



World Congress of Herpetology

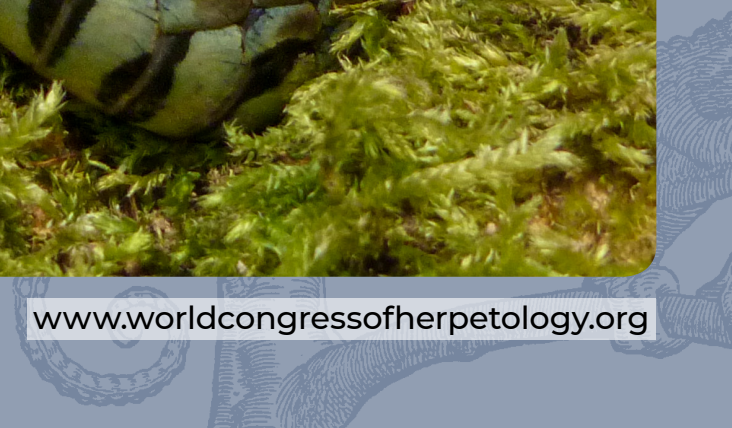
Newsletter

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Letter from the Editor

RICHARD GRIFFITHS

As a student, I remember a box of still twitching decapitated frogs being brought into the lab for a practical experiment. At the time, any discussion about the ethical, welfare or conservation implications of such teaching practice was not on the educational radar. Fortunately, things have changed. Although they have relatively small brains, we now appreciate that amphibians and reptiles are sentient beings and experience stress in ways we once did not consider. Such stress extends to other aspects of our interactions, such as handling and even simple observation. It also applies to some activities that, in the past, we haven't given much thought to, such as photographing that rare and beautiful creature on a field trip. I am pleased to report that WCH now has a newly formed Animal Welfare Subcommittee that will provide advice on such matters, particularly as they relate to the organisation of activities related to future congresses. Find out more on page 6.

This newsletter also contains a second instalment of articles from early-career researchers about what they wish they knew when they started out. The pieces relate specifically to work

being undertaken in China, and I am grateful to Jing Che for collating these and providing an introduction.

Of course, it is always rewarding to see new faces starting to forge careers in herpetology, but also sad when influential colleagues pass on. Over the past year two such distinguished herpetologists, Jay Savage and Pat Gregory, have sadly died. Both Jay and Pat both contributed to the development of WCH and will be greatly missed by their friends, families and peers. But their impact will live on. Of the same generation as Jay and Pat is Sir David Attenborough who reached the milestone age of 100 recently. I was unaware that Sir David was involved with early discussions about the first WCH in Canterbury, and grateful to Kraig Adler for bring this to our attention (see page 4).

Finally, the co-Directors of the next WCH have compiled some thoughts from a range of herpetologists about what they hope to get out of meeting in Gijón in 2028. Hopefully

this will start getting you in the mood for the next World Congress of Herpetology!



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On the cover

Barred grass snake (*Natrix helvetica*), a species studied in England by Pat Gregory for over a decade (photo: Brett Lewis).

Sir David Attenborough and the WCH, an historical note

WCH News



Written by **Kraig Adler**
Founding Secretary General, WCH

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Sir David Attenborough, the renowned British naturalist, author, and broadcaster, who received numerous tributes from around the world on the occasion of his 100th birthday on 8 May 2026, was an active member of the leadership group for the first world congress (held in Canterbury, UK, September 1989). He is pictured at the far left, during a planning meeting held in London at the Institute of Biology, 26 May 1987. Also pictured, from the left, Roger Avery, chair of the British National Committee for the congress; Marinus Hoogmoed, WCH treasurer; Angus d'A. Bellairs, honorary president of the first congress; and three honorary vice presidents, along with Sir David: the Earl of Cranbrook, president of the British Herpetological Society; the Baroness Nichol, British politician, environmentalist, and member of the House of Lords; and Richard Fitter, chair of the Fauna and Flora Preservation Society. Lord Cranbrook convened the honorary officers and was our connection with Buckingham Palace and HRH Prince Philip who served as patron of the congress.



Planning meeting held in 1987 for the First World Congress of Herpetology.



WORLD CONGRESS ON SNAKES 2026

Snakes, Science, Species Survival & Sri Lanka

01 - 04 October 2026, Kandy, Sri Lanka

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Why Attend?

The World Congress on Snakes is the first international gathering fully dedicated to advancing snake science, conservation, education, and human-wildlife coexistence. It brings together global herpetologist, researchers, conservationists, wild-life managers, and enthusiasts for an unforgettable experience in a world-heritage and biodiversity hotspot city.

Who Should Attend:

- Scientists & Researchers
- Wildlife & Conservation Managers
- Educators & Students
- Herpetology Enthusiasts
- Policy & Wildlife Health Professionals
- Anyone passionate about snakes and biodiversity!

What You'll Gain:

- Field Trips
- Global Networking
- Cutting-edge Knowledge in Herpetology
- Hands-on Learning
- Collaborative Opportunities
- Cultural & inspirational Elements

1 2 3 4 OCTOBER 2026

THE GRAND KANDYAN HOTEL AT KANDY, A WORLD HERITAGE CITY

Deadline for Submitting abstracts is 30th of July

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The WCH Animal Welfare Subcommittee



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Greetings to the World Congress of Herpetology from your new WCH Animal Welfare Subcommittee. We have been convened at the request of your Executive Committee, driven largely by the interest shown by so many of you in the subject at the Improving Animal Welfare in Herpetological Research symposium run at 10WCH in Kuching, Borneo in 2024. As we wrote in our proposal to the Executive, reptiles and amphibians are disproportionately affected by the global biodiversity crisis, meaning we are constantly increasing the number of non-model species that are the focus of research. While the academic and conservation justification for why we work on these species is clear, our understanding of the welfare impacts of how we work with a new species is frequently uncertain. While the Terms of Reference for the subcommittee have yet to be finalized, we hope that our efforts will raise awareness of the subject and hopefully generate policy for the WCH and stimulate research in the subject.

Chances are many of you are involved in research that can already inform on welfare and best practices in herpetological research. Certainly, our community is trying to conserve amphibians and reptiles in an increasingly modified world and welfare sits at the heart of wildlife conservation. However, the great majority of welfare research on reptiles and amphibians is restricted to a few, so-called model organisms and studies of model organisms do not translate to different species, settings or purposes. Furthermore, many of the principles and standards of welfare that have been established for mammals and birds are difficult to apply to reptiles and amphibians. What this means is that the opportunities for welfare research in our community are myriad and even the most basic of studies can be important for establishing standards and best practices. It is important to be clear this is about animal welfare in a research context, so we will be limiting our efforts to the academic and research aspects of animal welfare and applications that improve welfare in the context of research, conservation and WCH standards and practices.

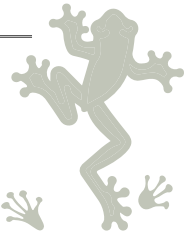
With that in mind, we have chosen three starting points to launch the subcommittee. Unsurprisingly, our first objective is to canvass the WCH members for people who have time to commit to the subcommittee. Right now we are only five: Trent Garner (Institute of Zoology, London), Anna Wilkinson (University of Lincoln), Jessica Thea Turner (University of Adelaide), Katie Bickerton (University of Gloucestershire) and Dave Daversa (UCLA). Five is a small number to generate and maintain momentum, and like all of you, we all have jobs or PhD, Masters and undergraduate commitments that limit the time we can commit to this endeavour. Any of you who think you have research experience in welfare and feel you can commit to the development of this subcommittee, please email Trent. Hopefully we will hold an online meeting in the coming months where we can begin to formalize the structure of the subcommittee, establish terms of reference and spread the workload amongst us.

Second, many of you probably already have some experience with the application of welfare to your research. We'd like to get an idea of what that might be. Maybe you've been actively undertaking welfare research and maybe even publishing on the subject. Maybe you are dealing with the more administrative side of welfare in research, applying for permission to conduct research on animals and have experience getting permits, licenses and other forms of permission to do the research you want to do that require justification at least in part on the basis of welfare. If you have professional experience with the ins and outs of welfare in herpetology, we would like to hear from you. For this your points of contact are Anna Wilkinson and Katie Bickerton.

Third, your WCH Executive has already asked us for input on a welfare issue. Each Congress, our delegates have proven to be avid herpetological paparazzi, and at the last meeting in Borneo several of our community raised concerns how groups of people attempting to photograph animals might be causing harm to the reptiles and amphibians you were photographing. Of course, nobody in our community would knowingly cause harm to wildlife, but it is entirely possible that some of our delegation may be unaware of how human disturbance directly attributable to the 'over-exposure' of wildlife to photography is a well-documented phenomenon. For example, a new study published in *Herpetology Notes* (Rajkumar et al. 2025 *Unethical wildlife photography imperils the Western Ghats endemic galaxy frog, *Melanobatrachus indicus* Beddome, 1878. Vol 18: 1169–1174*) describes the types of stresses groups of photographers can expose herpetofauna to, and how two frogs may have died as a result. While there are guidelines for ethical photography available, these were largely developed for (surprise, surprise) birds and mammals. Luckily, the authors of the *M. indicus* study are working with the Amphibian Survival Alliance to develop an Amphibian Ethical Field Imaging Standard. Members of your subcommittee may be participating in that effort. Hopefully this will lead to a policy for the WCH, and we are again asking members of our community who may have conducted quantitative research on the impacts of wildlife photography on herpetofauna to contact Trent and share their work.



In closing, this endeavour will only bear fruit if the community of delegates in the WCH consider it worthwhile and make the effort to contribute when and where possible. Hopefully the enthusiasm we saw at the symposium will be reflected in the feedback and contacts we receive and that the delegation is supportive of the subcommittee and the work it will do. Remember, we need your help!



Natural history photography requires a careful assessment of the potential disturbance it may cause to the target animal.



Attaching an external transmitter to a Northern viper (*Vipera berus*).

What I wish I knew more about when I started my herpetological career: Introduction to perceptions from China

Leading this section: **Jing Che**

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vice president of the Chinese Herpetological Society
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As a herpetologist in China, I've seen our field transform. Molecular systematics began rising in the early 2000s when I started graduate school—though slowly, lagging behind the West. Before that, research was long dominated by traditional morphology and fieldwork for taxonomy. Today, the change is striking: publication volumes and topics—from phylogenetics and speciation to genomics and conservation—have exploded, with many papers appearing in top journals. I believe anyone would be moved by how far Chinese herpetology has come.

In China, undergraduate life-science education provides a broad foundation in biology, including field practice where students first encounter herpetofauna and learn species identification. Top universities and colleges offer additional courses in biostatistics and molecular biology, and encourage students to join labs for early research exposure. However, rigorous, specialized training—in molecular lab techniques, statistical programming, and multi-omics—typically begins at the graduate level.

The challenges are formidable. Foremost is our staggering biodiversity: over 745 amphibian species and 730 reptile species, including many unstudied cryptic ones. This demands an integrative approach—blending traditional morphology with bioacoustics, evolutionary theory, and computational tools. Yet most students enter with limited coding and bioinformatics back-

grounds, facing a steep learning curve—many wish they had started learning these skills earlier. Additionally, non-native English speakers struggle with scientific writing and international communication; cultural differences can still hinder effective knowledge exchange.

Despite these hurdles, career opportunities have never been greater. The AI revolution and powerful computational platforms empower young researchers to move far beyond basic species identification, unraveling complex evolutionary drivers and adaptive mechanisms. I am thrilled to see more of our students attending global conferences like the World Congress of Herpetology, participating in international visiting scholar programs, and pursuing postdoc positions abroad. These cross-border experiences are crucial—they sharpen technical skills and open minds to new research horizons.

Looking ahead, my greatest hope for China's next generation of herpetologists—and for our global community—is that we maintain a free, open, and collaborative international academic environment. It is simply essential for their continued growth, and for the future of herpetology worldwide.

What I wish I knew



Delegation of herpetologists from China attending the WCH10 in Kuching, Borneo.





CHEN-QI LU

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Practice scientific writing relentlessly

Of all the skills I wish I'd honed earlier in herpetology, proficient field identification stands out. The ability to quickly and accurately identify species, life stages, and even sexes in the field is foundational, yet often underdeveloped in beginners. I also underestimated the critical importance of detailed, consistent note-taking. A photograph is invaluable, but it can't replace written data on microhabitat, weather, and behavior recorded in the moment.



Furthermore, a stronger early grasp of statistics and GIS would have been transformative. These are not just "specialized" skills anymore but essential tools for designing robust studies and analyzing spatial ecological data. Finally, I would tell my younger self to practice scientific writing relentlessly. The ability to clearly communicate methods, results, and significance is what turns a field observation into a meaningful contribution to science. Mastering these early on accelerates research from simple observation to impactful discovery.

Chenqi-Lu carrying out a survey of giant salamanders.



HAO XUN

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Transitioning from microscopy to big omics

When I first started studying amphibians and reptiles, most of my work revolved around "observing and comparing"—examining morphological features under microscopes or analyzing tissue structures across different species. I became quite comfortable working with electron microscopy images and glass slides.

But as I delved deeper into research, I realized that many fundamental questions about evolution couldn't be answered through observation alone. An increasing number of

studies were using genomic data to explain how species evolved, and that's when I recognized a major gap in my skills: I lacked the ability to handle big omics data.

I really wish I had learned basic Linux commands and scripting earlier. Being able to work with command-line interfaces, run bioinformatics software, and automate data processing would have significantly advanced my research. It's like learning to use a new type of tool—one that handles data instead of tissue sections.

More importantly, I've come to understand that data analysis is only half the battle. True scientific work lies in interpreting what the results actually mean. For example, how did amphibians and reptiles evolve to adapt to specific environments, and what traits emerged as a result?

Now I'm playing catch-up—not just learning to code but also developing the ability to tell compelling scientific stories through data. While challenging, this approach has made my research much more meaningful.



Hao Xun (right) recording acclimation of mountain dragons in enclosures.

LE VAN MANH

Yunnan Key Laboratory of Biodiversity and Ecological Conservation of Gaoligong Mountain, Kunming Institute of Zoology, Chinese Academy of Sciences, China; Kunming College of Life Science, University of Chinese Academy of Sciences, China; Institute of Life Sciences, Vietnam Academy of Science and Technology, Vietnam



Taxonomy is a foundation for any researcher on amphibians and reptiles

When I first began my journey in amphibian and reptile research, I carried with me only passion and strong curiosity about the natural world. However, I soon realized that love for animals alone was not enough. Looking back, I can see many kinds of knowledge and skills that, if I had learned earlier, would have made my path in research much smoother and more effective.

The first and most important is taxonomy, the foundation for any researcher in this field. This was also the biggest challenge I faced at the beginning. Lacking a solid background made it very difficult for me to identify species in the field. Over time, I came to understand that mastering identification keys at the levels of family, genus, and species is essential. It not only makes field identification more accurate but also builds a strong basis for later studies. I also realized that focusing only on taxonomy limited my perspective. If I had expanded into evolutionary studies earlier, my understanding of amphibians and reptiles would have been much broader.

Another weakness was my lack of skills in statistics and programming. At first, when I worked with large datasets, I relied only on some basic tests without fully understanding their assumptions and limitations. If I had learned and practiced R or Python earlier, together with proper statistical thinking, I could have designed stronger studies and drawn more reliable conclusions.

In addition, fieldwork and data management skills are also very important. Every trip should be documented carefully, with detailed notes, photos of specimens, and well-organized records. Only years later did I realize how valuable those “small” notes in a field notebook can be for future research.

Finally, I discovered the importance of communication and collaboration. Working in an academic environment, sharing ideas, and collaborating with different research groups not only helped me improve my skills and broaden my vision, but also gave me new research ideas that I would never have thought of on my own.

Although I had many shortcomings at the beginning, I do not see them as failures but as valuable lessons. I believe that the process of learning step by step, filling gaps in both knowledge and skills, is what truly shapes the path of a researcher, and what makes me who I am today as a researcher on amphibian and reptile field.



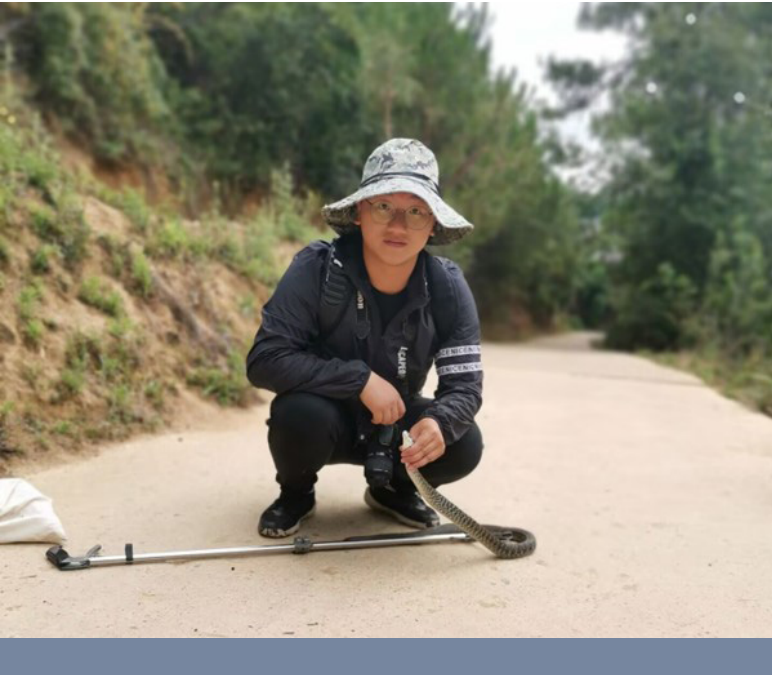
LI LING

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Learning accurate species identification is crucial

When I first began my journey in herpetological research, I was full of excitement but also somewhat unprepared. Looking back to 2016, when I carried out field surveys in the Leigong Mountain Nature Reserve, I realize there were several essential skills I truly wish I had learned earlier.

At the beginning, the most important skill I lacked was species identification. I often found it difficult to distinguish closely related species or to measure morphological traits with accuracy. These challenges led to mistakes in my early work. With more training, I came to understand that precise identification and careful measurement form the very



Li Ling in the field with???

foundation of high-quality scientific research. Another crucial skill was statistics. In my early fieldwork, I collected a large amount of data but did not know how to analyze it properly. Later, when I started to learn R and other statistical software, I realized how powerful these tools are. If I had mastered them earlier, I could have saved a great deal of time and produced more convincing results.

As my fieldwork came to an end, I also recognized the importance of molecular laboratory skills. Mastering standardized laboratory procedures and learning how to analyze and interpret molecular data are essential for modern herpetological studies.

ies. These skills not only expand research perspectives but also allow for deeper insights into evolutionary and ecological processes.

Finally, I wish I had practiced scientific writing and academic presentation much earlier. Writing a clear paper or delivering an engaging talk is never easy, yet both are vital for sharing research outcomes with others. Communicating science effectively is just as important as conducting the research itself.

In conclusion, I hope that new students can start their training with a strong focus on taxonomy, statistics, laboratory techniques, scientific writing, and presentation skills. Developing these abilities early will make their research journey smoother, more efficient, and ultimately more rewarding.

LIULIN LI

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Research inevitably involves analyzing various types of molecular data

Without a doubt, if one is going to conduct research on amphibians and reptiles, it is essential to have some basic understanding of these groups. This does not mean we need to be experts on every taxon, but at the very least, we should have a solid grasp of their taxonomy. For example, knowing which orders and families are included, what the key diagnostic features of different groups are, and how to recognize them in the field are all fundamental skills.



In addition, in this era of rapidly advancing molecular biology, research inevitably involves analyzing various types of molecular data. For that reason, I believe it is equally important to understand the principles of different sequencing technologies and to develop basic proficiency with the Linux operating system. These skills not only make data analysis more efficient but also facilitate clearer communication and collaboration with others.

Beyond this, the specific knowledge required will largely depend on one's future research focus. However, there are several universally important skills: cultivating critical thinking and the ability to read and synthesize literature, which help us identify key questions amidst a vast body of research, and developing strong habits of academic communication and collaboration, which can make the research process more efficient and create greater possibilities for future work.



Hao Xun, Liliu Lin (centre) and Han Wan photographing a frog near a stream.

MU-RONG YI

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Conservation success depends not only on robust science but also conveying findings to policymakers, local communities, and funding agencies

As a fifth-year PhD student specializing in amphibian conservation, I have come to realize that successful herpetological research requires far more than just field expertise and species identification skills. Reflecting on my journey, several critical knowledge gaps and skills stand out that I wish I had addressed earlier.

First and foremost, I underestimated the importance of integrative taxonomy approaches. While I focused heavily on morphological identification in my early years, I now recognize that molecular techniques, bioacoustics, and ecological niche modelling should have been incorporated from the beginning. This multifaceted approach would have prevented misidentifications that later complicated my conservation assessments of cryptic species complexes, particularly among threatened anurans in biodiversity hotspots.

Statistical modelling and programming skills represent another significant gap. I spent countless hours manually processing data that could have been automated through R or Python scripts. More importantly, understanding advanced statistical methods like occupancy modelling and population viability analysis earlier would have strengthened my ability to assess extinction risks and design effective monitoring programs. These quantitative skills are essential for translating field observations into actionable conservation strategies.

The interdisciplinary nature of conservation was something I grasped too late. Amphibian declines rarely stem from single causes; they result from complex interactions between disease, climate change, habitat loss, and pollution. I wish I had pursued earlier training in disease ecology, particularly regarding chytrid fungus dynamics, and environmental chemistry to better understand how pollutants affect amphibian physiology. This knowledge would have enriched my understanding of threat synergies.

Science communication and stakeholder engagement skills were notably absent from my early training. Conservation success depends not just on robust science but on effectively conveying findings to policymakers, local communities, and funding agencies. I now realize that learning to write compelling grant proposals, policy briefs, and public-oriented content should have been prioritized alongside academic writing.

Finally, I undervalued collaborative networks and mentorship. Building relationships with researchers across institutions and countries earlier would have accelerated my learning curve and opened doors to comparative studies across different biogeographic

What I wish I knew

regions. The isolation I initially maintained limited my perspective on global amphibian conservation challenges.

Looking forward, I encourage emerging herpetologists to embrace these diverse skill sets early. Conservation biology is inherently interdisciplinary, and the sooner we acknowledge and address these knowledge gaps, the more effective we become as advocates for threatened amphibian species. The complexity of modern conservation challenges demands researchers who are not just species experts, but versatile scientists capable of navigating molecular labs, statistical software, policy documents, and community meetings with equal confidence..



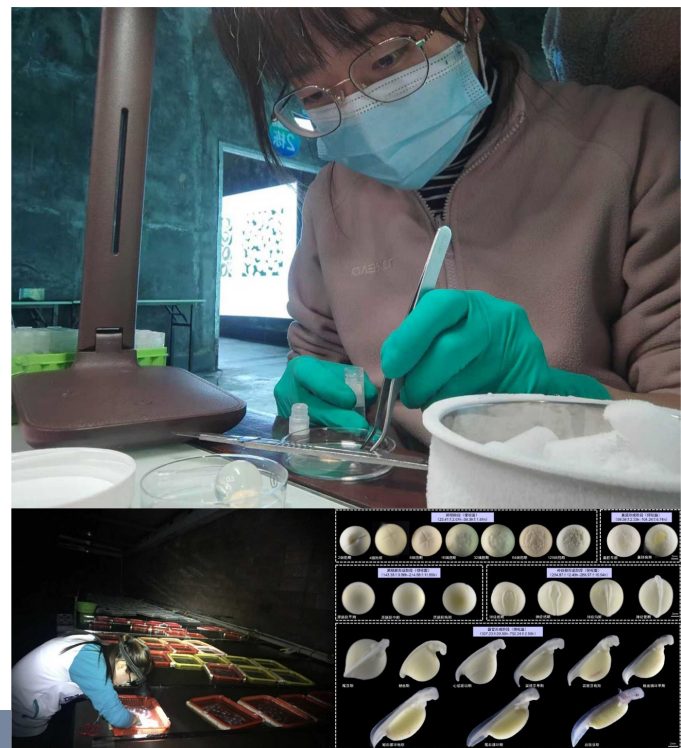
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Widening the cultural experience to increase diversity and inspiration in research

When I first entered the field of amphibian and reptile research, my professor had in-depth discussions with me, asking about my research interests and future directions. At that time, I clearly chose the embryonic development of Chinese Giant Salamanders as the main research focus for my master’s degree. On the one hand, developmental biology itself contains the delicate logic of life growth, and the process from cell differentiation to organ formation has always filled me with a desire to explore. On the other hand, giant salamander species are also distributed in Japan, and the Japanese academic community has long been deeply engaged in the field of developmental biology, accumulating profound research foundations and cutting-edge technical methods, which provide a valuable reference perspective for in-depth research in this area.

I also have a childhood natural interest in the Japanese language and social culture. Therefore, a hope quietly took root in my heart: I hoped that in the future, I would have the opportunity to go to Japan and conduct in-depth academic exchanges with local scholars on the embryonic development of giant salamanders. While jointly advancing research and deepening my understanding of developmental biology, I could also experience the local culture firsthand and learn the language, allowing academic exploration and cultural experience to complement each other and bring more diverse inspirations to my research.



Ru-Jun Cao measuring the embryonic development of the giant salamander.

WEN-JIE DONG

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A focus on fundamental theories and methods of evolutionary biology and phylogenetics

When I first stepped into the field of amphibian and reptile research, I was full of enthusiasm but lacked the practical knowledge needed to carry out substantive work. Initially, my understanding of amphibian and reptile species was limited to pets and information gleaned from documentaries. Upon joining the research group, I discovered that taxonomic studies were far more complex than I had initially imagined. Moreover, beyond the taxonomy aimed at studying amphibian and reptile species themselves, evolutionary biology was the primary focus of the lab's research, with amphibian and reptile groups serving more as models for study. Therefore, upon realizing this, while learning about the characteristics of the species themselves, I began to focus on understanding the fundamental theories and methods of evolutionary biology and phylogenetics.

Secondly, fieldwork is indispensable in amphibian and reptile research. Consequently, from the outset, I was eager to learn and master practical field skills—including methods for locating species, capture techniques, sampling methods, specimen preparation procedures, as well as the responsibilities and requirements of leading field teams. Furthermore, DNA extraction and PCR in the laboratory are essential techniques that require continuous practice to master experimental skills and problem-solving abilities.

Lastly, evolutionary research on amphibians and reptiles is inseparable from data analysis. Thus, upon starting my studies, I began learning the Linux operating system and computer programming, as well as mastering data analysis software.

XIAO-GANG FENG

Kunming Institute of Zoology

Do not confine ourselves to identifying as 'herpetologists'

When I first entered the field of amphibian and reptile research as a doctoral student, I quickly realized how vast and complex this discipline can be. After six years of study, one of the most important lessons I have learned is that we should not confine ourselves to the identity of simply being "herpetologists." Rather, it is more meaningful to position ourselves as evolutionary biologists who use amphibians and reptiles as powerful models to explore broader questions of vertebrate evolution.



Only by taking this wider perspective can we fully appreciate the evolutionary significance of the groups we study.

Looking back, one area of knowledge I wish I had mastered earlier is population genetics and molecular evolution. These foundations, together with biostatistics and bioinformatics, are indispensable for anyone working in evolutionary research. While natural history and species-level understanding remain essential, the deeper and more transformative insights often come from linking these observations with molecular mechanisms. Advanced analytical methods and emerging experimental approaches are not just optional skills, but necessary tools that allow us to uncover the hidden evolutionary processes shaping biodiversity.

Ultimately, although my work is rooted in amphibians and reptiles, I see this focus as a starting point rather than a limitation. The questions I aim to answer are evolutionary in nature, and they transcend taxonomic boundaries. For this reason, I believe it is crucial to train ourselves to think beyond a single clade, to approach problems with a comparative framework, and to continuously broaden our perspective across the tree of life.



YI-JING CHEN

Jiangsu Key Laboratory for Biodiversity and Biotechnology, College of Life Sciences, Nanjing Normal University, Nanjing 210023, Jiangsu, China

My initiation into the world of herpetology began when I joined the herpetology laboratory. It was through identifying reptiles, understanding their native habitats, observing various lizards' behaviors, daily husbandry practices, assist-

ing senior researchers in morphological measurements, recording life history data, conducting physiological ecology and molecular experiments, and simultaneously learning statistics to analyze existing data that I truly stepped into this research community.

Later, as a core member of the organizing committee, I assisted my advisor in hosting the "8th World Congress of Herpetology" in China in 2016. It was then that I realized the immense depth, breadth, and sophistication of this research field—and how small I was within it.

Subsequently, I embarked on my own research project, focusing on the *Phrynocephalus vlangalii* species complex distributed in the northeastern Qinghai-Tibet Plateau. Through comprehensive field investigations and laboratory experiments, I integrated climatic environmental data, phenotypic information, neutral molecular markers, and reduced-genomics data to explore the mechanisms driving speciation and population differentiation. Specifically, I investigated how geological and climatic changes resulting from the uplift of the Qinghai-Tibet Plateau influenced phenotypic adaptation and contributed to speciation and population divergence.

Currently, as a postdoctoral researcher, I plan to study viviparous species within the *Phrynocephalus* genus. Using multidisciplinary approaches including morphology, ge-

nomics, transcriptomics, and cytogenetics, I aim to decipher the origin and evolution mechanisms of ZW sex chromosomes, compare differences across lineages, and uncover the role and mechanism of sex chromosome evolution in *Phrynocephalus* speciation.

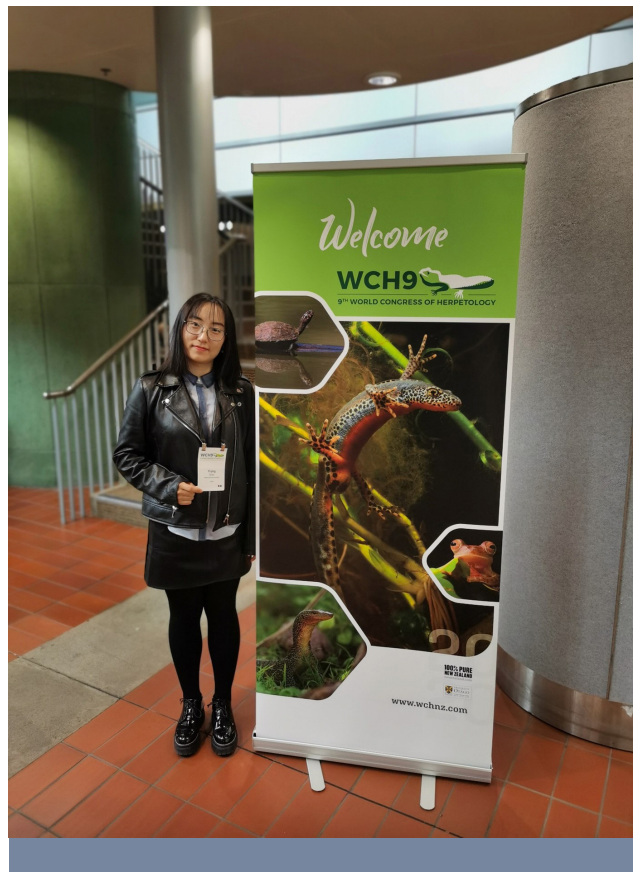
Reflecting on my journey, I believe that before entering the field of herpetological research, one should start with personal interests, read literature to accumulate foundational knowledge, and understand that scientific research revolves around meaningful questions—a continuous process of identifying and solving problems. It is also advisable to seek guidance from experienced researchers to gain insights into the academic community and the realities of scientific work. Additionally, focusing on relevant coursework and improving spoken and written English proficiency is crucial.

For instance, had I immersed myself earlier in theoretical statistics and bioinformatics, mastered tools like R, basic Linux commands and scripting, and bioinformatics software, and strengthened my English expression and SCI paper writing skills, my path might have been smoother. Most importantly, nurturing scientific intuition—developing a conceptual understanding of the research field, learning how to critically read and summarize literature, generating original ideas, and constructing logical solutions to scientific problems—is essential.

Had I realized and acted on these earlier, I believe my research journey would have been more seamless. No matter which direction one eventually takes, having a strong skill set and a transferable understanding of research fundamentals ensures adaptability and competence.



Yi-Jing Chen with a toad-headed lizard.



Yi-Jing Chen attending WCH9 in Dunedin, New Zealand.



ALEX PLIMO KARUNO

State Key Laboratory of Genetic Resources and Evolution & Yunnan key laboratory of Biodiversity and Ecological Conservation of Gaoligong Mountain, Kunming Institute of Zoology, Chinese Academy of Sciences, Kunming, China; Kunming College of Life Science, University of Chinese Academy of Sciences, Kunming, China

Identifying a research direction early in one's career is essential

As an early-career research scientist, my fascination with herpetology was inspired by the remarkable diversity of species, their high rates of endemism within small geographical ranges, and their ecological importance coupled with extreme vulnerability. Depending on the direction of research, students of herpetology can benefit greatly from a strong foundation in taxonomy and systematics, biogeography, evolutionary biology, field survey and monitoring techniques, museum specimen curation, programming, bioinformatics and scientific writing. At the start of my career, I possessed basic knowledge in many of these areas; however, I lacked in-depth training in bioinformatics, computational tools, and programming languages—skills that later proved indispensable. The steep learning curve associated with these tools consumed considerable amount of time and slowed down my research progress. This challenge is particularly pressing for both students and young herpetologists pursuing genomics, as the advent of the genomic era has produced vast and complex datasets requiring sophisticated analytical approaches for management, analysis, and visualization. Prior knowledge of these analytical approaches would therefore guarantee a fast and smooth scientific research journey.

Despite the central role of bioinformatics and computational biology in evolutionary research, few academic institutions currently integrate these disciplines into herpetology or evolutionary biology curricula. This gap leaves many students unprepared for the demands of modern research.

If I had the opportunity to begin again, I would place greater emphasis on early preparation. Identifying a research direction early in one's career is essential, as it allows for the timely acquisition of knowledge specialized skills. For those interested in genomics and evolutionary biology, proficiency in bioinformatics, computational biology, and programming languages such as R, Perl and Python are crucial. I would strongly recommend that bioinformatics and computational training be incorporated into the standard curriculum for students in evolutionary biology and related fields. Even basic exposure to these areas can significantly reduce the future learning curve, increase research efficiency, and enhance the productivity of both students and early-career research scientists.

FELISTA KASYOKA KILUNDA

Sino-Africa Joint Research Centre, Chinese Academy of Sciences, 62000-00200 Nairobi, Kenya



Knowledge gaps are not regrets but reminders of the continuous nature of learning

As I look back on my herpetological journey, I realize that every step has been a learning process shaped by both successes and challenges. Each project taught me something new, yet there are skills and areas of knowledge I wish I had mastered earlier. Having these skills sooner would have made my work more efficient and helped me avoid certain struggles.

One of the first areas I wish I had developed earlier is specialized field survey techniques for amphibians and reptiles. When I began fieldwork in Kenya during my time as a research assistant at the National Museums of Kenya, I often relied on general ecological approaches. These worked to some extent, but I later discovered how critical species-specific methods are for herpetofauna. Techniques like pitfall trapping, drift fences, nocturnal call surveys, and habitat-focused searches are invaluable for detecting cryptic species. I have also learned that taking several good fieldwork photos of species in life at different angles without assuming to know the species, good photos of habitats, and microhabitats, while taking good field notes, can go a long way in supporting species identification and description. Mastering these earlier would have improved my early datasets and made me more confident in handling field surveys in complex habitats.

Closely linked to fieldwork is taxonomic and morphological expertise. During my MSc program, where I worked on DNA barcoding of herpetofaunal diversity in Shimba Hills and Tsavo ecosystems in Kenya, I often faced challenges when distinguishing species within groups that display few morphological differences. These challenges were especially pronounced in sexually dimorphic species where males and females appeared so distinct that they could easily be mistaken for different species, and similarly, where juveniles look nothing like adults and could easily be confused for a new species. I would often get too excited that I had caught a new species, only to realize that it was a juvenile of an already described adult. At that time, I did not know much about relying on molecular data to confirm identifications. While molecular tools are essential, I now understand the importance of combining them with detailed morphological observations. Skills like taking precise morphometric measurements, recognizing diagnostic traits, and understanding variation within species would have strengthened my work earlier on. These skills have become especially important in my PhD research in the Indo-Burma hotspot, where uncovering cryptic diversity and identifying new species often depends on a fine balance of both morphological and molecular evidence

Another area I wish I had mastered sooner is molecular and genomic techniques. My master's research introduced me to DNA barcoding, but I have had little exposure to broader molecular approaches such as phylogenomics, population genetics, or advanced bioinformatics. Acquiring these skills earlier would have given me a stronger foundation for large-scale data analyses, thus making my current PhD work smoother and faster.

I also recognize how important geospatial analysis and species distribution modeling have become. Early in my career, I was less aware of tools like R, Arcmap/ QGIS, Maxent, and biomode2. Yet these are now central to studying species diversity patterns. Today, these methods form a major part of my Indo-Burma research, helping me address both ecological and conservation questions.

Beyond technical skills, I wish I had earlier built stronger abilities in data management and science communication. When I first started working with museum collections, I didn't fully appreciate the importance of standardized data curation and proper cataloguing. Similarly, I struggled to communicate findings beyond academic circles. With time, I have learned the value of engaging the public, policymakers, and local communities, especially when conservation is at stake. This lesson became clear when I realized how farmers in certain regions mistake caecilians for snakes and kill them out of fear, an issue where creating awareness could save species.

Finally, I see now how important grant writing, collaboration, and project management are in sustaining a research career. Earlier mastery of these skills would have helped me secure more resources and build stronger networks. Now, as I near the end of my PhD, I appreciate that these abilities are just as essential as scientific expertise. They not only support research but also enable mentorship and contribute to long-term conservation impact.

In the end, I view these gaps not as regrets but as reminders of the continuous nature of learning. My path in herpetology has been shaped by gradual growth from barcoding amphibians of Kenya to mapping species richness patterns and uncovering cryptic diversity in the Indo-Burma biodiversity hotspot. Each stage has taught me resilience, adaptability, and the need to keep building new skills. If anything, wishing I had mastered certain knowledge earlier only motivates me to pass it on to future students and colleagues, so their journeys may be smoother than mine.



Fieldwork group photo in Xishuangbanna, China.



Group photo of WCH volunteers at the 8th World Congress of Herpetology hosted in China in 2016.

What I wish I knew

Jay M. Savage in Memorium: Passing of a legend in tropical herpetology

In memorium



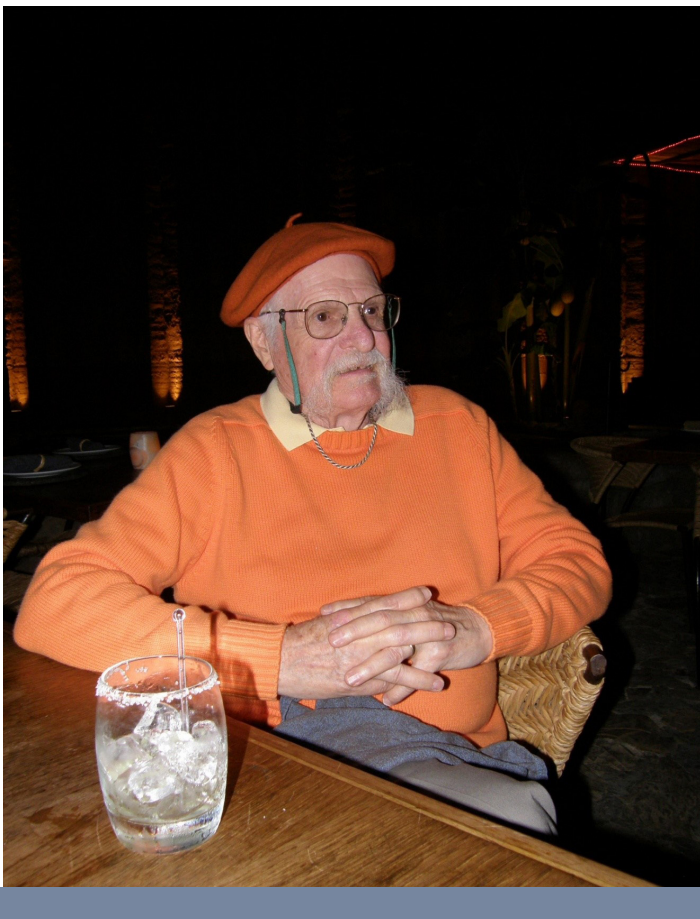
Written by **David Bickford**
Jay Savage Lab Alumnus

E-mail: rokrokbickford@gmail.com

Jay Mathers Savage passed away on November 3rd 2025 in San Diego, California and tropical herpetology lost one of its most beloved and respected scientists. Central to Jay’s legacy was his deep and enduring connection to Costa Rica and the tropics. Recognizing the need for infrastructure (field stations) and strong insitutions (university consortia) in science, he became one of the founding figures behind the Organization for Tropical Studies (OTS). The creation of OTS was a turning point, not just in Jay’s career, but in the development of tropical biology as a global discipline. What began as a modest collaboration between a handful of mostly American institutions grew into a transformative model for immersive, field-based education around the world. Jay believed that to understand the tropics, scientists needed to live in them and experience

their vibrancy and complexities firsthand. That same philosophy now underpins many successful field-based programs around the world.

In the late 1980s, Jay again found himself at the forefront of a scientific turning point. Observing unexplained declines in amphibian populations in Costa Rica, he was among the first to recognize that these were not isolated events, but part of a broader, global pattern. His insights helped bring international attention to what would become one of the most urgent conservation crises of the modern era, global amphibian declines and extinctions. That became one of the most important set of research results recognized during the First World Congress of Herpetology in Canterbury in 1989. The value of the World Congress of Herpetology is largely tied to our collective capacity to share new and



Jay relaxing in Oaxaca, Mexico.

important results directly from the field on a global scale every time we meet. Jay foresaw this importance and urged all of his students and colleagues to be a part of the WCH.

Jay had a long career that hinged on dedication to people and institutions, both of which he saw as vital to the pursuit of science. His approach to science was collegial and vivacious, sparking generations of students who welcomed rigorous devotion to repeated field work and cultivating relationships with local scientists across many countries. Wherever Jay went, he brought with him a sense of community and fostered an academic family of students who grew close through shared passion for the organisms and habitats they studied.

His academic lineage traces to Alexander von Humbolt and Jay was largely trained at Stanford University, where he earned his bachelor's, master's, and doctoral degrees. There, under the mentorship of George Myers, he developed an intellectual style that resisted boundaries, something he was keen to pass to his students. After a brief early teaching stint at Pomona College, Jay began a long and influential tenure at the University of Southern California, followed by nearly two decades at the University of Miami. In both places, he cultivated vibrant academic communities defined by collaboration, mentorship, and a shared sense of purpose.

His laboratory was less an academic lab with a strict hierarchy and more like an extended family that spanned generations of students. He took particular pride not in his own publications, but in the achievements of those he trained. His students benefited not only from his intellectual rigor, but



Jay at work in the lab.

his generosity: time given freely, advice offered thoughtfully, and support delivered unconditionally, especially when it mattered most. I know that Jay's unwavering support for my own field research was critical for my development as a scientist.

Jay's ability to see the larger meaning across specific observations was a hallmark of his work. Whether observing a single species or helping to build fields of study like biogeography and evolutionary biology, "Doc Savage" approached science with patience, humility, and a deep respect for data and specimens. He resisted jumping to conclusions, favoring instead the slow accumulation of understanding over time, mostly through repeatedly going to the same places again and again. Jay often said that you had to know the people and the place first, and then, the organisms.

In this way, Jay indoctrinated building the knowledge necessary for being a good scientist and a decent human being.

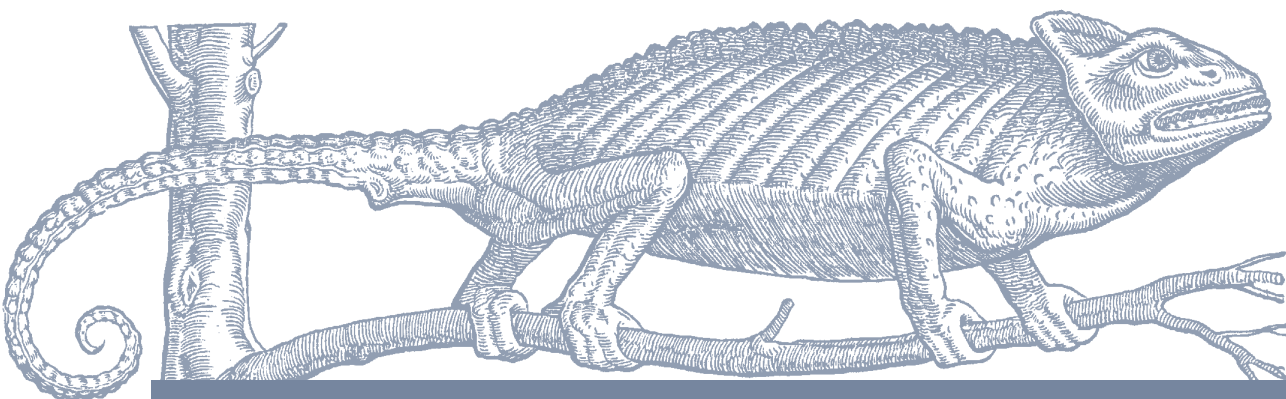
Even in retirement, he remained actively engaged in research, publishing, and academic life. After relocating to California to be with his wife, Rebecca Papendick, he continued attending seminars, collaborating with colleagues, and contributing to the scientific literature well into his nineties. His final work was completed only months before his death – a testament to a curiosity and work ethic that never dimmed.

Jay's influence extends far beyond his own accomplishments. His academic descendants, generations of students and collaborators, continue to work around the world, asking new questions while building on the foundations he helped lay. Through them, his legacy lives not as a static record, but as an ongoing process.

The World Congress is a part of that legacy, not only because of Jay, but because he encouraged his students to actively grow the institution into what it is today.



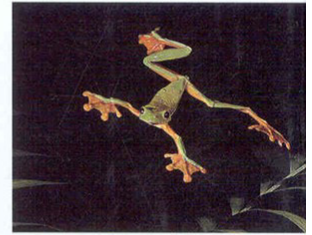
Jay with his favourite football shirt.



In the end, Jay's life will be remembered not only by what he discovered, but by what he made possible for his students and for the scientific understanding of a world he never stopped exploring.



The Amphibians and Reptiles of Costa Rica



A Herpetofauna
between
Two Continents,
between
Two Seas



Jay M. Savage

With Photographs by Michael Fogden and Patricia Fogden

The definitive work on the herpetofauna of Costa Rica, first published in 2002.

In memoriam

Pat Gregory in memorium: the doyen of North American snake ecology

Leading this section: **Richard A. Griffiths**

Durrell Institute of Conservation and Ecology, University of Kent
E-mail: R.A.Griffiths@kent.ac.uk



Pat Gregory sadly passed away on 6 December 2025 aged 79. Born in England, Pat's family moved to Canada when he was a boy although he continued to hold both British and Canadian passports for the rest of his life. During his research career he pursued a diverse range of herpetological questions involving both amphibians and reptiles, although his passion was the natural history of snakes. He joined the University of Victoria in 1973 where he stayed until his retirement in 2018. As the following tributes show, during his long tenure as a faculty member at the University of Victoria, he was an inspiring and generous mentor to many students and colleagues, several of which have gone on to carve out significant herpetological careers for themselves. A dedicated family man and proud grandfather, his wife Linda and daughters Jill and Jacquie often assisted Pat with his field work and became expert snake spotters themselves. The Pat Gregory Memorial Award Scholarship has been set up by the University of Victoria and invites donations to ensure an enduring legacy for Pat's pioneering research and scholarship: [Patrick Gregory Memorial Award in Biology - Giving to UVic - UVic](#)

On a personal level, over 30 years ago I received a letter from Pat enquiring about the possibility of carrying out a sabbatical in England. Although we had not met personally, I was well aware of his distinguished research on the ecology of North American snakes. Pat was proposing to complement this work by a parallel study of grass snakes (*Natrix helvetica*), which he thought would make a nice comparison with the garter snakes he was familiar with in Canada. In my reply, I politely pointed out to Pat that grass snakes were flighty, cryptic animals that were difficult to find in the wild, and that I thought he would struggle to obtain sufficient sample sizes for the questions he was interested in asking. In sum, I tried



Pat with a Western yellow-bellied racer snake
(*Coluber constrictor mormon*).

to put him off the idea for fear that he would have a wasted journey. In his reply, he said 'These sound like the animals I'm used to working with – I think this project might fly!'

During his sabbatical, he was successful in finding a local study site that – to my surprise – he later discovered supported several hundred grass snakes. Eschewing traditional survey methods such as the deployment of artificial cover objects, Pat's protocol was simple – walk along the paths that circulated around a wetland using his keen eyes to spot any basking grass snakes and then dive on them before they were spooked. Such was his cat-like agility, that I christened this method 'The David Seaman Technique' after the England soccer team's goalkeeper of the day. Despite his trademark T-shirt and shorts, his arms and legs seemed to be immune to the painful stings administered by the nettle beds that grass snakes seemed to favour, and his nose immune to the smell of grass snake musk that infused his clothes, and indeed, the inside of his hire car. I was also surprised that Pat seemed quite happy with what I regarded as a very low rate of data return – he regarded four grass snakes during nine hours for searching a particularly rewarding day. Returning to England for a few weeks every summer, Pat's data set slowly accumulated, and he often expressed how puzzled he was that no British ecologists were carrying out similar studies on the same species. I think I knew the reason why. We just didn't have the people with the field skills and patience that Pat had.

When not pursuing grass snakes, Pat would generously devote his time – usually over a beer or two – discussing contemporary herpetological issues and the disappointing achievements of the England soccer team with students and other early career researchers. Indeed, before meeting Pat my own research was primarily amphibian-focused, and it was down to him that my own field skills improved and I developed the confidence (and patience!) to develop some long-term reptile studies at local sites that continue to this day. Long may he continue to influence and inspire aspiring herpetologists.

From **AL SAVITZKY**

WCH Treasurer

Pat Gregory was a brilliant researcher, generating an impressive body of literature, often with titles punctuated by a question mark. One of his many gifts was the ability to see a question, often an obvious one in retrospect, that others had overlooked, and then to frame that question in a way that allowed him to test it with rigorous experimentation or comparative analysis. Given his institution's location at 48.4o N latitude, Pat focused most of his work on the relatively limited number of snake species in his region, but by doing so he came to understand the ophidian fauna of western Canada intimately, especially the northwestern populations of *Thamnophis* species. The insights that Pat gained led him to address fundamental questions of life history, thermoregulation, and seasonal movement patterns, along with other basic aspects of natural history that so many other researchers had simply failed to see.

However, in addition to Pat's enduring influence on our understanding of snake biology, he also left behind a legacy related to the World Congress of Herpetology, of which far fewer people are aware. The World Congress had convened in Manaus, Brazil in 2008, but by the time the Seventh World Congress of Herpetology was due to be held in 2012, no World Congress had been held in North America. Looking for a venue that was less politically charged (even then) than the United States, eyes turned to Canada. However, the presence of such an important conference in North America meant that it would compete with the meetings of the three US-based societies, unless they were invited to join in meeting with the WCH. To ensure the success of the WCH and the other societies, Pat graciously agreed to host a much larger meeting than usual for a World Congress, especially since one of the other societies also included ichthyologists among its members. Pat had previously hosted the 1986 meeting of the American Society of Ichthyologists and Herpetologists alone, at his home institution, the University of Victoria, but that had been a much smaller event, which is why he chose to hold WCH7 in Vancouver, rather than Victoria.

One curiosity of the WCH as an organization is that it has no individual members, and so its only regular source of income consists of the proceeds (surplus) from previous conferences. Although it also has relatively few expenses, the most important one is providing funds to reserve the next Congress venue and pay for deposits for conference services. These can be large expenses but, if we are lucky, we can recover some or all of the funds we have invested in a conference, so we can afford to organize the next one. I



Fieldwork for Pat (right) was often a family affair.

became Treasurer shortly after WCH6 in Brazil, which unfortunately had not returned any surplus to the treasury. However, we were already well into planning for WCH7 by the time we learned that there was no surplus from WCH6, and we had spent a total of almost \$10,000 USD, a fairly standard amount, to support the advance organization of WCH7 in Vancouver.

As the time of the meeting time approached, I prepared my first report as Treasurer, with a summary of the World Congress' annual bank balances for as far back as I had records (which was back to about WCH5 in South Africa). That's when I realized that, after reserving the venue and services for WCH7, we were entering the Vancouver meeting with exactly \$373.95! As I told the attendees at the WCH7 Business Meeting, we could not support another World Congress unless WCH7 was successful. It took two years for the accounting for WCH7 to be completed, but when it was, the University of British Columbia, our host institution, sent the World Congress almost \$125,000, more than five times the amount that we had held in our accounts since WCH5. We have not seen that size of conference surplus since.

By agreeing to serve as the local host for WCH7, and by consenting to open the meeting to other herpetological societies across North America, Pat truly saved the World Congress of Herpetology. We will never know what would have happened if Pat had not organized such a successful Congress in 2012, but I think of how much more confidence we had when planning for the three Congresses since then, as we continue to live off the surplus from Vancouver. I also think of Pat's courage and generosity in organizing the highly successful Seventh World Congress of Herpetology.

From **TRENT GARNER**

Gregory Lab alumnus

I spent much of the 90s in the Gregory lab as a volunteer undergrad, an Honours student and conducting my MSc research. An unorthodox research environment, to say the least, where a collection of misfits (herpetologists) worked on a range of ecological questions largely on Western Canadian reptiles and amphibians. While I'm sure my colleagues will recall a range of stories involving sweater vests, Spam, colubrid secretions and a fondness for the Rolling Stones, what sealed the Gregory deal for me was taking his 4th year undergraduate Herpetology course. There were at least 7 of us in that class who went on to conduct peer-reviewed research on herps, and we did not give Pat an easy time, hijacking his lectures, pummelling him with questions and redirecting discussions to subjects we were currently interested in. He later recalled the experience of teaching that class something akin to being a bug pinned in a collection box. Notwithstanding he showed up with the citations and content that answered every question he couldn't answer in the preceding lecture and did so twice a week for months. Pat showed me how support for students shouldn't be at the convenience of the academic. He treated his job as a privilege, not a right. I hope that in some small way I've managed to do the same.



Trent Garner (centre) with Linda and Pat Gregory on the occasion of Pat's retirement in 2018.

From **BRENT CHARLAND**

Gregory Lab alumnus

When I was in grad school I found out how deeply Pat cared about us. The day before I left to spend the summer in the field I was bustling around the lab getting things together. My desk was in the lab next to Pat's office. We saw each other all day long and chatted from time to time. I never really thought much about it. That night I got a call from Pat because he didn't think he gave me enough of his attention before I left for the summer. It really bothered him that he didn't give me his undivided focus and he wanted to be certain that I had everything I needed before the field season started. I hadn't even thought about it because we spent the day together in the lab. I've never forgotten that call and what it meant to me.

Another piece of advice that he gave one afternoon in the lab has had a lasting impact on me. It was about how to provide constructive comments when reviewing a manuscript. He said that no matter how frustrating the review, never write a comment that you wouldn't accept if it came back to you on your own manuscript. I have applied that maxim throughout my career. I have used it to tailor my responses to any frustrations, whether in meetings, evaluations, or personal interactions. He was an exceptional reviewer with finely honed critical skills, and that advice has stayed with me for decades. It still guides me.

From **KARL LARSEN**

Gregory Lab alumnus

As Pat's third graduate student (1983), I came into his research group quite early on. The menagerie within his lab was just starting to grow, and when I rose to a position of seniority I shifted into the nicest study carrel in the room, which came with a (supposedly) de venomized cottonmouth as a desk mate. Other than that 'perk', so many things that I incorporated into my own graduate student supervision were drawn from my experiences with Pat: This included conference field trips (including a few days spent exploring native ecosystems and herpetofauna), quasi-social lab meetings, and fun (but challenging) herp-knowledge quizzes to wrap up oral defences. On one field outing in Tennessee, we emerged from our tents in the morning to be greeted by an older, grizzled campground attendant carefully picking up litter. With a smile, he pronounced to us that "It's going to be a real day". That became our motto over the following decades, and I still use it when soaking in a sunny morning. I had many a 'real day' with Pat, and I count myself fortunate that our careers allowed us to visit and collaborate frequently over the years. I will miss him.



Pat radiotracking grass snakes (*Natrix helvetica*) in Kent, England.

To mark Pat's retirement from the University of Victoria, a limited edition commemorative T-shirt was produced.



Build the World Congress of Herpetology with us



Leading this section:

Gonçalo M. Rosa & Jaime Bosch

IMIB Biodiversity Research Institute (CSIC, University of Oviedo, Principality of Asturias), Spain
E-mails: goncalo.rosa@csic.es, jaime.bosch@csic.es

The road to the 11th World Congress of Herpetology has already begun. The next meeting in Iberia is more than a date on the calendar: it is a shared opportunity to build a congress that reflects the energy, diversity, and ambition of our global herpetological community.

Over the coming months, we want to keep the conversation alive by sharing voices from across continents: researchers, conservationists, students, educators, and practitioners working with amphibians and reptiles in many different contexts. To begin, we asked a few colleagues from around the world to tell us why they plan to attend WCH 2028 in Gijón, and what they hope the congress might offer.

Their responses are more than personal commitments to be there. They are invitations to reconnect, collaborate, propose

symposia and workshops when the call is announced, amplify underrepresented voices, and help shape a scientific programme that captures the breadth, urgency, and excitement of herpetology today. We hope these first statements spark new ideas, encourage others to get involved, and remind us that a congress begins long before the opening session, through every conversation, proposal, and shared ambition that brings the community closer together.



11th WORLD CONGRESS OF HERPETOLOGY

WCH 11

4-8th SEPTEMBER 2028 | GIJÓN, ASTURIAS | SPAIN, PORTUGAL | IBERIA



From: **TERESA CAMACHO BADANI**

*Museum of Zoology (QCAZ), Pontifical Catholic University of Ecuador, Ecuador
Fundación SAPHY, Bolivia*

“I am very excited to participate in the upcoming World Congress of Herpetology 2028, an event that for me represents much more than a scientific conference. It is an opportunity to reconnect with colleagues, discover new ideas, meet the people who have inspired me throughout my journey in herpetology, and continue building a global community passionate about amphibians and reptiles.

Having had the opportunity to participate as a plenary speaker at previous meetings confirmed something I consider essential: the human and academic connections that emerge from these events deeply enrich our work. Conversations with people who share similar interests not only improve the quality of our research, but also inspire, motivate, and open unexpected paths for collaboration.

One of the initiatives I have enjoyed the most within the WCH has been the gatherings of women in herpetology, which continue to grow with every edition and create opportunities for young researchers, including first-time participants through initiatives such as the Global Women in Herpetology Project. I believe this congress will continue fostering inclusion, mentorship, and international collaboration within our scientific community. I also look forward to meeting new colleagues and continuing to share this passion for herpetology at the next congress.”



From: **CALEB OFORI-BOATENG**

*Founder and CEO,
Herp Conservation Ghana*

“I attended the 10th World Congress of Herpetology in Kuching, Sarawak, Malaysia, which was held from 5–9 August 2024 at the Borneo Convention Centre Kuching (BCCCK). The meeting reminded me of why gatherings like this matter so much. Beyond the presentations and posters, it was the conversations in the hallways, over meals, the unexpected introductions, and the chance to reconnect with old friends and colleagues that made the experience unforgettable. Some of those discussions have already led to new collaborations and co-authored publications, with more still developing today.

For those of us working in conservation and research, especially in regions where resources and opportunities can be limited, these meetings are incredibly energizing. I returned home inspired, full of fresh ideas, renewed passion, and a stronger sense of global community.

I am excited to attend the 2028 Congress in Gijón and would especially encourage more African researchers, conservationists, and students to join us there. Africa remains underrepresented at many global scientific meetings, yet our voices, species, and conservation stories are essential to the future of herpetology. Let us meet, learn, collaborate, and shape that future together in Spain. I can't wait to see you there."



From: **LUIS FERNANDO MARIN DA FONTE¹,
GABRIELA AGOSTINI² & PRIA GHOSH¹**

¹ Synchronicity Earth, UK

² IEGEBA, Buenos Aires University, CONICET, Argentina



"Herpetology, like science more broadly, has historically been shaped largely by a relatively narrow group of researchers, predominantly the elites from Europe and North America. Over the past few decades, however, growing attention has been given to the need for greater protagonism of local people, communities, and underrepresented groups in both knowledge production and conservation practice. Discussions around colonialism in science and conservation have intensified, highlighting persistent power imbalances and the ways in which perspectives, priorities, and actions are sometimes, whether deliberately or inadvertently, imposed by more established or better-resourced actors. These dynamics manifest across multiple scales: between the Global North and Global South, within countries, and among different stakeholders, including academia vs. local and traditional communities, international NGOs vs. grassroots organizations, donors vs. local implementers.

At the 11th World Congress of Herpetology, we aim to deepen this conversation through a symposium format. We will provide a space to critically reflect on practices, challenge entrenched structures, and, importantly, amplify the voices of those historically excluded from decision-making processes. By centering diverse experiences and perspectives, we will seek to foster more equitable, inclusive, and effective approaches to herpetological research and conservation."



From: **ERIN MUTHS**

*U.S. Geological Survey,
USA*

“I still have a job (!) therefore, I am planning on attending the World Congress of Herpetology in 2028 in the lovely Gijón, Spain. I’ve been to four World Congresses, and they have made a difference to my career, my science, and my integration into a global community of scientists and friends. There are so many reasons to attend! Besides the expected, and always delivered, thoughtful, interesting, and dynamic science at WCH, there are some other cool things about Asturias, especially for folks coming from the US. For one, there is apparently some fascinating Art Nouveau architecture that has not been torn down to build other things. There are Roman Baths in town and skiing is only an hour away (okay, that will probably be closed in September). I’ve personally never seen a fire salamander or a midwife toad in the flesh, so I’m hoping that Gijón and surrounds will deliver (I hope this does not seem unrealistic...). And remember: Now is a good time to organize that session or symposium you’ve been thinking about. Start that email to the most interesting scientist you know and see if they’d like to submit a proposal with you! I’ve already started emailing...”



From: **LUKÁŠ KRATOCHVÍL**

*Charles University in Prague,
Czechia*

“Since the 1997 congress in Prague, I have attended several WCH congresses, and I do not hesitate at all to come to the next in Spain in 2028. No other large conference gathers so many enthusiasts for the most fascinating animals in one place.

To help shape the scientific program, I want to propose a space for one of the most intriguing phenomena in vertebrate biology: asexual reproduction. Squamate reptiles are the only vertebrates able to form all-female populations independent of sperm, while some amphibian lineages can parasitize the sperm of related species, only to eliminate its genome immediately or in the next generation.

When the call is announced I intend to propose a symposium focused entirely on the biology, ecology, and evolution of asexual reptiles and amphibians. From whiptail lizards to water frogs, the mechanisms and consequences of asexual reproduction still hold incredible evolutionary mysteries.

Would you be interested in contributing to this session? If you study asexual squamates or amphibians, or are simply captivated by this evolutionary marvel, please reach out. Let’s collaborate and make this symposium on these unique animals a reality!”



From: **JING CHE**

*Kunming Institute of Zoology, Chinese Academy of Sciences, China
Vice President of the Chinese Herpetological Society*

“I am absolutely thrilled to attend the World Congress of Herpetology 2028 in Gijón, Spain! As a researcher dedicated to amphibian evolution and conservation — particularly the diversification of Asian amphibians and the conservation of Chinese giant salamanders — this congress offers an unparalleled platform to connect with our global community.

I am especially excited to discuss how emerging technologies like AI, acoustic monitoring, and genomic tracking are revolutionizing wildlife conservation. Beyond the conference halls, Gijón provides a breathtaking backdrop. I cannot wait to experience its warm coastal charm, ancient history, and encounter unique Iberian herpetofauna, from the striking golden-striped salamander to the Cantabrian viper.

To amplify our collective impact, I invite fellow researchers to co-organize a proposed symposium entitled: “Diversification and Conservation of Amphibians in the Anthropocene.” If your work encompasses population genomics, species compositions, ecology, or conservation area planning, I would love to connect. Let’s design a collaborative, dynamic session that transforms cutting-edge science into tangible conservation outcomes. Please reach out if you are interested in partnering. Let’s make WCH 2028 an unforgettable convergence of actionable science and herpetological wonder. I look forward to meeting you all in Spain!”



From: **PATRICIA A. BURROWES¹ & KAREN LIPS²**

*¹ National Museum of Natural Sciences, Madrid, Spain
¹ University of Puerto Rico, Puerto Rico
² Deputy Director General, IIASA, Austria
² University of Maryland College Park, USA*



“We are excited to be coordinating a one-day symposium proposal to commemorate RANA (Research and Analysis Network for Neotropical Amphibians). RANA was an NSF-funded project that we worked on from 2001 to 2005, led by two of its principal investigators (Karen Lips and Bruce Young). Its primary objective was to empower herpetologists working in Latin America to monitor amphibian populations in the field and conduct research on species status and major threats. The

success of RANA participants and their students is reflected in a substantial body of published work that has advanced our understanding of the roles of pathogens, climate change, and complex ecological interactions in the widespread declines of amphibian species.

Nearly three decades later, at the Gijón WCH, we hope to bring together as many of the original participants as possible to present how their research has evolved — from its early stages to the present — while highlighting key questions that will shape future work. The proposed symposium will conclude with a panel discussion to synthesize the findings, identify research priorities, and promote efforts to secure funding for a potential RANA-2 initiative.”



From: **SANDEEP DAS**

Department of Biotechnology, Government of India, India
EDGE Affiliate, Zoological Society of London, UK

“I am excited and eagerly looking forward to attending the 11th World Congress of Herpetology 2028 in Spain. The last congress in Kuching was a powerful reminder of how diverse, interconnected, and globally relevant herpetology has become, from evolutionary studies to conservation, disease ecology, taxonomy, community engagement, and snakebite awareness.

As someone working in India, particularly in the Western Ghats, I find these meetings invaluable not only for sharing science, but also for building collaborations that bridge field biology, conservation action, and public outreach. What excites me most about WCH is the opportunity to interact with researchers from across continents who are addressing both fundamental and applied questions in herpetology. I also cherish the memorable herping sessions and informal exchanges from the previous congress, and I hope to experience the same enthusiasm and camaraderie again in Spain.

I especially look forward to contributing to discussions on snakebite mitigation, tropical amphibian diversity, and community-based conservation initiatives. Above all, I hope WCH 2028 encourages more early-career researchers and students from underrepresented regions to participate, collaborate, and bring fresh perspectives to the global herpetological community.”



From: **MARGARITA LAMPO¹ & GINA DELLA TOGNA²**

¹Academy of Physics, Mathematics and Natural Sciences, Venezuela

¹Venezuelan Institute for Scientific Research (IVIC), Venezuela

²Smithsonian Tropical Research Institute, Panama

²Executive Director of the Amphibian Survival Alliance



“Amphibian conservation programs are increasingly moving beyond the establishment of assurance colonies toward the more complex challenge of restoring and sustaining populations in the wild. Over recent decades, major advances have been achieved

in captive breeding, assisted reproductive technologies, biobanking, disease management, and ex situ population maintenance. However, translating these advances into effective long-term recovery of wild populations remains one of the greatest challenges in amphibian conservation.

To address this emerging frontier, we are aiming to propose a symposium entitled “Building Integrated Models for Amphibian Conservation and Recovery” focused on integrated amphibian population restoration approaches that connect ex situ and in situ conservation strategies through collaborative partnerships, science-based management, and supportive national frameworks. Inspired by initiatives such as the Tropical Amphibian Resilience Initiative (TARI), this symposium will explore how multidisciplinary and cross-sector collaborations can help bridge the gap between captive management and wild population recovery.

This one-day symposium will aim to bring together researchers, practitioners, and conservation teams developing and implementing restoration strategies across this continuum, from assisted reproductive technologies, biobanking, and ex situ management to reintroductions, habitat assessment and restoration, long-term monitoring, disease mitigation, community engagement, and policy development.

Participants will share experiences, discuss common challenges, and identify lessons learned that can help guide future amphibian recovery efforts globally. The symposium will aim to strengthen the integration of ex situ and in situ approaches and advance more effective, scalable, and sustainable models for amphibian population restoration worldwide while fostering dialogue across disciplines and conservation sectors.”



WUCH 11

Although Asturias is located in the Atlantic region of the Iberian Peninsula it features transitional zones with Mediterranean Iberia where species from both biogeographic regions coexist. From top left going clockwise: golden-striped salamander (*Chioglossa lusitanica*); West Iberian rock lizard (*Iberolacerta monticola*); Seoane's viper (*Vipera seoanei*); Iberian three-toed skink (*Chalcides striatus*). Photos: Enrique Ayllon

Herp news around the world

Leading this section: **JULIA RILEY**

This section features news, announcements, and initiatives from herpetological societies around the world. Each news snippet is a short summary and highlights of what each society is getting up to, so please check out their own websites, social media sites, and newsletters for more information! Reach out if you have news you want to be featured in this section in future WCH newsletters by contacting Julia Riley (jriley@mta.ca).

Special News

Upcoming scientific conferences and meetings

- June 20–24, 2026. Evolution: Joint Meeting of the American Society of Naturalists, the Society of Systematic Biologists, and the Society for the Study of Evolution. Cleveland, Ohio, USA. [LINK](#)
- July 14–18, 2026. Animal Behavior Society Conference. Cincinnati, Ohio, USA. [LINK](#)
- July 26–31, 2026. Ecological Society of America Annual Meeting. Salt Lake City, Utah, USA. [LINK](#)
- July 29–31, 2026. Annual Meeting of Northeast Partners in Amphibian and Reptile Conservation (NEPARC). Paul Smiths, New York, USA. [LINK](#)
- July 29–August 1, 2026. International Herpetological Symposium. Rodeo, New Mexico, USA. [LINK](#)
- August 3–6, 2026. Annual Symposium on the Conservation and Biology of Tortoises and Freshwater Turtles. Guadalajara, Mexico. [LINK](#)
- September 18–21, 2026. Annual Meeting of the Canadian Herpetological Society. Brudenell, Prince Edward Island, Canada. [LINK](#)
- October 1–4, 2026. World Congress of Snakes. Kandy, Sri Lanka. For more information. [LINK](#)
- October 11 2026. Joint Meeting of the British Herpetological Society with the Thames and Chilterns Herpetological Group, Amersham, UK. [LINK](#)
- November 1–5, 2026. The Wildlife Society's Annual Conference. Des Moines, Iowa, USA. Abstracts due May 11. [LINK](#)
- November 24–27, 2026. Conference of the Herpetological Association of Africa. Simunye, Eswatini. [LINK](#)
- December 14–17, 2026. British Ecological Society Annual Meeting, Birmingham, UK. [LINK](#)

Check out details below for more upcoming conferences!

Nearctic

Advocates for Snake Preservation



Advocates for Snake Preservation (ASP) is a charity committed to changing how people view and treat snakes. As important predators and prey, snakes are an essential part of a vibrant, functioning planet, but negative attitudes about snakes may be the biggest barrier to their conservation.

ASP provides science-based solutions to everyday human-snake conflicts that sometimes end badly for people and often prove fatal for snakes. We make snakes more familiar and less scary by busting myths and misconceptions, illustrating lesser-known and appealing behaviors like parental care, and sharing stories of individual snakes to show what they're really like. Often this information is enough for people to welcome their snake neighbors and appreciate, rather than fear, their encounters. But we also recommend yard and human behavior modifications to reduce human-snake conflicts and make coexistence with venomous snakes safer. [Join our email list](#) to learn more about ASP's work and how to get involved.

Introducing The Snake Advocate Toolkit!

Most folks learn about snakes from naturalists, teachers, interpreters, or even their neighbors – not "snake experts." We want to equip these frontline educators with science-based interpretive materials and training to improve public attitudes and reduce human-snake conflict.

The Snake Advocate Toolkit will include a comprehensive set of interpretive materials – factsheets, brochures, panels, vignettes, presentation slides, and exhibit films – and training on our empathy-first approach to education. The Toolkit will give educators facts and answers to common questions about snakes, and how to communicate about these amazing animals effectively.

Do you educate the public about snakes?

Find out more about contributing to or receiving the [Snake Advocate Toolkit](#).



Kids in rural Arizona learn to love snakes; photographed by Jamie Wolgast.



- **Joint Meeting of Ichthyologists and Herpetologists: July 8–12 in New Orleans, Louisiana, USA**

The Society for the Study of Amphibians and Reptiles (SSAR) is thrilled to hold its annual meeting at JMIH in New Orleans, Louisiana from July 8–12, 2026. We are happy to offer lower registration rates for students and members, as well as free childcare with a \$50 deposit to all attendees. Check out the [meeting website](#) for more details.

The SSAR will hold the Live and Silent Auctions at JMIH, which help fund student travel to the annual meeting. Check out this post for more information on donations.

- **All 2026 Journal of Herpetology articles are available open access for free**

The Journal of Herpetology is participating in a pilot program with 70 other journals called “Subscribe to Open” where the Journal's nonprofit content provider, BioOne, will provide all articles from 2026-2028 as open access free of charge if their subscription goals are met by libraries each year. We are proud to announce that BioOne already reached its goal for 2026—making every 2026 Journal of Herpetology article open access, increasing readership without paywalls. Check out this [link](#) to learn more about BioOne's Subscribe to Open pilot and consider submitting your manuscripts to the [Journal of Herpetology](#) for free open access!

- **Resources for prospective graduate students and postdocs**

The SSAR creates a spreadsheet every year for herpetology-focused labs that are currently recruiting graduate students and postdocs. This year we are rolling out an additional option to advertise paid post-undergraduate opportunities! These may include but are not limited to research in the lab or field, and outreach or curatorial experiences. PIs/employers can fill out this [form](#) to populate the [spreadsheet](#) with positions they want to advertise. Graduate positions are expected to start during the 2027-28 cycle, and all other positions may begin anytime.

Our [website](#) includes links to the form and spreadsheet, as well as additional resources for students who are navigating the application process. Feel free to share on social media! You can find us on social media on [Bluesky](#), [Instagram](#), and [Facebook](#).

Request for advice



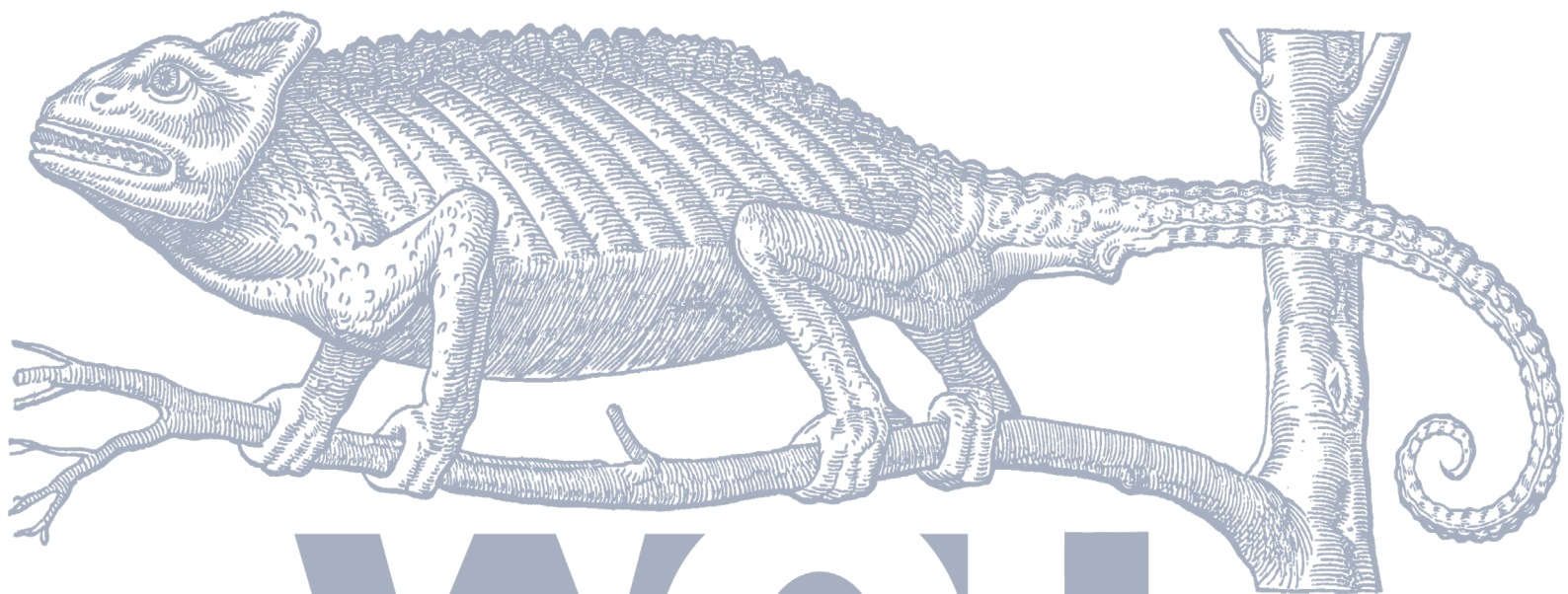
The first versions of the WCH Newsletter ([no. 1–5. published by Kraig Adler between 1983-1986](#)), focused mainly on the organization of the first WCH congress in Canterbury. A section within these newsletters was called 'Request for Advice', and in this section Kraig Adler solicited advice from the global herpetological community on how to structure the congress. Specifically he said, "Since we are not bound by tradition we should try new approaches wherever they seem worth attempting." There were some 'radical' decisions made for the first congress as an outcome of this – for example, no oral contributed papers, instead attendees presented their contributed research in a series of poster sessions!

In general, WCH has a [unique format](#). All attendees of a congress are considered members of the society, and vote at each congress to advise on the location of the next congress and members of the International Herpetological Committee (IHC) and Executive Committee (EC). Both the IHC and EC are the advisory board to guide the WCH congresses, but the organization of each congress is carried out by a local organising committee. The IHC and EC relies on feedback and expertise from the global herpetological community to guide and prioritise the actions and initiatives carried out at WCH congresses.

In the renewal of the WCH newsletter, it is important to us to continue to ask for your advice. In the future we may ask for your advice on specific topics (e.g., call for symposia, plenary speakers, or nominations for IHC and EC members). At the moment, if you have any suggestions or comments about the format and content of WCH congresses, WCH initiatives, or an idea of content you would like to see in future newsletters, we would be delighted to receive it.

You may have also seen that we are asking for submissions of news from herpetological societies and organizations (the *Herp News around the World* section). We are really looking forward to receiving these insights from the global herpetological community.

To submit advice, please e-mail it to worldcongressofherpetology@gmail.com with "Advice for WCH" in the subject line. Any comments will be kept confidential, and will not be identified to source, they should adhere to the [WCH Code of Conduct](#), and they will be compiled and submitted to the EC twice a year. The IHC and EC has long relied on ingenious ideas from the herpetological community to move WCH congresses forward in new, exciting, and inclusive ways. We look forward to hearing from you!



WCH

World Congress of Herpetology

The World Congress of Herpetology (WCH) is an International Scientific Nonprofit Organization that is also a Scientific Member of the International Union of Biological Sciences (IUBS). The mission of the World Congress of Herpetology is to promote herpetological research, education, and conservation, by facilitating communication between individuals, societies, and other organisations engaged in the study of amphibians and reptiles.

The aim of the WCH newsletter is to provide a means of communication during the period between WCH congresses that are typically held every three to five years. We want it to be a means of communication between the WCH Executive Committee (EC), the International Herpetological Committee (IHC), and the global herpetological community, and a place to feature ongoing actions being taken to study amphibians and reptiles by individuals and herpetological societies globally. It will be published bi-annually in June and December.

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