conservation
Science, Ornithology,
Birds of Prey, Telemetry.

RESEARCH PROFILES

Conservation Ecology Group: https://www.uni-marburg.de/en/fb17/disciplines/conservation/farwig-group/team/sascha-rosner

ORCID: https://orcid.org/0000-0002-6766-1546

ResearchGate: https://www.researchgate.net/profile/Sascha-Roesner



White-tailed Eagle (Haliaeetus albicilla) © Sascha Rösner

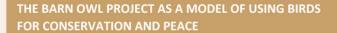
IOU WORKING GROUP



A Barn Owl bringing a vole to its chicks in the nesting box. (Photo: Amir Ezer)

ALTHOUGH THE DOVE BECAME A SYMBOL FOR PEACE in

the biblical episode of Noah's Ark, the Barn Owl (*Tyto alba*) replaced the dove as the symbol of peace in the Middle East after four decades of efforts in bird conservation through the Barn Owl project. Following a lecture on the Barn Owl project by Yossi Leshem, General Mansour Abu Rashid, and Alexandre Roulin at the 27th International Ornithological Congress (IOCongress) in Vancouver, Canada, in 2018, then-secretary and current immediate past president of the IOU, Prof. Dominique Homberger, recommended to the triumvirate to start an IOU Working Group on the subject of Birds as Peacemakers and to expand its successful mission globally.





Prof. Yossi Leshem

The intensive use of agricultural pesticides throughout the Jordan Valley and surrounding region used to be a grave threat to the environment, migrating birds, and birds in general. Many species of raptors went extinct in the Middle East due to secondary poisonings resulting from feeding on poisoned rodents in agricultural fields. Hence, a project was developed towards a significant long-term reduction in the use of pesticides and towards farming practices becoming more sustainable and environmentally safe.

Not like other birds of prey, Barn Owls are a very common species in the Middle East and, especially, in agricultural areas. Each pair of Barn Owl eat 2,000-6,000 rodents per year, making them an efficient alternative to pesticides. These considerations led to the initiation of the Barn Owl project four decades ago under the motto of "Barn Owls know no boundaries".

The Barn Owl project started in 1983 in Israel at the Kibbutz Sde Eliyahu on the Jordanian border under the initiative of Prof. Yossi Leshem from the Society for the Protection of Nature in Israel and Tel Aviv University, with 14 nesting boxes. Under the leadership of General Mansour Abu Rashid,

the chairperson of the Amman Center for Peace and Development (ACPD), Jordanian and Palestinian ornithologists and farmers joined and significantly expanded the project in 2002. Prof. Alexandre Roulin, an internationally recognized authority on Barn Owls at the University of Lausanne in Switzerland, joined the project in 2010. In addition, the government of Switzerland, a politically strictly neutral country, lent its enthusiastic support to the project as part of its support for world peace. In 2015, Dr. Vasileios Bontzorlos of TYTO-Association for the Management and Conservation of Biodiversity in Agricultural Ecosystems in Greece, and BirdLife Cyprus under the leadership of Prof. Costas Kadis, the Cypriot Minister of Agriculture, also joined the Barn Owl project. More than 1,300 nesting boxes for Barn Owls were placed in the Greek part of the island and also 100 nesting boxes along the border between the Turkish and Greek republics of Cyprus - possibly as a first step toward peaceful cooperation across the demilitarized United Nations Buffer Zone.

In 2022 Prof. Imad Cherkaoui at the Ibn Tofail University in Kenitra, Morocco, joined the Barn Owl project and led farmers in large parts of the country to participate. The Barn Owl project is a unique model of cooperation among farmers, academics, conservationists, government agencies, and NGOs, and creates a bridge of understanding

and cooperation between different cultures and people.

The proposal for an IOU Working Group Birds as Peacemakers (WGBP) was accepted by the IOU Council in May 2022, and a month later, the WGBP was announced on the IOU web page https:// www.internationalornithology.org/birds-aspeacemakers. It was subsequently presented at the virtual 28th IOCongress in August 2022 . Since then, the WGBP has held meetings each year in a different country. In May 2023, it held a seminar in the Jordan Valley. In 2024, there will be a meeting in Cyprus and another meeting in Morocco to advance the Barn Owl project in these countries. The WGBP also plans to hold a conference in Nairobi in 2025 in the hope of expanding the Barn Owl project to Sub-Saharan African countries.

We hope that the Barn Owl project's vision will continue to expand with the help of the IOU to many more countries around the globe and with more bird species as a platform for peace and cooperation to benefit the environment, birds, and people. We wish to conclude and emphasize that the Barn Owls brought a significant decrease in the use of pesticides in the Middle East region, and we are confident that the same will happen in other countries in which the Barn Owl project is adopted.



June 27, 2018: Swiss President Alain Berset hosted 150 ambassadors on a tour of a farm in Switzerland with Barn Owl nesting boxes to create a broad exposure of the Barn Owl project and inform high-ranking government individuals. In the photo, President Berset with General Mansour and Prof. Leshem take some time to discuss poster exhibits on the subject (Photo: Alex Roulin)

IOU INSIDER

A Win-Win Partnership!

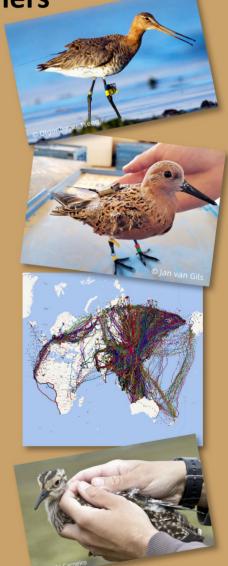
Global Messenger and IOU
Offer Discounts and Grants to
Bird Researchers

THE INTERNATIONAL ORNITHOLOGISTS' UNION (IOU) is delighted to announce a new sponsorship agreement with Hunan Global Messenger Technology Company, LTD. (Global Messenger), a leading manufacturer and seller of animal tracking products. This partnership will provide significant benefits to IOU members and the global bird research community.

Global Messenger has generously agreed to offer a 5% discount on their products to IOU members, as well as to establish an equipment granting program that can provide free tracking devices and support to bird researchers, especially those who are early-career researchers (i.e., students, postdocs, and others initiating a career in bird ecology). Global Messenger's products include GPS trackers, radio transmitters, geolocators, and other devices that can help researchers monitor the movements, behavior, and ecology of birds. To learn more about Global Messenger and its products, please visit its website https://www.gm-tracking.com/

The equipment granting program is open to all bird researchers who are IOU members. The program aims to support research projects that have clear scientific objectives, sound methodology, ethical standards, and conservation relevance. IOU members in middle- and low-income countries are especially encouraged to apply. To learn more about the eligibility criteria and application process, please visit the online form https://ousurvey.qualtrics.com/jfe/form/SV_5iPqYhWkhyXPCHI or scan the QR code below.

The IOU is grateful to Global Messenger for their generous support and commitment to advancing international ornithology. We encourage our members to take advantage of this opportunity. Together, we can foster a vibrant and diverse community of bird researchers who can contribute to the understanding and conservation of birds around the world.



Images from top: Otgonbayar Tsend; Jan van Gils; Global Messenger Tracking Map; Camilo Carneiro.







THE IOUFLUTTER

FLY INTO THE WORLD OF BIRDS!



Join the International Ornithologists' Union ON INSTAGRAM!



EXCITING NEWS!

The International Ornithologists' Union (IOU) is thrilled to unveil its official Instagram page!

- · Discover the breathtaking world of birds like never before!
- · Join us on Instagram as we showcase the extraordinary beauty and diversity of our feathered friends while promoting their conservation.
 - · Stay up-to-date with the latest research, ornithological news, and breakthroughs in avian biology.
- · We'll also shine a spotlight on the remarkable work of the IOU and its members.

Don't miss out on this incredible opportunity to join our passionate community of dedicated ornithologists. Follow us on Instagram and embark on an exhilarating avian adventure!

Ready to spread your wings and dive into the world of birds?

Scan the QR code or search for our username,

@the iou

to find the IOU's Instagram page.

Thank you for your unwavering support, and we can't wait to see you there!

Join us on Threads too!

The International Ornithologists' Union (IOU) has also recently joined Threads, the innovative app from Meta. With Threads, you can effortlessly connect with the global community of ornithologists.

To join Threads, simply create an Instagram account if you don't have one already. Once you have an account, you can easily download the Threads app from Google Play or the Threads website. After installation, search for the IOU's username @threads.net and hit the follow button.



Can You Identify These Renowned Ornithologists?



International Ornithological Congress, Tring Park, 1905 © James Cranfield, Cranfield's Curiosity Cabinet

Help us identify the participants of the 1905 International Ornithological Congress
We need your help to put names on faces. Do you recognize anyone in this photo of the 1905 International
Ornithological Congress? If you do, please email us at fulter@internationalornithology.org or complete
this form at https://forms.gle/QeaoFNmV2pMDyywo6. Your contribution will help us preserve the
history of ornithology. Thank you for your passion and support for birds!

THE IOUFLUTTER

CREATIVITY AND COLLABORATION IN ORNITHOLOGY

THE ORNITHOLOGY FORUM

YOUR PERSPECTIVES, NOTES, AND FEATURES



Mexican Ornithologists and Birdwatching Volunteers Celebrate their Annual Meeting

Opening Ceremony of the XX CIPAMEX Congress in Mexico at the Postgraduate College Montecillos, Texcoco, México.

TO SHARE SCIENTIFIC ADVANCES, citizen monitoring activities, and conservation practices and concerns, 9-13 October 2023, around 170 attendants got together in the Colegio de Postgraduados, Montecillo, Texcoco, near Mexico City, where CIPAMEX held its XX Congress on the Study and Conservation of Birds in Mexico (CECAM), which offered 86 oral presentations and 32 posters, by 305 authors (7 countries and 27 states of Mexico), four keynote presentations, four symposia, a photographic exhibition, two scientific documentaries, two contests (one about drawing birds and the other about photographing them), bird watching trips, and workshops.



Chief Tashka Yawanawá and his wife Laura Yawanawá.

DAY 1

On Monday, there was a pre-Congress workshop on Biodiversity Measurements. The opening ceremony was graced by the visit of Tashka Yawanawá, chief of the Yawanawá people, from Acre, Brazil, and his wife Laura Yawanawá, an indigenous Zapotec and Mixtec woman from Oaxaca, Mexico. Both have been participating internationally in different conferences, advocating for the biocultural conservation of the Amazon. They were also welcomed by renowned photographer and conservationist Patricio Robles Gil. And we had an icebreaker with a toast and music.

DAY 2

Activities began with the first plenary offered by ornithologist Prof.

Patricia Escalante, who presented the teachings of a parrot shelter from a seizure in Mexico City, where the medical and social efforts helped achieve a 75% success rate in the chicks' survival snatched from traffickers by authorities. This experience raised many questions from the audience.

The congress
hosted oral
presentations,
posters.
symposia,
exhibitions,
documentaries,
contests,
field trips and
workshops



Dr. Gary García (left) presented his research on avian influenza in Mexico.

The oral presentations were given in the first two symposia. One was dedicated to carrion birds, where several talks alluded to the 20-year effort to reintroduce the California Condor to the Sierra San Pedro Mártir. At the same time, there was another symposium on waterfowl in the continental wetlands of Mexico and a regular session on bird ecology.

The second plenary session was about monitoring golden eagles in Mexico by Sam Carrera from BWild, and then a documentary entitled "Cult of the Natural History of Mexico" about Mexican biodiversity (mainly birds) by Miguel Angel Sicilia and Monserrat Armenta.

The third plenary session featured biologist Amira Mora, who recounted her experiences in a bird monitoring project in the Veracruz High Mountains and the participation of women. Oral contributions on ecology-urbanization, reproductive ecology, and genetics and evolution, as well as the third symposium on bird community monitoring and women as protagonists of this effort. The next plenary session was offered by Dr. Gary García, who recounted his research on avian influenza in Mexico.

The fourth day was dedicated to a field trip to observe migratory birds in Lake Texcoco, an emblematic and controversial conservation site in the metropolitan area of Mexico City, which is home to more than 250 thousand waterfowl individuals every year and where the construction of a new airport was recently canceled. After the poster presentations during the afternoon, the CIPAMEX assembly took place.



(Above and below) Group of congress participants in the early morning free day in the Lake Texcoco Ecological Park watching birds led by two of the ornithologists' organizers, José Luis Alcántara and Javier Salgado.



(Below) Group picture of participants on the second day of the XX CIPAMEX Congress, 9-13 October 2023, Texcoco, Mexico





Group photo of participants on the second day of the XX CIPAMEX Congress, 9-13 October 2023, Texcoco, State of Mexico.

The day's plenary was led by Dr. Roberto Sosa, who presented the topic of bird vocalizations from an ecological-evolutionary approach. Oral presentations continued about communities, birds of prey, populations, techniques, conservation, and a symposium on raptors. There was also the presentation of the TOTONTLI magazine, CIPAMEX's new electronic magazine, to disseminate scientific knowledge about birds to the public.

The meeting ended with the presentation of a commemorative poster for the 20th anniversary of CECAM, under the title "Birds of the wetlands of Central Mexico" made by two talented young Mexican biologists and artists. Finally, prizes were awarded to the three best works at bachelor's, master's, and doctoral levels in the Closing Ceremony. These young ornithologists of Mexico participated with 57 research papers, of which 18 were evaluated on posters and 39 oral presentations. In total, six awards were given at undergraduate level and five at graduate level.



A winner of the student presentation awards offered by the jury and represented by Sarahy Contreras and Javier Salgado.

PATRICIA ESCALANTE Membership Chair, IOU



SPECIES SNAPSHOTS



THE HAWAIIAN PETREL Pterodroma sandwichensis

Why We Need to Track the Endangered 'Ua'u

Understanding the post-fledging distribution of the 'ua'u is a crucial challenge in conserving this endangered species



. Hawaiian Petrel (Pterodroma sandwichensis) © Rob Fowler

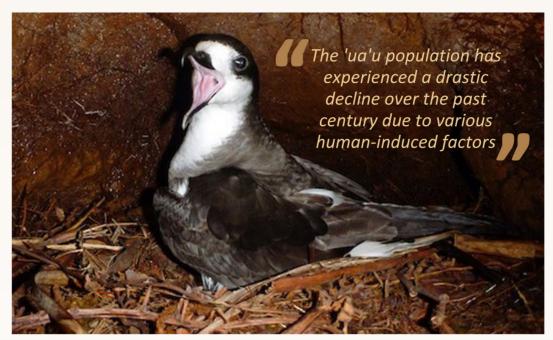


The study revealed that 'ua'u fledglings from Kaua'i crossed the Pacific Ocean, covering distances of up to 10,000 km to overwinter in Micronesia and the Phillipines. (Petrel sp.) Carlos Torres, Unsplash.

THE 'UA'U, also known as the Hawaiian petrel (Pterodroma sandwichensis), is a critically endangered seabird that is unique to the Hawaiian Islands. It holds immense ecological importance as one of the few remaining native seabird species that still breeds in Hawai'i. Furthermore, it holds a deep cultural significance for Native Hawaiians, who revere it as a sacred messenger from the Gods.



Maui is host to some the few remaining breeding sites of the Hawaiian Petrel (Pterodroma sandwichensis). Pascal Debrunner, Unsplash.



Hawaiian Petrel (Pterodroma sandwichensis) © Oscar Johnson

Unfortunately, the 'ua'u population has experienced a drastic decline over the past century due to various human-induced factors. Habitat loss, invasive predators, light pollution, and the impacts of climate change all contribute to this concerning situation. The current estimate suggests that there are fewer than 20,000 'ua'u individuals remaining, with the majority of them breeding on Maui and Lāna'i.

Understanding the post-fledging distribution of the 'ua'u is a crucial challenge in conserving this endangered species. Post-fledging distribution refers to where these birds go and what they do after leaving their nests for the first time. This period is critical as they must learn to survive and navigate the vast ocean without parental guidance. By tracking their post-fledging distribution, we can identify potential threats and develop conservation actions to protect the 'ua'u, such as safeguarding their foraging areas, reducing light pollution, and mitigating bycatch.

A recent study has provided valuable insights into the post-fledging distribution of 'ua'u from Kaua'i, Hawai'i, using satellite transmitters and geolocators. The study assessed the effectiveness of rehabilitating grounded 'ua'u fledglings, which often become disoriented by artificial lights and fall to the ground. The study revealed that 'ua'u fledglings from Kaua'i embarked on remarkable journeys across the Pacific Ocean to wintering grounds

in Micronesia and the Philippines, covering distances of up to 10,000 km. These fledglings predominantly occupied areas with abundant resources and low fishing activity, indicating their preference for habitats that optimize food availability while minimizing the risk of predation.

Furthermore, the study demonstrated that the rehabilitated 'ua'u fledglings exhibited similar survival rates and movements to their wild counterparts, highlighting the viability of rehabilitation as an effective conservation tool for this species. These findings underscore the importance of ongoing efforts to rehabilitate and release grounded 'ua'u fledglings, as they contribute to the preservation of the species and its long-term survival.

VIDYA PADMAKUMAR

Editor, The IOU Flutter flutter@internationalornithology.org

ORIGINAL ARTICLE

Raine, A. F., Driskill, S., Raine, H., Rothe, J., Rossiter, S., Anderson, T., and Bache, M. (2023). Post-fledging distribution of 'ua'u (Hawaiian petrel *Pterodroma sandwichensis*) from Kaua'i, Hawai'i, and effectiveness of rehabilitation. *Endangered Species Research*, 52, 27-40. https://doi.org/10.3354/esr01268

THE EDITOR'S TOP PICKS





Blood smear showing Plasmodium relictum (stained purple) within red blood cells, Wikimedia.

A RECENT STUDY conducted by researchers from the University of South Florida and the University of Nebraska-Lincoln delved into the impact of acute *Plasmodium relictum* infection on various physiological processes in house sparrows (*Passer domesticus*). Avian malaria caused by *Plasmodium* parasites is a widespread disease that affects the red blood cells of avian hosts, leading to decreased fitness. *Plasmodium relictum* specifically is highly prevalent and pathogenic, causing mortality, illness, and reduced reproductive success in infected birds. Nevertheless, the specific physiological mechanisms underlying the host's response to *Plasmodium relictum* infection have yet to be fully comprehended.

The researchers focused on investigating the effects of acute *Plasmodium relictum* infection on the functioning of the hypothalamic-pituitary-adrenal (HPA) axis, as well as on immunity and glucose regulation in house sparrows. The HPA axis is a crucial neuroendocrine system that plays a vital role in the stress response and regulates various physiological processes, including metabolism, immunity, and growth. It comprises three main components: the hypothalamus, which releases corticotropin-releasing hormone (CRH); the pituitary gland, which releases adrenocorticotropic hormone (ACTH); and the adrenal glands, which release glucocorticoids like corticosterone in birds.

In their study, the researchers infected 24 house sparrows with *Plasmodium relictum* and compared them to 24 uninfected birds used as controls. They observed and measured several

Infected birds
exhibited significant
increases in
parasitemia and
plasma corticosterone
concentration,
suggesting a
high parasite load
and activation of
the HPA axis

parameters at four different time points: before infection (day 0), during the peak of infection (day 5), during the recovery phase (day 10), and after the parasite had been cleared (day 15). The parameters included body mass, hematocrit (the proportion of red blood cells in the blood), parasitemia (the percentage of infected red blood cells), plasma corticosterone concentration, leukocyte counts, and plasma glucose concentration.

Significant reductions in body mass and hematocrit in the infected birds, indicating weight loss and anemia caused by the destruction of red blood cells by the parasite were observed. The infected birds also exhibited significant increases in parasitemia and plasma corticosterone concentration, suggesting a high parasite load and activation of the HPA axis. Furthermore, the infected birds showed significant decreases in total leukocyte counts, heterophil counts, lymphocyte counts, and the heterophil-to-lymphocyte ratio (H/L ratio), indicating immune suppression and inflammation. Additionally, the birds displayed significant increases in plasma glucose concentration, indicating disrupted glucose regulation and increased energy demand.

The study also uncovered intriguing differences between male and female house sparrows in their response to *Plasmodium relictum* infection. Female birds exhibited higher levels of parasitemia, plasma corticosterone concentration, plasma glucose concentration, and H/L ratio compared to their male counterparts during the peak of infection. These findings suggest that female birds are more susceptible and responsive to *Plasmodium relictum* infection than male birds.

This study offers valuable new insights into the impact of acute *Plasmodium relictum* infection on the functioning of the HPA axis, immunity, and glucose regulation in house sparrows. Moreover, it underscores the significance of considering sexspecific differences when investigating the pathophysiology of avian malaria. These findings may have broader implications for understanding how other *Plasmodium* species influence their avian hosts.

Female birds
exhibited higher levels
of parasitemia,
plasma corticosterone
concentration,
plasma glucose
concentration, and
H/L ratio compared
to their male
counterparts
during the peak
of infection

VIDYA PADMAKUMAR

Editor, The IOU Flutter flutter@internationalornithology.org

ORIGINAL ARTICLE

Kelly, T. R., Cannon, A., Stansberry, K. R., Kimball, M. G., and Lattin, C. R. (2023). Changes in hypothalamic-pituitary-adrenal axis function, immunity, and glucose during acute Plasmodium relictum infection in house sparrows (*Passer domesticus*). *General and Comparative Endocrinology*, 345, 114388. https://doi.org/10.1016/j.ygcen.2023.114388

THE HIDDEN THREAT

The Impact of Rodenticides on Owls and other Nocturnal Birds



SGARs also

persist longer

in the body and can

accumulate in the

food chain

RODENTICIDES ARE CHEMICALS USED TO

which can cause damage to crops, buildings, and human health. However, these chemicals can also harm other animals that feed on rodents or scavenge their carcasses, such as owls, hawks, eagles, and foxes. A recent study published in the Science of the Total Environment investigated the prevalence and impact of rodenticides on four nocturnal bird species in Australia: the powerful owl (Ninox strenua), southern boobook (Ninox boobook), eastern barn owl (Tyto alba), and tawny frogmouth (Podarqus strigoides).

Researchers collected deceased birds from different landscapes, including forests,

agricultural areas, and urban environments. They analyzed liver samples from these birds for the presence of eight types of rodenticides, including three first-generation anticoagulants (FGARs) and five second-generation anticoagulants (SGARs). FGARs are

less potent and require multiple doses to kill rodents, while SGARs are more powerful and can eliminate rodents with a single dose. SGARs also persist longer in the body and can accumulate in the food chain.

The study's findings revealed that FGARs were rarely detected, except for low

concentrations of pindone, in powerful owls. On the other hand, SGARs were detected in every species analyzed, with 92% of the birds showing their presence. Furthermore, the concentrations of SGARs were at levels that could potentially cause toxicological or lethal impacts in 33% of powerful owls, 68% of tawny frogmouths, 42% of southern boobooks, and 80% of barn owls. When multiple SGARs were found in a bird, the overall concentrations were higher, suggesting possible cumulative effects.

The study also observed variations in the prevalence and concentrations of rodenticides across different landscapes. Birds from agricultural areas exhibited the highest

occurrence and concentrations of rodenticides, followed by urban areas and then forests. This indicates that the use of rodenticides in agricultural settings poses a significant threat to nocturnal bird species.

The impact of rodenticides on owls and other nocturnal birds is concerning for several reasons. Firstly, these birds play a vital role in controlling rodent populations, and their decline can lead to an increase in rodent numbers, exacerbating the need for rodenticide use. Secondly, owls and other birds of prey are often considered indicators of ecosystem health.

Their exposure to rodenticides suggests that these chemicals are entering the food chain and potentially affecting other wildlife species as well.

The specific mechanisms by which rodenticides harm birds are not fully understood, but they are known to disrupt blood clotting and cause internal bleeding. This can result in weakness, impaired flying ability, and ultimately death. Birds can be exposed to rodenticides by ingesting contaminated prey or scavenging on carcasses.

To address this issue, there is a need for greater awareness and regulation of rodenticide use. Integrated Pest Management (IPM) practices, which focus on reducing rodent populations through non-chemical means, should be promoted. This includes improving sanitation, sealing entry points, and using traps instead of relying solely on rodenticides. Additionally, the use of less toxic rodenticides and the implementation of targeted baiting strategies can help minimize the risk to non-target wildlife.

Overall, the study highlights the hidden threat of rodenticides to owls, underscoring the importance of considering the broader ecological impacts of chemical pest control methods and the need for sustainable and environmentally friendly alternatives. Protecting these birds is not only crucial for their survival but also for maintaining the balance of ecosystems in which they play a vital role.

Birds from agricultural areas exhibited the highest occurrence and concentrations of rodenticides, followed by urban areas and then forests

VIDYA PADMAKUMAR

Editor, The IOU Flutter flutter@internationalornithology.org

ORIGINAL ARTICLE

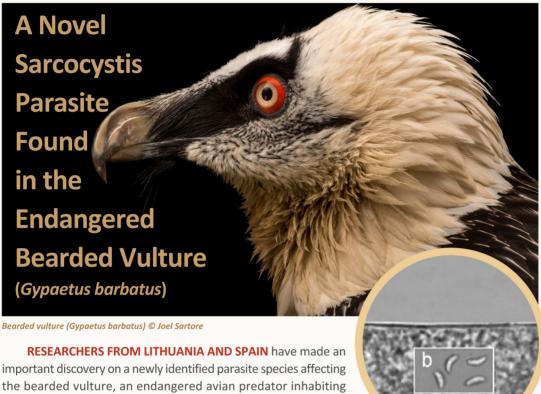
Cooke, R., Whiteley, P., Death, C., Weston, M. A., Carter, N., Scammell, K., and White, J. G. (2023). Silent killers? The widespread exposure of predatory nocturnal birds to anticoagulant rodenticides. *Science of the Total Environment, 904,* 166293. https://doi.org/10.1016/j.scitotenv.2023.166293

See also page 13
IOU WORKING GROUP BIRDS AS PEACEMAKERS

Towny Frogmouth (Podargus strigoides)
© Steven Pratt

BIRD NEWS ROUNDUP





Morphology of Sarcocystis halieti in tissue

respectively an endangered avian predator inhabiting mountainous regions across Europe, Asia, and Africa. The parasite, known as *Sarcocystis halieti*, falls within the taxonomic group Apicomplexa, which encompasses pathogenic organisms responsible for ailments, such as malaria and toxoplasmosis.

During the study, the scientists encountered the parasite in two deceased bearded vultures discovered within the Pyrenees, a mountain range serving as a natural boundary between France and Spain. Employing necropsy techniques, the researchers examined the birds and observed the presence of microscopic cysts containing the aforementioned parasite within their skeletal muscles. Furthermore, they successfully isolated and sequenced the DNA extracted from these cysts, allowing for the accurate identification of the particular species of parasite.

The findings of the study reveal a close genetic affinity between the newly discovered parasite and *Sarcocystis rileyi*, a known species that infects waterfowl and has been implicated in mortality events among ducks and geese. However, distinct morphological characteristics, such as variations in cyst wall shape and size, as well as unique genetic sequences, warranted its classification as a novel species within the *Sarcocystis* genus.

Phylogenetic analysis, employed to elucidate the evolutionary relationships among different *Sarcocystis* species, demonstrated that *S. halieti* exhibited the closest genetic proximity to *S. rileyi*

The discovery of S. halieti holds significant implications for the conservation of the bearded vulture

and *S. falcatula*, both species known to infect avian hosts and utilize opossums as their definitive hosts. This observation suggests a potential similarity in the life cycle of *S. halieti*, involving an intermediate host (the bearded vulture) and a definitive host (a carnivorous mammal) that consumes the infected bird.

The researchers postulated that the Eurasian lynx (*Lynx lynx*), a predatory feline known to prey on bearded vultures in certain regions, may serve as the definitive host for *S. halieti*. Nevertheless, the necessity for further investigations to substantiate this hypothesis, as well as to ascertain the prevalence and pathogenicity of the parasite in bearded vultures and other potential hosts, is evident.

The discovery of *S. halieti* holds significant implications for the conservation of the bearded vulture, an endangered species according to the International Union for Conservation of Nature (IUCN). The bearded vulture already faces multiple threats, including habitat loss, poisoning, electrocution, collisions with power lines and wind turbines, and illegal hunting. The emergence of this parasite introduces an additional potential hazard to the survival of these magnificent birds, particularly if it induces illness or compromises their overall fitness.

Future monitoring initiatives should incorporate screenings for *S. halieti* and other parasites in bearded vultures and their potential hosts. Enhanced protective measures ought to be implemented to safeguard the bearded vulture population and mitigate the potential impacts of this newly discovered parasite.

VIDYA PADMAKUMAR Editor, The IOU Flutter flutter@internationalornithology.org



Bearded vulture (Gypaetus barbatus) © Jose Luis Ruiz Jimenez

The necessity for further investigations to ascertain the prevalence and pathogenicity of the parasite in bearded vultures and other potential hosts is evident

ORIGINAL ARTICLE

Prakas, P., Estruch, J., Velarde, R., Ilgūnas, M., Šneideris, D., Nicolás-Francisco, O., and Calero-Bernal, R. (2023). First report of *Sarcocystis halieti* (Apicomplexa) in bearded vulture (*Gypaetus barbatus*). *Veterinary Research Communications*, 1-6. https://doi.org/10.1007/s11259-023-10191-1



A Study of Female-Female Aggression

Female
blue tits'
aggression and
hissing are
different ways
of dealing with
different
problems

Eurasian Blue Tit (Cyanistes caeruleus), (Top) David Griffiths, Unsplash, (below) © Matti Rekilä, (bottom) Lukasz Rawa, Unsplash.

BLUE TITS (Cyanistes caeruleus) are small and colorful birds that frequent gardens and woodlands across Europe and Asia. They are known for their acrobatic feeding behavior, large clutches of eggs, and vibrant blue and yellow plumage. However, an interesting discovery about blue tits is their aggressive nature and ability to produce snake-like hissing sounds.

A recent study published in the journal *Scientific Reports* examined the aggression and hissing behaviors of female blue tits in different situations. The researchers conducted their observations during the breeding season in a natural population of blue tits in Wilrijk, Belgium. They documented the birds' behavior when encountering other females, both at their own nests and neighboring nests. The study revealed two distinct types of aggression exhibited by female blue tits: physical attacks and vocal threats. Physical attacks involved pecking, chasing, or grappling with the opponent, while vocal threats involved emitting

in aggressive behavior toward other females at their nests, indicating a defense of their territory and resources.

Surprisingly, regardless of whether they initiated physical attacks or not, female blue tits produced snake-like hissing sounds in both situations. Typically, hissing sounds in birds are associated with fear or submission. However, the researchers suggest that the hissing behavior of female blue tits serves a different purpose. Female blue tits can be aggressive to other females and make hissing sounds when they defend their nests. Both the behaviours are stable over time and show the personality of each bird. But there has been no link established between them, meaning that they do not affect each other's evolution. This means that female aggression and hissing are different ways of dealing with different problems: female aggression is for competing with other females, while hissing is for scaring away predators. It is essential to look at how these behaviours change over different breeding stages and years to understand them better. This will help us learn more about how aggression and hissing work in the long run.

The study uncovers the complex and context-dependent aggressive behaviors exhibited by female blue tits, including physical attacks and vocal threats. The discovery of their snakelike hissing behavior adds an intriguing aspect to their defensive strategies.

VIDYA PADMAKUMAR

Editor, The IOU Flutter
flutter@internationalornithology.org

ORIGINAL ARTICLE

Van Iersel, R., Boiten, G., Pinxten, R., and Eens, M. (2023). Untangling behaviors: independent expressions of female-female aggression and snake-like hissing in the blue tit (*Cyanistes caeruleus*). *Scientific Reports*, 13(1), 16346. https://doi.org/10.1038/s41598-023-43652-3

Eurasian Blue Tit (Cyanistes caeruleus), (From top) David Griffiths, Unsplash, © Matti Rekilä, Lukasz Rawa, Unsplash.

CONSERVATION AND RESEARCH

A VITAL PARTNERSHIP



Tracing the Flight Paths of North American Swallows using Multi-isotope and Morphometric Analysis

SWALLOWS, BELONGING TO THE FAMILY Hirundinidae,

are widely distributed and highly familiar birds. Despite their global presence, many aspects of their migratory movements remain poorly understood. However, a recent study published in *Movement Ecology* has employed advanced techniques to gain insights



Bank Swallow (Riparia riparia) © Darlene Friedman eBird \$72022083

into the migratory connectivity of three North American swallow species: Bank Swallow (*Riparia riparia*), Barn Swallow (*Hirundo rustica*), and Cliff Swallow (*Petrochelidon pyrrhonota*).

The researchers utilized a multi-isotope approach, analyzing stable hydrogen ($\delta 2H$), carbon ($\delta 13C$), and nitrogen ($\delta 15N$) isotopes in feathers. By comparing these isotopic signatures with predicted isoscapes for winter-grown feathers, the probable regions where feather molt had occurred were identified. Additionally, morphometric measurements, such as wing length, were employed as indicators of potential population differentiation.

The results of the study unveiled distinct non-breeding regions and clusters of molt origin for the different swallow populations and species. Generally, these regions aligned with Central America and northern South America, eastern and south-central South America, as well as the western and southern parts of the continent. The swallows undertake extensive migrations, utilizing diverse wintering grounds.

Interestingly, significant variation in wing length was observed among populations within each species. Bank and Cliff Swallows demonstrate longer wing lengths in the western and northern regions, while eastern Canadian Barn Swallows

THE OFFICIAL MAGAZINE OF THE INTERNATIONAL ORNITHOLOGISTS' UNION

exhibited longer wing lengths. Wing morphology plays a crucial role in determining a bird's flight performance and efficiency, affecting aspects such as maneuverability and migration capabilities.

Barn Swallows consistently occupy larger isotopic and morphometric niche spaces

compared to the other species. They may have lower migratory connectivity and a wider range of potential wintering habitats. The ability to utilize diverse habitats during migration is advantageous for species that face changing environmental conditions and the availability of resources.

The use of multi-isotope analysis in this study provides a cost-effective and broad-scale method for assessing migratory connectivity. By combining isotopic techniques with morphometric measurements, a comprehensive understanding of the population dynamics and migratory behavior of these declining aerial insectivores can be achieved. Such knowledge is crucial for developing effective conservation strategies to protect and manage swallow populations.

VIDYA PADMAKUMAR

Editor, The IOU Flutter flutter@internationalornithology.org

ORIGINAL ARTICLE

Hobson, K. A., and Kardynal, K. J. (2023). Multi-isotope (δ 2H, δ 13C, δ 15N) feather profiles and morphometrics inform patterns of migratory connectivity in three species of North American swallows. *Movement Ecology*, 11(1), 1-20. https://movementecologyjournal.biomedcentral.com/articles/10.1186/s40462-023-00412-2







Barn swallows (Hirundo rustica) gather before migrating, Gary Hider, Unsplash.

Differential
Gene Expression
in the Brain of the
Semipalmated
Sandpiper
(Calidris pusilla)
During Autumn
and Spring
Migration



This research provides insights into the remarkable adaptations occurring in the brains of these small birds during extreme migratory journeys

THE SEMIPALMATED SANDPIPER (Calidris pusilla), is a diminutive shorebird renowned for its extraordinary migratory prowess, which stands as one of the most awe-inspiring feats in the animal kingdom. Throughout its migratory cycle, this avian species embarks on a truly remarkable journey, defying geographical boundaries and pushing its physiological limits. Notably, during its autumn migration, the sandpiper engages in a non-stop flight of approximately five days, traversing a staggering distance of over 4,000 km across the vast expanse of the Atlantic Ocean. Upon reaching its destination, it seeks refuge amidst the labyrinthine mangroves flourishing within the Amazon River estuary, where it finds respite during the winter months. In contrast, the species' spring migration unfolds at a more measured pace, characterized by a series of strategic stopovers along the coastal regions of North and Central America.

This captivating behavioral phenomenon has prompted scientific research into the intricate

interplay between the sandpiper's migratory behavior and its neural adaptations. A recent study conducted by Oliveira *et al.* (2023) undertook a comprehensive investigation of the molecular changes transpiring within the sandpiper's brain throughout both the autumn and spring migrations. Employing cutting-edge RNA-Seq analysis, the researchers sought to unravel the underlying genetic mechanisms that orchestrate this remarkable migratory spectacle.

RNA-Seq is a technique that examines gene expression by sequencing RNA molecules derived from DNA, to compare the brains of semipalmated sandpipers that had recently completed their autumn migration (RA) with those preparing for their spring migration (PM). The analysis revealed 1,096 differentially expressed genes (DEGs) between the two groups. Notably, these DEGs were found to be enriched in various biological processes, including neurogenesis, metabolism, glial cells, and immune response.

Neurogenesis, the formation of new neurons in the brain, plays a crucial role in learning, memory, and mood regulation. The researchers observed that the RA birds exhibited higher expression levels of genes associated with neurogenesis, such as GABBR2 and ARHGEF9, which are involved in GABAergic transmission. GABA is a neurotransmitter that inhibits neuronal activity and contributes to synaptic plasticity.



Metabolic alterations might assist the birds in sustaining the demands of their long-distance flight and surviving the harsh Arctic conditions

This finding suggests that the neurogenic processes within the sandpipers' brains may be more active following the completion of their autumn migration. The authors postulated that these metabolic alterations might assist the birds in sustaining the challenging demands of their long-distance flight and surviving the harsh Arctic conditions.

Glial cells, a type of supportive cells in the brain, play diverse roles in nutrient supply, maintaining homeostasis, regulating inflammation, and facilitating communication between neurons. The PM birds exhibited heightened expression of genes associated with glial changes, including astrocyte-dopaminergic neuron signaling, astrocyte differentiation, astrocyte migration, and astrocyte activation. These processes are involved in the regulation of dopamine, a neurotransmitter that influences motivation, reward, and movement. These glial changes may aid the birds in modulating their behavior and motivation for migration.

The study uncovers that RA birds exhibit elevated expression of genes associated with immune response, including type I interferons, inflammatory cytokines (IL-6, IL-1 β , TNF, and NF- κ B), NLRP3 inflammasome, anti-inflammatory cytokines (IL-10), and cell death pathways (pyroptosis and caspase). These processes play roles in detecting viral infections, initiating inflammation, resolving inflammation, and eliminating infected cells. These immune adjustments may enable the birds to combat infections and recover from the stresses of migration.

This research provides insights into the remarkable adaptations occurring in the brains of these small birds during extreme migratory journeys, highlighting the significant changes in gene expression. These findings will enhance our understanding of the molecular mechanisms underlying animal migration and contribute to conservation efforts.

VIDYA PADMAKUMAR

Editor, The IOU Flutter flutter@internationalornithology.org

ORIGINAL ARTICLE

Pereira, P. D. C., Henrique, E. P., da Costa, E. R., Falcão, A. D. J., de Melo, M. A. D., Schneider, M. P. C., and Guerreiro-Diniz, C. (2023). Molecular Changes in the Brain of the Wintering *Calidris pusilla* in the Mangroves of the Amazon River Estuary. *International Journal of Molecular Sciences*, 24(16), 12712. https://doi.org/10.3390/ijms241612712



NEW HORIZONS IN ORNITHOLOGY



The Secrets of Facial Recognition in Greylag Geese

HAVE YOU EVER WONDERED how birds recognize each other? Do they use their voices, their feathers, their behaviors, or something else? A new study published in the *Journal of Ornithology* reveals that Greylag Geese (*Anser anser*) can use their faces as cues to individuality and that they can even recognize their partners from photos!

Greylag Geese are social birds that form long-term monogamous bonds and live in flocks of up to hundreds of individuals. They are also one of the oldest domesticated animals and were famously studied by Konrad Lorenz, who could name each goose in his flock from a photograph. But how do the geese themselves tell each other apart?

To answer this question, a team of researchers from Australia, Austria, and France developed facial recognition software that can reliably assign a goose face to a goose ID within a database, using bill morphology normalized during photo preparation. They found that the software could correctly identify a goose face with about 97% accuracy, suggesting that there are subtle but consistent differences in the shape and color of the bills that can be used as cues to individuality.

To test whether the geese can also use these cues, the researchers erected life-size photos of geese and measured the responses of subjects to photos of themselves (unfamiliar goose), their partner, and another flock mate. They found that geese displayed significantly greater affiliative responses (such as approaching, vocalizing, or preening) to photos of their partners, providing evidence that geese can use two-dimensional images as cues to determine social category (partner/non-partner) and/or individual-level recognition.

The researchers suggest that facial recognition may have evolved in Greylag Geese as a way to facilitate social interactions and cooperation within their complex societies. The methods provide novel approaches to automatically detect and monitor geese and to test avian cognition. Their study may also create new opportunities for species monitoring approaches more generally using photographic images and citizen-science engagement.

VIDYA PADMAKUMAR

Editor, The IOU Flutter

flutter@internationalornithology.org

ORIGINAL ARTICLE

Kleindorfer, S., Heger, B., Tohl, D., Frigerio, D., Hemetsberger, J., Fusani, L., ... and Colombelli-Négrel, D. (2023). Cues to individuality in Greylag Goose faces algorithmic discrimination and behavioral field tests. *Journal of Ornithology*, 1-11. https://doi.org/10.1007/s10336-023-02113-4

Graylag Goose (Anser anser), Anna Kasin, Unsplash.

Innovative Monitoring Technique Reveals Insights into Endangered Bird Species

MONITORING THE STATUS OF ENDANGERED

BIRDS is a critical foundation for biodiversity conservation efforts. However, the cost and availability of monitoring equipment pose challenges in many countries. In a groundbreaking study, researchers have developed an innovative, low-cost approach to bird monitoring using modified smartphone devices. This breakthrough offers hope for accessible conservation initiatives worldwide.

The study focused on the Vietnamese Crested Argus (*Rheinardia ocellata*), a species at risk in the Kon Chu Rang Nature Reserve, Vietnam. By equipping smartphones with specialized software, researchers were able to record and analyze the sounds produced by the Crested Argus. The software package RAVEN was employed to create spectrograms and identify the species' unique calls accurately.

Excitingly, the modified smartphones successfully recorded Crested Argus calls at 16 out of 40 locations within the nature reserve. A closer examination of the data revealed that the majority of calls were concentrated in the northern and eastern parts of the reserve. This valuable information provides targeted insights into the specific areas where the species is more likely to be found. Such knowledge is crucial for effective conservation strategies and habitat management.

To estimate population and detection probabilities, the researchers utilized the program MARK. Their findings indicated consistent detection probabilities of approximately 0.50 during both morning and afternoon sampling periods across seven days. These insights into optimal monitoring times can significantly enhance future survey efforts.

The study also shed light on the overall occurrence probability of the Crested Argus, which was estimated to be 0.43 with a standard error of ±0.08. This suggests that while the species is present in the study area, it does not occupy all locations at all times. Additionally, a positive correlation between occupancy and distance to the nearest village was observed, indicating the potential negative impact of poaching on this endangered species. It is evident that anti-poaching measures and community involvement are crucial in ensuring the survival of the Crested Argus.

Based on the study's findings, the researchers recommended prioritizing conservation efforts in the Kon Chu Rang Nature Reserve, as well as the adjacent nature reserves of An Tay and Kon Ka Kinh. These areas have been identified as critical habitats for the Vietnamese Crested Argus and should be the focus of conservation initiatives.

The success of this study lies not only in its valuable findings but also in the innovative approach it employed. By modifying smartphones and utilizing accessible software, researchers were able to conduct cost-effective and efficient monitoring of an endangered species. This breakthrough opens doors for similar initiatives worldwide, where expensive equipment may not be readily available. As conservation enthusiasts, it is essential for us to support and promote such innovative approaches to protect our precious wildlife. By utilizing low-cost technology, we can expand monitoring efforts, gather vital data, and implement targeted conservation strategies effectively.

VIDYA PADMAKUMAR

Editor, The IOU Flutter flutter@internationalornithology.org



FASCINATING ORNITHOLOGICAL EXPERIMENTS



GOFFIN'S COCKATOOS: The Master Craftsmen of the Bird World

BIRDS ARE OFTEN ADMIRED FOR THEIR BEAUTY, grace, and intelligence, but some of them also possess remarkable skills that rival those of humans and chimpanzees. One such species is the Goffin's cockatoo (*Cacatua goffiniana*), a mediumsized parrot native to Indonesia which has recently amazed scientists with its ability to use a set of tools to complete complex tasks. Tool use is a rare and sophisticated behavior that requires planning, problem-solving, and coordination. While many animals can use a single tool to achieve a simple goal, such as cracking a nut or fishing for insects, only a few can combine multiple tools to perform more complicated actions, such as extracting food from hard-to-reach places. Until now, this ability was known only in humans and chimpanzees, our closest living relatives.



But a new study published in the journal *Current Biology* has shown that Goffin's cockatoos can also use toolsets, and even carry them around for future use. The researchers presented 10 captive cockatoos with a box containing a cashew nut that could only be accessed using two different tools: a rigid stick to pierce and tear a membrane between a window and the nut, and a longer, flexible tool to fish the nut out. The birds had never encountered this situation before, so they had to figure out how to use the tools by themselves.

The results were impressive: seven out of the 10 cockatoos successfully extracted the nuts, and two of them (named Figaro and Fini) solved the task on their first attempt within 35 seconds. The birds also showed that they could select the best tool for each step of the task, and transport both tools together before using them. This suggests that they have a mental representation of the toolset and its function, and can apply it flexibly to different situations. The researchers believe that the cockatoos' remarkable tool skills are not innate, but learned through exploration and social interaction. Goffin's cockatoos are highly curious and playful birds that live in complex social groups in the wild. They are also adept at manipulating objects with their beaks and feet and have been observed making and using tools in captivity and in the wild.

The study adds to the growing evidence that Goffin's cockatoos are among the most intelligent birds in the world, along with other parrots and corvids (such as crows and ravens). These birds have evolved large brains relative to their body size, and have developed cognitive abilities that rival those of some primates. They can communicate, cooperate, learn, remember, reason, and even show emotions. The discovery of toolset use in Goffin's cockatoos challenges our understanding of animal intelligence and its evolution. It also raises questions about how these birds acquire and transmit their knowledge across generations. By studying these feathered geniuses, we can learn more about ourselves and our place in nature.

VIDYA PADMAKUMAR

Editor, The IOU Flutter flutter@internationalornithology.org

ORIGINAL ARTICLE

Osuna-Mascaró, A. J., O'Hara, M., Folkertsma, R., Tebbich, S., Beck, S. R., and Auersperg, A. M. (2023). Flexible tool set transport in Goffin's cockatoos. *Current Biology*, 33(5), 849-857. https://doi.org/10.1016/j.cub.2023.01.023

CREATIVITY AND COLLABORATION IN ORNITHOLOGY

IN LOVING MEMORY

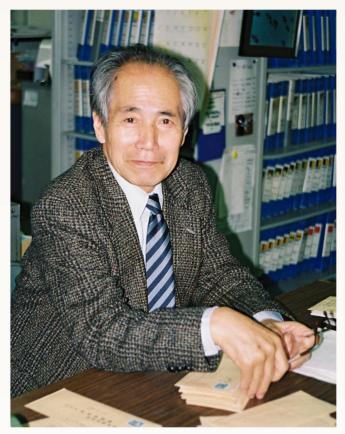


Masashi Yoshii

1921 - 2012 -

MASASHI YOSHII, former Director of the Bird Banding Laboratory of the Yamashina Institute for Ornithology, died on December 26, 2012, at the age of 91. Mr. Yoshii graduated from Senshu University's Preparatory Course and Faculty of Economics in 1944. He then worked at the Translation and Interpretation Department of the Research Division of the GHQ Economic Science Bureau. followed by the Birds Room of the US Army General Medical Research Institute for eight years. There he collaborated with Dr. Nagahisa Kuroda, who later became the director of the Yamashina Institute for Ornithology.

In February 1960, he joined the Yamashina Institute for Ornithology



and soon after, he was responsible for the secretariat of the International Council for Bird Preservation Conference, the precursor organization of BirdLife International, held in Tokyo in May. The conference recommended that "a central agency should be established in Japan to investigate and protect migratory birds in Asia and the pan-Pacific region …", and the following year, the Ministry of Agriculture and Forestry initiated a bird banding survey.

In 1964, Mr. Yoshii took charge of the US Army Pathology Research Institute's project to investigate migratory birds in the Southeast Asian region. In 1972, when the bird banding research project by the Environment Agency began in earnest, he became the director of the newly established bird banding laboratory and led the bird banding research in Japan for 31 years. During that time, he also served as a councilor of the Yamashina Institute for Ornithology from 1987 until his retirement in 1995. He continued to be an advisor to the younger generation afterward.

Besides his work at the Yamashina Institute for Ornithology, he contributed to the establishment of the Japan Bird Ringing Association, which is an organization of banders for the advancement of bird banding research. He served as an honorary member since 2010. He was also involved in various other societies, such as the Ornithological Society of Japan (Vice President 1979-82, Councilor 1976-88, General Secretary 1962-75, Auditor 1989-90, Permanent Member 1994-), Japanese Society for Preservation of Birds (Planning and Editorial Committee 1960-69), Japanese Society for Preservation of Nature (Councilor 1973-97, Auditor 1997-2002).

Japan has signed bilateral treaties for the protection of migratory birds with the United States, Russia, Australia, and China, and engages in information exchange and joint research on migratory bird conservation. Mr. Yoshii was involved in the expert meetings from the initial stages of preparation.



Crested ibis (Nipponia nippon), FreeDesignFile.com.

He also attended most of the treaty meetings held every two years after the signing. Moreover, he participated in the International Ornithological Congresses, which are held every four years, almost without interruption since the 1974 IOCongress in Canberra, Australia, and he was elected as a Senior IOU Fellow. These activities were made possible by the practical skills that he acquired in the Translation and Interpretation Department of the Research Division of the GHQ Economic Science Bureau and the Birds Room of the U.S. Army General Medical Research Institute.

Mr. Yoshii was also adept at negotiating with personal connections. He wrote in his essay "It was helpful to have deepened exchanges with bird scholars who are active in many worlds at the International Bird Conservation Conference (ICBP) held in 1960." For instance, when he captured two storks in Toyooka in 1965, he succeeded only with the help of Sergeant Rollston (a cannon net expert) of the US Army, who was introduced by Dr. H. McClure. In 1981, he acquired the rocket net used to capture five storks in Sado with the assistance of Mr. Bertland of the US Wildlife Service and Dr. G. Archibald of the International Crane Foundation. In each case, his friendship with Mr. Yoshii was crucial. For his achievement in capturing the crested ibis (Nipponia nippon), he received a letter of appreciation from Hyōsuke Kujira, the then Secretary of the Environment Agency.

As mentioned above, Mr. Yoshii was involved in bird banding surveys from start to finish, but he was especially active in the Migratory Animal Pathological Survey (MAPS) led by the U.S. Army Pathology Research Institute. This project began when Veterinary Commander CM Burns of the U.S. Army Pathology Institute visited the



Crested ibis (Nipponia nippon), Zhang Zhicheng, Wikimedia.

Mr Yoshii advised
Director Yoshimaro Yamashina
that it would be necessary
to establish a network of
bird banding surveys in the
Asian region and conduct
international collaborative
banding surveys. Thus
a large-scale migratory
bird survey in Southeast Asia
was initiated.

Yamashina Institute in 1963 and requested accurate and detailed information on the movement of migratory birds in relation to the distribution survey of viruses and parasites. He advised Director Yoshimaro Yamashina that it was necessary to establish a network of bird banding surveys in the Asian region and conduct international collaborative banding surveys. Thus, a large-scale migratory bird survey in Southeast Asia was initiated. The results of the banding survey were published in the Yamashina Institute for Ornithology research report. In addition, "Migratory Birds" (Masayoshi Yoshii, Takuya Kanouchi, 1979, Tokai University Press), which displayed a map of these banded bird recovery data along with ecological photographs, was the first attempt of its kind in Japan.

Furthermore, the "World Bird Name Encyclopedia" (supervised by Masashi Yoshii, 2005. Sanseido) covers English names, scientific names, morphologies, distributions, ecology, etc. of more than 3,800 species of birds in the world, aiming to be useful for internationalization, was published.

In 1981, when Mr. Yoshii turned 60 years old, a member of the banding laboratory discovered a new species of rail in Okinawa, and the Japanese name was discussed in the laboratory. At that time, some people argued that "Okinawa Rail" was more appropriate than "Yanbaru Rail", which was too local. However, Mr. Yoshii said, "Local understanding and cooperation are essential for bird conservation, and Yanbaru is more specific than Okinawa." He finally decided to name it "Yanbaru Okinawa" by emphasizing its "target".

Recently its importance has been finally recognized. Mr. Yoshii's beloved and nurtured "Banding Laboratory" was renamed to "Conservation Laboratory" in 2009. The role of the bird banding center continues, and all the staff members are determined to continue to develop the banding survey in Japan and neighboring countries, following Mr. Yoshii's wishes.

Mr. Yoshii said, 'Local understanding and cooperation are essential for bird conservation, and Yanbaru is more specific than Okinawa.' The rail was thus named the Yanbaru Okinawa rail by emphasizing its 'target'



Yanbaru Okinawa rail (Gallirallus okinawae), Agostini Sylvain, Wikimedia



Yanbaru Okinawa rail (Gallirallus okinawae), Simon Speich, Wikimedia.

KIYOAKI OZAKI

Deputy Director General Yamashina Institute for Ornithology 115 Konoyama, Abiko 270-1145 Japan

ORIGINAL ARTICLE

Ozaki, K. (2013). Masashi Yoshii, former Director of the Bird Banding Laboratory of the Yamashina Institute for Ornithology [Obituary]. *Journal of the Yamashina Institute for Ornithology*, 45(1), 65-66. https://doi.org/10.3312/jyio.45.65

BOOK AND FILM REVIEWS

DOOK MID THEIR REFIELDS

The Amazing World of East African Birds:

AN ECOLOGICAL AND CULTURAL EXPLORATION

0

0

m

101 CURIOUS TALES OF EAST AFRICAN BIRDS is a delightful compendium that showcases the remarkable diversity and allure of avifauna within this region. Author Colin Beale, an esteemed professor of ecology and devoted ornithologist, draws upon his extensive years of study and observations to unveil 101 concise tales, each centered around a distinct bird species, its biology, behavior, ecology, or cultural significance. The book is lavishly illustrated with the author's breathtaking photographs.

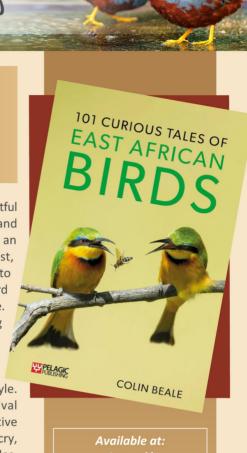
Beyond its informative capacity, Beale's narratives and anecdotes are crafted in a dynamic and accessible style. Beale provides insights into the adaptations and survival strategies that birds have honed to thrive in their respective environments, these include the Fork-tailed Drongo's mimicry, the intricate dynamics of sibling rivalry among Tawny Eagles, and camouflage techniques employed by the Spotted Thick-knee. Beale also delves into relationships between birds and other creatures, such as the mutualistic bond between honeyguides and honey gatherers, the parasitic habits of cuckoos and whydahs, as well as the myths and legends surrounding owls and vultures.

This book not only celebrates East Africa's avian diversity, but also reflects on the current challenges and opportunities in avian conservation. While Beale describes the manifold threats birds face, including habitat loss, climate change, hunting, and the encroachment of invasive species, he also highlights efforts made to safeguard them and their fragile habitats. He encourages readers to cultivate an appreciation for their local avian wonders, and to engage in citizen science and birdwatching to contribute meaningfully to their study and preservation.

101 Curious Tales of East African Birds is an enthralling publication that will undoubtedly inspire a deeper appreciation for birds, nature, and the enchanting realm of East Africa. Whether you are a seasoned ornithologist, a nature enthusiast, or simply someone who appreciates the wonders of the natural world, this book will leave an indelible mark on your heart and mind.

VIDYA PADMAKUMAR

Editor, The IOU Flutter flutter@internationalornithology.org



Available at:

https://

pelagicpublishing.com/

products/101-curious-talesof-east-african-birds

PELAGIC PUBLISHING is offering a

10%
DISCOUNT

Ecology and Conservation of Mountain Birds

Dan Chamberlain, Aleksi Lehikoinen and Kathy Martin (Editors)

ECOLOGY, BIODIVERSITY AND CONSERVATION SERIES, CAMBRIDGE UNIVERSITY PRESS

WE ANNOUNCE THE PUBLICATION of a global reference volume on high mountain bird ecology and conservation. The ten chapters in our multi-author book focus on avian ecology and research at and above the treeline ecotone with an emphasis on the alpine zone.

The book begins with our working definition of 'mountains', global estimates of mountain habitats, and an introduction to mountain bird communities and their habitats including the many adaptations that birds employ to live in high mountains.

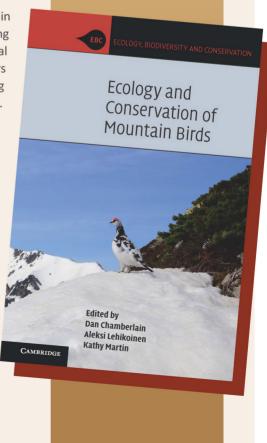
Several chapters summarize what we know about avian ecology in the alpine and nival zones (the highest elevation habitats) and the treeline ecotone in temperate and tropical habitats. Two chapters review mountain bird population trends across Europe and North America and approaches to large large-scale modeling for mountain bird ecology and conservation. There is extensive treatment of potential threats to mountain bird populations, particularly climate change and human disturbance, assessing the evidence of likely impacts and conservation actions required to minimize those impacts and improve prospects for the future.

The book concludes with a 'roadmap' to guide mountain bird research over the next decades that involves improving population monitoring programs, increasing our ecological knowledge of mountain species, identifying the key drivers of their distributions and population trends, and providing an assessment of their resilience to environmental change.

Mountains are globally important for biodiversity and endemism as mountain regions cover one-quarter of the earth's terrestrial surface, but contain nearly half of its biodiversity hot-spots. The high mountains host many charismatic and highly sought-after species such as the giant hummingbird and glacier finch in the Andes, white-tailed ptarmigan in North America, white-winged snow finch in the European Alps, grandala in Asia, scarlettufted sunbird in Africa, or rosy-finches in the Holarctic.

Many of you will be familiar with the research on mountain grouse, but you might be surprised to learn that at least 1,310 species of birds breed above the treeline, with additional species expected to be discovered in the future, especially in the global south. This tally represents 12% of the 10,933 species currently

You might be surprised to learn that at least 1,310 species of birds breed above the treeline, with additional species expected to be discovered in the future



recognized by the International Ornithological Committee. In some areas, high mountains support up to 40% of the local species pools with often extensive avian use year-round. About 25% of birds breeding above the treeline are alpine specialists, and 75% of birds breeding there live across a range of elevations.

Mountain biodiversity is threatened by growing pressure caused by human activities, especially climate change, that imperil many key ecosystem services provided by mountain habitats. Increasingly, mountains are providing climate and habitat refugia for open-country species that were formerly widespread, but are now declining in the lowlands due to increasingly intensive anthropogenic activities at low elevations. Despite escalating threats, mountain biodiversity is poorly studied compared to many lowland habitats. Thus, conducting further ecological and biodiversity conservation research for mountain ecosystems is a high priority. Overall, mountains support disproportionately high biodiversity, birds in high mountains are sensitive to habitat degradation, and alpine birds can be useful sentinels of environmental change. We hope that despite the climate change threats, mountain ecosystems may, with appropriate management, become more important centers for bird conservation in a changing climate than they are at present.

KATHY MARTIN

Home Page: https://profiles.forestry.ubc.ca/person/kathy-martin/ Centre for Alpine Studies: http://alpine.forestry.ubc.ca/ Department of Forest and Conservation Sciences

Faculty of Forestry
University of British Columbia

3004 - 2424 Main Mall

Vancouver, B.C. Canada V6T 1Z4

Phone: (902) 277-0130 Fax: (604) 822-9102 For more information and to order, visit:

www.cambridge.org/

9781108940429

and enter the code **ECMB2023**

at the checkout.

If you encounter any issues placing your order, please emai Customer Services: directcs@cambridge.org

CAMBRIDGE UNIVERSITY
PRESS
is offering a

20%

ON THIS TITLE until 30 June 2024





THIS EXTRAORDINARY DOCUMENTARY invites viewers to embark on a fascinating exploration of one of the most remarkable avian species on earth, the bearded vulture. The film, by Lizzie Daly, a passionate wildlife presenter and biologist, takes one to diverse locations across Africa and Asia. Along the way, Lizzie engages with experts and conservationists who generously share their expertise and deep admiration for these incredible scavengers. Through stunning cinematography and compelling storytelling, the film unveils the hidden wonders of vulture biology, ecology, and behavior, highlighting their indispensable role in maintaining thriving ecosystems. For bird and wildlife enthusiasts, *VULTURE* is an absolute must-watch. The film premiered on YouTube on 14 September 2023.

CREATIVITY AND COLLABORATION IN ORNITHOLOGY

THE NOTICEBOARD



CONFERENCES

FOR MORE INFORMATION: https://www.internationalornithology.org/

	2024	
7 - 8 JANUARY	INTERNATIONAL CONFERENCE ON BIODIVERSITY AND FOREST HABITAT MANAGEMENT (ICBFHM) - Tokyo, Japan	https://conferenceindex.org/event/ international-conference-on-biodiversity- and-forest-habitat-management-icbfhm- 2024-january-tokyo-jp
5 - 9 FEBRUARY	9TH NORTH AMERICAN DUCK SYMPOSIUM - Portland, OR	https://ducks9.org/
9 - 11 APRIL	BOU 2024 ANNUAL CONFERENCE - Jubilee Campus, Nottingham University	https://bou.org.uk/event/urban-birds- bou2024/
26 - 28 APRIL	KENTUCKY ORNITHOLOGICAL SOCIETY 2024 FALL MEETING - Mammoth Cave National Park	https://www.birdky.org/kosmeetings-1- upcoming.php
20 - 26 MAY	7TH INTERNATIONAL ALBATROSS AND PETREL CONFERENCE - Ensenada, Baja California, Mexico	https://islas.org.mx/iapc7/
23 - 29 JUNE	XXVI IUFRO WORLD CONGRESS 2024 - Stockholm, Sweden	https://www.iufro.org/events/congresse s/2024/
29 JULY - 1 AUGUST	JOINT WILSON ORNITHOLOGICAL SOCIETY, ASSOCIATION OF FIELD ORNITHOLOGISTS, AND SOCIETY OF CANADIAN ORNITHOLOGISTS - SOCIÉTÉ DES ORNITHOLOGISTES DU CANADA MEETING - Peoria, Illinois, US	https://afoscowos2024.org/
19 - 23 OCTOBER	The Wildlife Society's 31st Annual Conference - Baltimore, Maryland	https://wildlife.org/network/conferences- network/
11 - 12 NOVEMBER	INTERNATIONAL CONFERENCE ON WILDLIFE FORENSICS AND CONSERVATION STUDIES - Phnom Penh, Cambodia	https://conferenceindex.org/event/intern ational-conference-on-wildlife-forensics- and-conservation-studies-icwfcs-2024- november-phnom-penh-kh
12 - 13 NOVEMBER	BOU AUTUMN 2024 CONFERENCE - AVIAN CONSERVATION TRANSLOCATIONS - Virtual (International)	https://bou.org.uk/event/avian- conservation-translocations-bousci24/
ТВС	2024 ANNUAL MEETING OF THE RAPTOR RESEARCH FOUNDATION - Charlotte, NC, USA	https://raptorresearchfoundation.org/ events/
2025		
ТВС	2025 ANNUAL MEETING OF THE RAPTOR RESEARCH FOUNDATION - San Jose, Costa Rica	https://raptorresearchfoundation.org/ events/
ТВС	2025 BIRD NUMBERS CONFERENCE EBCC - Latvia	https://www.ebcc.info/what-we-do/conferences-and-workshops/



Cormorant sp., Ray Hennesey, Unsplash.

COURSES, WORKSHOPS AND WEBINARS

Aves Argentinas - Courses	https://www.avesargentinas.org.ar/cursos
Bird Alliance - Courses and Workshops	https://birdalliance.in/ba-category/courses-workshops/
Bird Banding Opportunities	https://www.westernbirdbanding.org/bird-banding-opportunities
Bird Identification and Survey - Courses	http://www.earthquestcanada.ca/Birdcourses.htm
Bird Identification online course	https://www.doc.govt.nz/get-involved/training/online- courses/bird-identification-online-course/
Bird Keeping (Aviculture)	https://www.acs.edu.au/courses/bird-keeping-aviculture-707.aspx
Bird Language Online Courses	https://www.naturaliststudies.com/bird-language-courses
Bird Monitoring and Banding Workshops	https://rpbo.org/what-we-do/training/bird-monitoring-and-banding-workshop/
Birds Canada Workshops and Webinars	https://www.birdscanada.org/discover-birds/training-and-workshops
Birds Queensland bird identification courses	https://birdsqueensland.org.au/activities/courses/
BlackAFinSTEM - Webinars	https://www.blackafinstem.com/virtual-2023
British Trust for Ornithology Workshops	https://www.bto.org/community/events
Field Studies Council - Courses	https://www.field-studies-council.org/courses-and-experiences/ subjects/birds-courses/
Hummingbird Banding	https://donorbox.org/hbjuly29
IBP-facilitated Beginner and Advanced banding classes	https://www.birdpop.org/pages/birdBandingClasses.php
ITEC Birding Program	https://itec-edu.org/itec-birding-program/
NABC Banding Workshop and Certification in Belize	https://www.ecorana.ca/bird-banding-apprenticeship/
Nature Trails and Workshops - Bombay Natural History Society	https://www.bnhs.org/nature-trails
Raptor Research Foundation Workshops	https://raptorresearchfoundation.org/current-conference/ workshops/
Training Directory: Identification and Field Survey Skills Ornithology Short Courses	https://www.countryside-jobs.com/training/identificationand-field-survey-skills-ornithology
Vancouver Avian Research Centre - Workshops	https://www.birdvancouver.com/bird-identification-workshop/
WildResearch Workshops	https://wildresearch.ca/training/

JOB OPPORTUNITIES F	OR MORE INFORMATION: https://ornithologyexchange.org/jobs/board/
Avian Biologists - Woodland Raptor Broadcast and Surveys - CO	https://wfscjobs.tamu.edu/jobs/avian-biologists-woodland-Nest raptor-broadcast-and-nest-surveys-co/
Bird Conservancy of the Rockies - Job Opportunities	https://www.birdconservancy.org/about-us/employment/
Bird Inventory Biologist	https://stantec.taleo.net/careersection
Birder Certification and jobs	https://birdercertification.org/birding-projects.php
BirdLife International - Careers	https://www.birdlife.org/careers-hub/
Birds Canada Job opportunities	https://www.birdscanada.org/about-us/job-opportunities
Bombay Natural History Society Jobs	https://www.bnhs.org/career
Conservation Job Board	https://www.conservationjobboard.com/
Cornell Lab of Ornithology Job Opportunities	https://www.birds.cornell.edu/home/jobs/#staff
Eastern Whip-poor-will Avian Field Technician (New York)	https://wfscjobs.tamu.edu/jobs/immediate-hire-eastern-whip-poor-will-avian-field-technician-new-york/
Ecological Society of America Jobs	https://www.esacareercenter.org/
Environmental Science Careers and Other Green Jobs	https://jobs.environmentalscience.org/
Fall Migration Banding Field Assistant	https://wfscjobs.tamu.edu/jobs/experienced-fall-migration-banding-field-assistant/
Field Volunteer Assistant working with endangered parrots and macaws in Costa Rica	https://careers.conbio.org/job/599228/field-volunteer-assistant-working-with-endangered-parrots-and-macaws-in-costa-rica/? LinkSource=PremiumListing
Hawk Migration Counter (Cape May Hawkwatch)	https://wfscjobs.tamu.edu/jobs/hawk-migration-counter-cape-may-hawkwatch/
Hawk Migration Counter (Montclair Hawkwatch)	https://wfscjobs.tamu.edu/jobs/hawk-migration-counter- montclair-hawkwatch/
Landbird Research Tech (Bio Aide III)	https://wfscjobs.tamu.edu/jobs/landbird-research-tech-bio-aide-iii/
Landbird Research Tech (Bio Aide IV)	https://wfscjobs.tamu.edu/jobs/landbird-research-tech-bio-aide-iv/
Migratory Bird Habitat Initiative Project Leader	https://wfscjobs.tamu.edu/jobs/migratory-bird-habitat-initiative-project-leader/
Morning Flight Songbird Counter	https://wfscjobs.tamu.edu/jobs/morning-flight-songbird-counter/
Natural Resources Job Board	https://wfscjobs.tamu.edu/job-board/
Ornithology Exchange Job Board	https://ornithologyexchange.org/jobs/board/
Pacific Seabird Group Job Postings	https://pacificseabirdgroup.org/category/news/job-postings/
Scientist III (Avian Ecology Research Associate), remote	https://wfscjobs.tamu.edu/jobs/scientist-iii-avian-ecology- research-associate-remote/
Spotted Owl Technicians- Occupancy Monitoring in Southwest for Recovery	https://wfscjobs.tamu.edu/jobs/2-spotted-owl-technicians-the occupancy-monitoring-in-the-southwest-for-recovery-17-hr-start-date-asap/
The Wildlife Society Career Center	https://careers.wildlife.org/home/
Waterbird Migration Counter (Avalon Seawatch)	https://wfscjobs.tamu.edu/jobs/waterbird-migration-counter-avalon-seawatch/
Wild Bird Trust - Careers	https://www.wildbirdtrust.com/careers/all
Work Cabin - Conservation Job Board	https://www.workcabin.ca/

THE IOU FLUTTER

GRANTS AND FELLOWSHIPS

AAV Wild Bird Health Research Fund from the Association of Avian Veterinarians supports research projects that have a direct impact on the health and welfare of wild birds. The award amount is up to \$5,000 and the application deadline is 1 February each year. https://www.aav.org/page/research

ABC Conservation Awards from the African Bird Club support small and medium-sized bird conservation projects in Africa. Applicants should normally be resident in Africa. The award amount is up to £1,500 and the application deadlines are 28 February, 30 June, and 31 October each year. https://www.africanbirdclub.org/conservation/awards

ABC Expedition Award from the African Bird Club supports expeditions that take place within continental Africa or adjacent islands, with a strong base in conservation and birds. The award amount is up to £2,000 and the application deadlines are 28 February, 30 June, and 31 October each year. https://www.africanbirdclub.org/conservation/expeditions

African Union Kwame Nkrumah Scientific Awards recognize outstanding African scientists for their achievements and valuable discoveries and findings in science, technology, and innovation. Three awards are available for outstanding African scientists; (i) AU-TWAS National Young Scientists Award at the National Level (\$5,000); (ii) African Union Regional Women Scientists Award at the AU Regional Level (\$20,000); and (iii)Continental Scientific Award at the continental level (\$100,000). The application deadline is 10 November each year. https://au.int/en/aurg/2020

AOS Student and Postdoc Research Grants from the American Ornithological Society (AOS) support research in various areas of avian biology by students or postdocs who are members of AOS. The award amounts range from \$1,000 to \$2,500 and the application deadline is 15 January each year. https://americanornithology.org/awards-grants/student-postdocresearch-grants/

The Atlas Fund Scholarships are travel grants offered by the Québec Breeding Bird Atlas to experienced volunteer birdwatchers who survey remote squares in northern Québec. The amount granted for a project usually varies between \$1,000 and \$3,000. https://www.quebecoiseaux.org/fr/fonds-atlas

Birds Australia Research Grants from BirdLife Australia support research projects that contribute to the conservation of Australian birds and their habitats. The award amount ranges from \$1,000 to \$5,000 and the application deadline is 31 March each year. https://birdlife.org.au/who-we-are/our-organisation/grants

Career development bursaries from the BOU support early career researchers in developing new skills and collaborations. The award amount is up to £2,500 and the application deadline is 30 November each year. https://bou.org.uk/funding/career-development-bursaries/

Conference attendance grants from the BOU support students and early career researchers to attend international ornithological conferences. The award amount is up to £500 and the application deadlines vary depending on the conference. https://bou.org.uk/funding/conference-attendance-grants/

Colorado Field Ornithologists Youth Scholarships provide financial help to young Colorado birders to attend summer camps, workshops, and training programs that introduce them to science and nature through the study of birds. Scholarships typically range from \$200-\$800. https://cobirds.org/grants-scholarships/#application-information

Craig S. Harrison Conservation Fund - to advance the conservation of seabirds by providing funds or supplies to individuals from developing countries as well as those from elsewhere working in those developing countries primarily in or bordering the Pacific Ocean. https://pacificseabirdgroup.org/grants/general-instructions/

Crowder-Messersmith Conservation Fund supports local conservation projects in developing countries. The grants are intended as seed money for communities and individuals. The award amount is up to \$2,000 and the application deadline is 15 December each year. https://anshome.org/crowder-messersmith-conservation-fund/

The E. Alexander Bergstrom Memorial Research Award from the Association of Field Ornithologists (AFO) supports field studies of birds by helping to support research or analyses. The award amount is up to \$2,500 and the application deadline is 15 February each year. https://afonet.org/grants-awards/bergstrom-award/

Holsworth Wildlife Research Endowment from the Ecological Society of Australia supports postgraduate students to conduct research in ecology, wildlife management, and natural history studies. The award amount is up to \$7,500 and the application deadlines are 31 March and 31 August each year. https://www.ecolsoc.org.au/awards-and-prizes/holsworth-wildlife-research-endowment

The **Mohamed bin Zayed Species Conservation Fund** supports projects that focus on individual species conservation initiatives, recognize leaders in the field, and elevate the importance of species in the broader conservation debate. The award amount is up to \$25,000 and the application deadlines are 28 February, 30 June, and 31 October each year. https://www.speciesconservation.org/grants/

Norman Wettenhall Foundation Small Environmental Grant Scheme supports groups or individuals undertaking projects that will make a positive difference to the natural living environment in Australia. The award amount is up to \$10,000 and the application deadlines are quarterly. https://nwf.org.au/grants/small-environmental-grants/

The **Oregon Fund for Ornithology** is a grant program that supports projects related to the study, education, and conservation of birds and birding in Oregon. The fund offers up to \$1,000 for each project that aligns with OBA's mission. https://oregonbirding.org/oregon-fund-for-ornithology/

OSME Conservation Fund from the Ornithological Society of the Middle East, the Caucasus, and Central Asia supports bird conservation projects in the OSME region, which includes parts of East Asia such as Mongolia, China, and Japan. The award is up to £2,000 and the application deadlines are annually 31 January and 31 July. https://osme.org/grants/conservation-fund/

Rufford Small Grants for Nature Conservation support small nature/biodiversity conservation projects and pilot programs in developing countries. The award amount is up to £8,000 and the application deadline is continuous. https://www.rufford.org/apply-for-grant

Each year the **Society for Northwestern Vertebrate Biology (SNVB)** provides one scholarship of up to \$1000 to an undergraduate or graduate student conducting vertebrate research within the geographic scope of the society: northwestern North America west of the Great Plains and north of the Mojave Desert. SNVB is offering two \$1000 scholarships now. http://thesnvb.org/scholarship/

Student Research Grant seeks to aid student-led research in the promotion of up-and-coming scholar members of the Pacific Seabird Group. The PSG Student Research Grant typically funds at least three grants, one grant per degree level (bachelor, master, doctoral). Past grant awards were between \$500 and \$1000. https://pacificseabirdgroup.org/student-research-grant/

THE IOUFLUTTER

Texas Ornithological Society awards research grants each year to researchers and graduate students studying the birds of Texas. https://www.texasbirds.org/about-tos/grants/

The **Tropical Biology Association Small Grant Scheme** supports TBA alumni groups to assist them with their conservation projects and to strengthen their proficiency in natural resource management and research. They are particularly interested in innovative ideas and approaches that will lead to real outcomes. The award amount is up to £2,300 and the application deadline is 30 April each year. https://www.tropical-biology.org/opportunities/tba-small-grants/

The Waterbird Society awards grants for research in the science and conservation of waterbirds. https://waterbirds.org/researchgrants/

Western Bird Banding Association offers up to two \$500-1,000 grants each year, usually one for research and the other for monitoring, for individuals and/or organizations engaged in projects in the New World using marked birds. https://www.westernbirdbanding.org/research-grants

Wilson Ornithological Society Research Grants support ornithological research projects anywhere in the world. The award amount ranges from \$1,000 to \$2,500 and the application deadline is 1 February each year. https://www.wilsonsociety.org/awards/research-grants/

The **Wisconsin Society for Ornithology** sponsors several grants to support ornithological research by students and professionals, promote the study of birds by youth, enhance our knowledge of Wisconsin wetlands, and implement shorebird management activities. https://wsobirds.org/what-we-do/grants

The **Yukon Bird Club Conservation Scholarship** is an annual award of \$500 for a Yukon University student who demonstrates interest and motivation in environmental conservation related to birds and their habitats. https://yukonbirds.ca/yukonbird-club-conservation-scholarship/

AWARDS

AMERICAS

The Andersen Memorial Award for Raptor Research is given by the Raptor Research Foundation to the best student oral and poster presentations at their annual meeting. The award can only be given to a student once per degree and the student must be the senior author and presenter of the paper or poster. The poster award receives \$175 and 1 year of free membership to RRF. https://raptorresearchfoundation.org/grants-awards/andersen-memorial-award/

The James R. Koplin Travel Award is an award given by the Raptor Research Foundation (RRF) to up to six students who are the senior authors and presenters of a paper or poster to be presented at the RRF meeting for which travel funds are requested. The award includes up to \$500 and a free 1-year membership to RRF. The application deadline is the same as the abstract submission deadline for the RRF meeting. https://raptorresearchfoundation.org/grants-awards/koplintravel-award/

The William Brewster Memorial Award is given each year to the author or coauthors of the most meritorious body of work on birds of the Western Hemisphere published during the past ten years. https://americanornithology.org/awards-grants/awards-scholarships/william-brewster-memorial-award/

The **Loye and Alden Miller Research Award** is given for lifetime achievement in ornithological research. https://americanornithology.org/awards-grants/awards-scholarships/loye-and-alden-miller-research-award/

The **Elliott Coues Award** recognizes outstanding and innovative contributions to ornithological research, regardless of the geographic location of the work. https://americanornithology.org/awards-grants/awards-scholarships/elliott-coues-award/

The Ralph W. Schreiber Conservation Award recognizes extraordinary scientific contributions to the conservation, restoration, or preservation of birds and/or their habitats. https://americanornithology.org/awards-grants/awards-scholarships/ralph-w-schreiber-conservation-award/

The **CFO Awards** are annual awards given by the Colorado Field Ornithologists (CFO) to honor individuals and organizations for their service to Colorado's avian diversity. The awards are presented at the CFO annual convention, which will be held jointly with the Western Field Ornithologists (WFO). https://cobirds.org/awards/

The **Doris Heustis Speirs Award** is presented annually to an individual who has made outstanding lifetime contributions to Canadian ornithology. https://www.sco-soc.ca/doris-heustis-speirs-award

The Jamie Smith Memorial Mentoring Award honors established ornithologists from academia, industry, non-government, or government agencies in recognition of excellence in mentoring a new generation of professional or amateur biologists. https://www.sco-soc.ca/jamie-smith-memorial-mentoring-award

The Early Career Researcher Award honors fledgling ornithologists from academia, industry, and non-government or government agencies who show strong potential for future leadership in Canadian ornithology. https://www.sco-soc.ca/early-career-researcher-award

The **Taverner Awards** are awarded annually to those with limited or no access to major funding, regardless of professional status, who are undertaking ornithological work in Canada. https://www.sco-soc.ca/taverner-awards

The Franz Haffer Award is given to an individual who has made a significant and long-term contribution to the study of Neotropical birds. The award consists of a plaque and a lifetime membership to the Neotropical Ornithological Society (NOS). https://www.neotropicalornithology.org/franz-haffer-award/

The **John Terborgh Award** is given to an individual who has made a significant contribution to the conservation of Neotropical birds and their habitats. The award consists of a plaque and a lifetime membership to the Neotropical Ornithological Society (NOS). https://www.neotropicalornithology.org/john-terborgh-award/

The Ned K. Johnson Young Investigator Award is given to an early-career researcher who has made an outstanding contribution to the study of Neotropical birds. The award consists of a plaque, a cash prize, and a one-year membership to the Neotropical Ornithological Society (NOS). https://www.neotropicalornithology.org/ned-k-johnson-young-investigator-award/

The **Neotropical Ornithological Society (NOS) Student Awards** are given to students who present outstanding oral or poster presentations at the biennial Neotropical Ornithological Society (NOS) congress. The awards consist of certificates and cash prizes. https://www.neotropicalornithology.org/nos-student-awards/.

THE IOUFLUTTER

The **F.M.** Bailey Lifetime Achievement Award is an award given by the New Mexico Ornithological Society (NMOS) to recognize individuals who have made significant lifetime contributions to New Mexico's ornithological knowledge, the promotion of the value of birds, both aesthetic and economic, effective conservation of the state's avifauna, and/or the NMOS. http://www.nmbirds.org/fmbailey-award/

The **Waterbird Society** awards individuals for outstanding contributions to waterbird science, exemplary service to the Society, and students for excellence in presentations and assistance for travel to the annual meetings. https://waterbirds.org/awards/

EUROPE

The **EOU Awards** are awarded by the European Ornithologists' Union (EOU) to recognize outstanding contributions to ornithology in Europe. Some of the awards are the EOU Medal, the EOU Early Career Researcher Award, the EOU Outstanding Service Award, and the EOU Student Award. https://eounion.org/awards/

The Marsh Awards for Ornithology are awarded by the British Trust for Ornithology (BTO) to recognize individuals who have made significant contributions to ornithological research, conservation, or communication in the UK or abroad. Some of the awards are the Marsh Award for Ornithology, the Marsh Award for International Ornithology, the Marsh Award for Local Ornithology, and the Marsh Award for Innovative Ornithology. https://bto.org/community/grants-and-funding/marsh-awards

The **BOU** Awards are awarded by the British Ornithologists' Union (BOU) to support ornithological research and communication in various ways. Some of the awards are the BOU Career Development Bursary, the BOU Small Research Grants, the BOU Conference Bursaries, and the BOU Science Communication Award. https://www.bou.org.uk/grants-and-bursaries/

The **DO-G Awards** are awarded by the German Ornithologists' Society (DO-G) to honor outstanding achievements in ornithology. Some of the awards are the Erwin Stresemann Prize, the Wolfgang Makatsch Medal, and the DO-G Poster Prize. https://www.do-g.de/en/awards/

The **NOF Awards** are awarded by the Nordic Society Oikos (NOF) to acknowledge excellence in ornithological research and communication in Scandinavia. Some of the awards are the NOF Honorary Membership, the NOF Best Paper Award, and the NOF Best Student Presentation Award. https://www.nordic-society-oikos.org/awards

AUSTRALIA

The **D. L. Serventy Medal** is awarded by the Royal Australasian Ornithologists Union (BirdLife Australia) to a person who has rendered outstanding service to ornithology in the Australasian region. https://www.birdlife.org.au/who-we-are/our-organisation/awards-scholarships/d-l-serventy-medal

The John Hobbs Medal is awarded by the Royal Australasian Ornithologists Union (BirdLife Australia) to a person who has made an outstanding contribution to ornithological research in the Australasian region. https://www.birdlife.org.au/whowe-are/our-organisation/awards-scholarships/john-hobbs-medal

The **W. Roy Wheeler Medallion** is awarded by Bird Observation and Conservation Australia (BOCA) to a person who has made an outstanding contribution to ornithology in Australia. https://www.birdlife.org.au/who-we-are/our-organisation/awards-scholarships/w-roy-wheeler-medallion

The **S.G. 'Bill' Lane Award** is awarded by Charles Sturt University (CSU) to a person who has made an outstanding contribution to ornithology in Australia or internationally. https://about.csu.edu.au/community/graham-centre/news-events/news/news-archive/2019-news/s-g-bill-lane-award-for-excellence-in-ornithology

The **Robert Falla Memorial Award** is awarded by the Ornithological Society of New Zealand (OSNZ) to recognize individuals or groups who have made outstanding contributions towards ornithology and conservation in New Zealand or the South Pacific region. https://www.osnz.org.nz/robert-falla-memorial-award

AFRICA

The ABC Conservation Awards are awarded by the African Bird Club (ABC) to support small and medium-sized conservation projects in Africa. https://www.africanbirdclub.org/projects/conservation-fund

The ABC Expedition Award is awarded by the African Bird Club (ABC) to support expeditions that contribute significantly to knowledge of African birds. https://www.africanbirdclub.org/projects/expedition-fund

ASIA

The Salim Ali National Award for Nature Conservation is awarded by the Bombay Natural History Society (BNHS) to an individual who has made significant contributions to nature conservation in India. The award is named after Salim Ali, a renowned Indian ornithologist and naturalist. https://bnhs.org/awards/salim-ali-national-award-for-nature-conservation/

The Salim Ali Award for Ornithology is awarded by the Indian National Science Academy (INSA) to an individual who has made outstanding contributions to ornithology in India. The award is also named after Salim Ali and consists of a medal and a citation. https://www.insaindia.res.in/awards.php?award_id=18

The Yamashina Yoshimaro Award is awarded by the Yamashina Institute for Ornithology (YIO) to an individual who has made remarkable achievements in ornithology or related fields in Japan or abroad. The award is named after Yamashina Yoshimaro, a Japanese ornithologist and founder of YIO. https://www.yamashina.or.jp/english/award.html

The **Bird Conservation Nepal Award** is awarded by Bird Conservation Nepal (BCN) to an individual or organization who has made significant contributions to bird conservation in Nepal. The award consists of a certificate and a cash prize. https://www.birdlifenepal.org/page/awards

The **Sri Lanka Wildlife Conservation Society Award** is awarded by the Sri Lanka Wildlife Conservation Society (SLWCS) to an individual or organization who has made outstanding contributions to wildlife conservation in Sri Lanka. The award consists of a plaque and a citation. https://www.slwcs.org/awards

THE IOU FLUTTEN

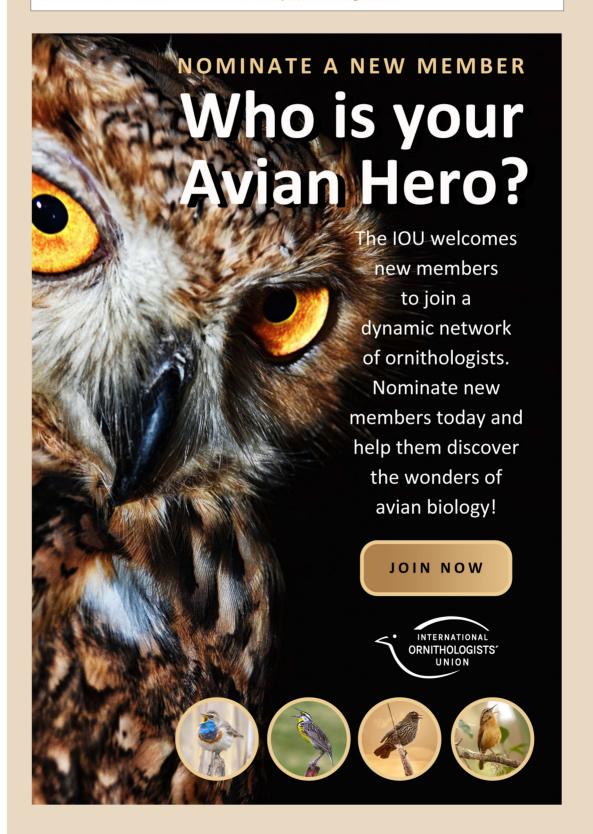
INTERNSHIPS

FOR MORE INFORMATION: https://ornithologyexchange.org/funding/portal/

Bartels Science Illustration Internship: This internship is offered by the Cornell Lab of Ornithology and involves creating illustrations of birds and other wildlife for scientific publications, exhibits, and education. The internship is open to Cornell undergraduates who would conduct the proposed project during the summer in collaboration with a Cornell Lab of Ornithology faculty or staff member. The internship duration and stipend are negotiable. https://www.birds.cornell.edu/home/jobs/

Ornithology Internship: This internship is offered by the Georgia Museum of Natural History and involves working in the Ornithology Collection. The internship is open to students who are enrolled in BIOL, ECOL, or FNAR 4261 (Museum of Natural History Internship) at the University of Georgia. The internship duration and credits are negotiable.https://gmnh.franklin.uga.edu/internship-information

Wisconsin Society for Ornithology Volunteering opportunities: Seeking volunteers to help in various positions to transform into a more effective advocate for bird conservation. https://wsobirds.org/volunteer



THE IOUFLUTTER

CREATIVITY AND COLLABORATION IN ORNITHOLOGY

CONTRIBUTE AND CONNECT



I welcome your comments and suggestions on this newsletter, as well as any information you would like to see in the next issue of *The Flutter*.

You can contact me at the address below.

VIDYA PADMAKUMAR (She/Her)

Editor, The Flutter

vidyapkumar3@gmail.com

flutter@internationalornithology.org

https://vidyapkumar3.wixsite.com/vidyapadmakumar

T: +1 (438) 951 - 9701

The next deadline for IOU members' submissions for *The Flutter* is 15 JANUARY 2024



FLUTTER

OFFICIAL MAGAZINE OF THE INTERNATIONAL ORNITHOLOGISTS' UNION

