



# ANNUAL REVIEW 2025

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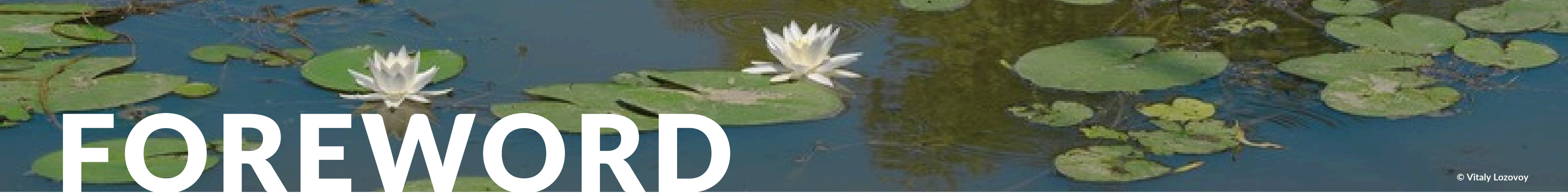


## ACKNOWLEDGEMENTS

**DESIGNER**  
Georgie Bull

**SPECIAL THANKS**  
SHOAL would like to extend a warm thank you to all partners – individuals and organisations who make up the wider 'SHOAL'. For this report, a particular thank you is owed to the experts who contributed their knowledge to the 1,000 Fishes data collection, and Local Action Partners who contributed their updates, as well as Synchronicity Earth, Re:wild, and the Rufford Foundation for supporting core staff capacity and on the ground action for the world's most threatened freshwater fish worldwide.

**IMAGES**  
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# FOREWORD

As SHOAL ends its sixth year since our launch in March 2019, we look back on twelve months of steady growth in the number of partners and increasing impact. There is much to report, and many people to thank.

We deepened our collaboration with all corners of the IUCN, and the core team were able to meet many long-term and potential new collaborators in person for the first time at the World Conservation Congress in Abu Dhabi. We also witnessed the birth of a new movement to protect the world's springs, subterranean waterways and oases, so precious for thousands of communities but under severe threat.

This year we formally launched an alliance of zoos and aquaria committed to

increasing the scale and impact that these powerful institutions and organisations can collectively achieve.

Over the coming pages, we celebrate our growing momentum and partnerships. We have been blown away by so many of the partners we have been lucky enough to work with: their vision, energy and expertise is exactly what is needed to move the dial on one of the major challenges of our time.

For decades, freshwater biodiversity has been chronically overlooked in global conservation funding, despite freshwaters containing extraordinary diversity and being essential to human wellbeing. We well know that freshwaters support a disproportionate share of life on Earth, but the species within them have received

only a fraction of the attention and investment directed towards more familiar terrestrial and marine ecosystems.

Encouragingly, that picture is beginning to change.

In 2025, a growing number of funders stepped up to support freshwater conservation, signalling a shift that is deeply welcome. Organisations including the Rufford Foundation, the Global Environment Facility through its Re:wild managed Gustavo Fonseca Species Conservation Fund, the Mohamed bin Zayed Species Conservation Fund, Ernest Kleinwort, Synchronicity Earth, Re:wild, the Critical Ecosystem Partnership Fund, and the IUCN Asian Species Action Partnership (ASAP) have all backed SHOAL partners and their projects,

proving their dedication to action for freshwater fishes. These investments are a recognition of the urgency, opportunity and global importance of safeguarding freshwater life.

Through this funding, we have been thrilled to start a killifish programme in East Africa, continue urgent work in India, Indonesia and Mexico, undertake extensive work in the Mekong, and start the mammoth task of compiling data for the 1000 Fishes Initiative.

This momentum reflects increasing awareness, stronger partnerships, and a widening community of donors willing to engage with one of conservation's most underfunded priorities. While the scale of need remains vast, the direction of travel is clear. Freshwater conservation is

gaining ground. And with continued support, progress can accelerate further, bringing us closer to a future where the world's most threatened freshwater species are actively protected.

Finally, this review provides the results of the first steps towards the hugely ambitious task to monitor the impact of our landmark 1000 Fishes Initiative. Over 70 scientists and conservationists have been contacted and have contributed to a tally of the present global conservation action of all 763 Critically Endangered freshwater fishes. The results set a baseline not only to assess future impact but a foundation of the community that we aim to build to further strengthen the SHOAL.

We hope you enjoy the read.



**Mike Baltzer**



**& the SHOAL Governing Council:  
Alex Quintero, Barney Long, Catherine Bryan, Gemma Goodman**



## JESSICA & ADAM SWEIDEN *Synchronicity Earth Co-Founders*

There is a real sense that freshwater biodiversity is garnering far more attention in the conservation sector. We have no doubt

that SHOAL has played a large part in this. Among many strategies, SHOAL innovates within and expands existing conservation practice to include freshwater fish – growing the whole field to recognise, focus on and protect freshwater fish. In the past few years, the policy response has widened and the public story around freshwater life, especially fishes, has begun to catch up. In January 2025, the first global multi-taxon assessment of freshwater animals found that 24% of assessed freshwater species are threatened with extinction, giving the sector a landmark evidence base and another strong platform from which to argue for action.

That growing momentum is visible in communications too. In 2025, SHOAL worked with WWF on Africa’s Forgotten Fishes, helped keep conservation in front of hobbyist audiences through regular features in Practical Fishkeeping and AMAZONAS magazines, and continued to build a wider constituency for fish conservation through webinars, reports and media outreach. A highlight was seeing how SHOAL’s first all-partners meeting brought together more than 60 partners from around the world. The upcoming May 2026 meeting will surely be as inspiring.

It is deeply rewarding to see freshwater species conservation gathering energy and confidence. More funders are coming to the table, enabling the SHOAL partnership to grow, and its work to reach further. The Rufford Foundation’s catalytic support enabled SHOAL to back work in Papua New Guinea, Papua in Indonesia, and SHOAL’s first killifish project in Tanzania. That kind of support shows that freshwater fishes are finally attracting the serious attention and investment that they have needed for so long.

Onwards!

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# INTRODUCTION



## WES SECHREST *Re:wild CEO and Board Chair*

There is growing recognition that the freshwater biodiversity crisis can only be addressed through stronger, broader, and more connected partnerships worldwide. Among the many species groups that rely on freshwater ecosystems to survive, more than 3,500 freshwater fish species are at risk of extinction, with another 3,000+ listed as Data Deficient, showing that the scale of the challenge demands more than isolated projects or institutions. This requires coordinated and inclusive initiatives like SHOAL that bring together conservation actors, funders, scientists, Indigenous Peoples, local communities, and institutions around a shared mission to reverse the freshwater biodiversity extinction crisis. Coordinated partnerships enable solutions that are more strategic, efficient, and impactful than any single organisation could achieve alone.

Over the past several years, SHOAL has demonstrated how strengthening existing alliances and cultivating new ones can accelerate conservation actions and mobilise critical resources for freshwater species and habitats at scale. This global momentum is reflected in the growth of collaborative networks such as the SHOAL Alliance of Zoos and Aquaria, the Goodeid Working Group in Mexico, the Mekong Fish Working Group, the African Killifish Society, and the emerging Global Springs Conservation Alliance. Together, these alliances expand technical capacity, foster innovation, generate public support, and help channel funding toward conservation priorities, ensuring that knowledge and support reach the places where they are most needed.

The expansion of partnerships is essential to scaling impact. Re:wild, along with Synchronicity Earth, hosts SHOAL as a central hub to build this global community of conservation actors and advance the 1000 Fishes Initiative. By continuing to grow its network of partners, SHOAL can mobilise the collective action needed to halt extinctions and restore freshwater biodiversity at scale.

# OUR 2025 IMPACT



Reports published



Countries with activity



Experts supported our 1,000 Fishes monitoring efforts



Freshwater fish species supported



CR or EN species supported



CR species we collected conservation action data for

SHOAL has continued to build momentum through 2025, widening the partnership, expanding work into new regions, and mobilising action for an increasing number of Priority Species. We are on track with our ambitious target of catalysing conservation action for 1,000 of the world's most threatened freshwater fishes by 2035. The capacity of the core team to keep track of the large amount of data that the 1,000 Fishes Initiative demands has now been greatly increased by the new Data Officer role. With this growth in the partnership and the core team, the curve of effective conservation action will continue to rise.

# ALLIANCES & NETWORKS

We are proud that we have continued to make key alliances and build strong networks through 2025, including launching the SHOAL Alliance of Zoos and Aquaria to catalyse conservation action, and working closely with all corners of the IUCN. Through radical collaboration, we can together instigate meaningful change.

## International Union For the Conservation of Nature (IUCN)



SHOAL are proud to work closely with all corners of the IUCN: from our strategic partners at the SSC Freshwater Fish Specialist Group, Freshwater Conservation Committee, and Asian Species Action Partnership, to close ties at the Secretariat, the Biodiversity Assessment and Knowledge Team at the IUCN Centre for Science and Knowledge, the Protected and Conserved Areas teams, and Congress, the rich collaboration between SHOAL and the IUCN continues to be productive and inspiring.

Visiting the IUCN World Conservation Congress in October, taking a lead role in putting forward a Motion, and seeing all freshwater-related Motions being ratified into Resolutions was a rewarding milestone for SHOAL.

We look forward to deepening our relationships across the Union throughout 2026.

### VIVEK MENON *Chair, IUCN Species Survival Commission*



*"Strong partnerships are essential to support and empower the SSC network and advance global species conservation. Since its creation, SHOAL has been a trusted and effective partner to the IUCN Species Survival Commission, helping to generate the momentum, visibility and action needed for freshwater species."*

*There is a growing energy behind freshwater biodiversity conservation, and SHOAL's close collaboration with the SSC, including the Freshwater Fish Specialist Group, is playing a critical role in mobilising urgent attention for some of the world's most threatened fishes. Together, we are strengthening the evidence base, raising the profile of these overlooked species, and driving coordinated action across the SSC network and beyond.*

*It is essential that the SHOAL partnerships and their ambitious, changemaking initiatives such as 1000 Fishes and INSPIRE get the participation, engagement and support they need to be fully successful."*

### CAMILLA CHUARD *IUCN Species Conservation Action Team*



*"I am excited to see freshwater biodiversity gaining the attention and collaborative action it urgently needs. Through initiatives like SHOAL's 1000 Fishes, we are beginning to mobilise a strong network of partners committed to reversing freshwater species declines. By connecting specialist knowledge across the IUCN network & helping catalyse concrete conservation projects on the ground, SHOAL complements and strengthens the work of the IUCN Species Conservation Action Team. Together, these partnerships are creating real momentum for safeguarding some of the world's most threatened freshwater fishes."*

### INTERVIEW WITH IAN HARRISON *Freshwater Conservation Committee Co-Chair IUCN Species Survival Commission*



#### WHAT ARE YOU EXCITED ABOUT IN TERMS OF THE FUTURE OF FRESHWATER BIODIVERSITY CONSERVATION?

*"While freshwater biodiversity has been the underdog in a lot of global policy action compared to land and sea, I see an encouraging increase in attention to freshwater ecosystems. Countries are thinking about them in terms of their protection and restoration plans. For example, there are 54 countries that*

*have stated their commitment to the goals of Freshwater Challenge, to restore freshwater ecosystems as part of global policy targets. At the Convention on Migratory Species COP in Brazil, we have seen freshwater species and habitats presented as a critical component. Countries are aware that freshwater is core to resilient sustainable development, and that requires maintaining healthy freshwater ecosystems."*

#### WHAT BENEFITS DO YOU SEE TO THIS GROWING 'SHOAL' OF PARTNERS ALL WORKING TOGETHER TO CONSERVE THE WORLD'S MOST THREATENED FRESHWATER FISHES?

*"One of the biggest challenges to well planned, well integrated, conservation of freshwater habitats and their species has been that people tend to work in silos. Conservation practitioners working in a region may not know what some of their colleagues are doing. Freshwater research scientists often tend to work disconnected from conservation practitioners. SHOAL can help build that integrated network, for more effective projects and help ensure that this network reaches out to funders and policymakers with well-aligned, compelling arguments for support."*

#### WHAT ARE SOME EXAMPLES OF HOW SHOAL ADDS TO THE WORK OF THE IUCN SSC FRESHWATER COMMITTEE?

*"SHOAL helps create the regional networks of experts that we need, as discussed above. It also consistently takes the objectives of the SSC Freshwater Conservation Committee, and indeed other Specialist Groups within the SSC, and synthesises them into extremely compelling reports and initiatives that help bring attention from a very wide group of potential supporters – funders and decision-makers. SHOAL excels at taking the complexities of freshwater biodiversity conservation, and all the facts behind it, and presenting this as a statement of what it means to all of us."*

## THE SHOAL ALLIANCE OF ZOOS AND AQUARIA

Recognising the significant potential of zoos and aquaria, as SHOAL members, to scale freshwater species conservation, SHOAL has worked with these institutions since 2024 to explore how collaboration and shared learning can increase impact.

In 2026, 11 zoos and aquaria became founding members of the SHOAL Alliance of Zoos and Aquaria for Freshwater Species Conservation. These institutions already have a strong track record of targeted conservation action, often driven by partnerships with local organisations, hobbyist groups, universities and other stakeholders. There is, however, clear potential to do more and contribute further to SHOAL's shared ambitions.

The Alliance will focus on four areas where members already demonstrate strong conservation value: ex situ breeding, support to local partners in situ, awareness and education, and fundraising. The aim is to grow membership to many more zoos and aquaria in the coming years.



**SABINE WIRTZ, Zoologist, AQUATIS Aquarium-Vivarium, Switzerland**

*"The SHOAL Alliance for Zoos and Aquaria represents, for us – an institution fully dedicated to freshwater systems and their inhabitants – a further step towards highlighting the importance of collaboration between different stakeholders for conservation. We look forward to a fruitful partnership as we are all committed to pursuing the same goals."*



**ALEX CLIFFE, Assistant Curator of Fish, Zoological Society of London**

*"Safeguarding freshwater fish for the future cannot be achieved in isolation; it requires the collaboration, shared expertise, and commitment of global partners. SHOAL's ethos provides a vital framework for this collective effort. By harnessing the complementary strengths of zoos, aquaria, universities, NGOs, and other partners, conservation action planning can be driven forward under a one-plan approach that integrates both in situ and ex situ conservation. Time is of the essence, and the consequences of inaction have never been more profound."*



**TIM LYONS, Director of Conservation, New Mexico BioPark Society**

*"For many years, global conservation strategy has largely overlooked the freshwater ecosystems that support more than half of all fishes globally. SHOAL represents a unique opportunity to shift this outlook, and to turn the tide on freshwater extinctions. This monumental and timely effort can only be accomplished if we collaborate. The SHOAL Alliance of Zoos and Aquaria is an ideal convener, coordinator, and catalyst of this work. In particular, the alliance is helping to set the stage for effective and coordinated ex situ conservation that is grounded in scientific decision-making to ensure that the species in greatest need are prioritised and well resourced. Through partnership, we have an opportunity to align our collective goals, practices, and resources to ensure that freshwater species are protected well into the future."*

## SULAWESI



Sulawesi, the largest Wallacean island and famed biodiversity hotspot, is home to a multitude of highly-threatened freshwater species. SHOAL is proud to have a strong and growing network of conservation action partners on Sulawesi: each of them passionate, high-impact, community-driven, and guided by the best available science and knowledge. In Lake Poso, PROGRES works tirelessly for native fishes, including the Critically Endangered Duck-billed Buntingi, Rosen's Buntingi, and Poso Bungu; in the Malili Lakes, TARSIOUS and YBS labour to control the numbers of invasive species and give native endemics a fighting chance of survival; in Lake Lindu, Celebica focuses on Sarasin's Ricefish and its congener *Xenopoecilus bonneorum*, long neglected and barely hanging on to existence.

Even as challenges to freshwater conservation here loom, the unflagging drive of our partner network in Sulawesi helps keeps hope aloft.



*"With SHOAL, it has been a challenging and fulfilling journey. We were not experts on freshwater ecosystems, yet SHOAL provided us with trust, support, and comradeship to learn while working together to establish our freshwater program in Lake Poso. Being part of the wider SHOAL means being in the community. It is important to feel the collective spirit for advocating for freshwater conservation that has been overlooked before.*

*SHOAL supports PROGRES to obtain ASAP Rapid Action Fund to look for endangered species and set up our first freshwater program in Lake Poso. Since then, SHOAL has provided us with expert support and facilitated us with potential donors to gain long term funding. We are grateful for our partnership with SHOAL and the growing network of freshwater scientists and conservationists worldwide."*

**SHERA, Co-Executive Director, Progres**

## MALAGASY FRESHWATER FISH CONSERVATION WORKING GROUP

Madagascar's freshwater fish are some of the country's most threatened and under-supported biodiversity. With 81% of species endemic and 73% at risk of extinction, urgent action is required to prevent irreversible losses. Threats include deforestation, sedimentation, agricultural expansion, overfishing, invasive species, hydrological alterations, pollution, and climate variability. Many species have highly restricted ranges, often confined to single river basins or lakes, while scientific knowledge and monitoring remain limited.

In 2024, Malagasy and international partners convened at a workshop in Paris hosted by Charles-Edouard Fusari from L'Aquarium Tropical, to review research, assess conservation needs, and develop a coordinated national strategy. The workshop attendees have subsequently began creating an action plan for Madagascar's freshwater fishes. SHOAL is humbled to join this working group.

**To date, the working group has focused on:**

- **Species Prioritisation:** A database of 82 endemic species has been compiled, integrating IUCN Red List status, evolutionary distinctiveness, habitat data, and conservation needs.
- **Ex situ Conservation:** Developing plans for in-country ex situ breeding, piloting with six priority species.
- **Capacity Building:** Proposed initiatives include technical training, graduate scholarships, completion of Red List assessments, and the proposed creation of a Malagasy freshwater fish NGO.
- **Spatial Planning:** Mapping species distributions against Key Biodiversity Areas to identify coverage gaps, consider protected area expansions, and guide field interventions.

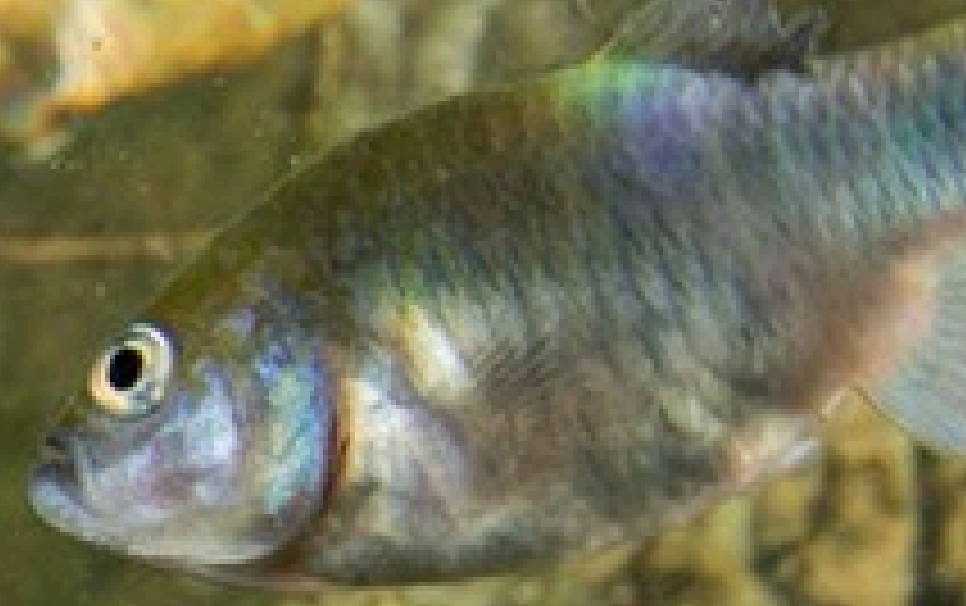
### MALAGASY FRESHWATER FISH CONSERVATION WORKING GROUP PARTNERS

Agence Française de Développement, Aquarium Tropical Association des producteurs, Privé D'Alevins, Association pour la Conservation des Cichlidés Malgaches, Braunschweig University, Bristol Zoological Society, Chester Zoo, Citadelle de Besançon, citizen conservation, Cologne Zoo, Conservation International, Floribis, Croc Farm, Fossa Sarl, Madagasikara Voakajy, Rotterdam Zoo, Toronto Zoo, Wildfowl & Wetlands Trust, Wildlife Protection Solutions, Yves Fermon – Ichthio SAS, Zoological Society of London



# SPRINGS

© Freshwaters Illustrated



*"I'm excited by the growing recognition that freshwater systems, and springs in particular, are central to biodiversity and water security. For a long time, these systems have been underrepresented in conservation, but that's starting to shift. I'm especially looking forward to continuing to scale our inventory and data efforts and connecting that work more directly to global conservation priorities. There's a real opportunity right now to turn better information into coordinated action."*

*"Being part of SHOAL means being part of a global network that's actively trying to change the trajectory for freshwater biodiversity. SHOAL brings together partners across disciplines and geographies to focus attention and resources on some of the most overlooked and threatened species and habitats. For us, it means our work on springs is connected to a much larger effort – one that's aligning science, conservation, and policy at a global scale. It also creates a space where we can share knowledge, learn from others working in very different systems, and contribute to a more coordinated response to freshwater challenges."*

**JOSEPH HOLWAY, Assistant Director, Springs Stewardship Institute**

Recognising that springs are keystone ecosystems, among the most unique yet overlooked freshwater ecosystems globally, SHOAL has been working with partners to address these critical gaps in freshwater conservation.

Springs support an exceptional concentration of endemic and highly threatened freshwater species that occupy extremely restricted ranges. Despite their global importance for biodiversity, culture, water security, and economy, springs have received limited attention in conservation planning and funding, and have not been included in national or global policy frameworks. SHOAL and partners are working to elevate the profile of springs and mobilise capacity, resources, and action toward springs conservation.

Through these partnerships, SHOAL aims to support conservation planning, awareness raising, research, and resource mobilisation to safeguard these irreplaceable ecosystems and the species they support. SHOAL is supporting the establishment of the IUCN Springs Task Force to help guide technical priorities, strengthen data accessibility, and integrate springs into national and global conservation frameworks, including the IUCN Red List of Ecosystems, Key Biodiversity Areas, Ramsar Sites, and World Heritage Nomination. In parallel, SHOAL is helping to create a complementary platform through the Global Springs Alliance to raise awareness, engage partners, and attract donors to support priority actions identified by the IUCN Springs Task Force.



# SHOAL ON THE GROUND

Over the past year, SHOAL has funded seven Local Action Partners, and collaborated with countless others. There isn't space to fit them all into this review, so we aimed to focus on a selection of projects that highlight the geographic spread and wide scope of fishes which define SHOAL's work.



## KILLIFISH: TANZANIA

Killifish (order Cyprinodontiformes) are small, oviparous freshwater fish that inhabit ephemeral aquatic ecosystems across Africa, Europe, and the Americas. There are over 1,200 recognised species, more than 300 of which are listed as threatened on the IUCN Red List. Many annual killifish complete their life cycle within a single year, producing drought-resistant eggs that remain dormant in soil until the wet season rains trigger hatching. This unique adaptation allows them to persist in environments where surface water may be absent for extended periods, earning them nicknames such as “the fish that fall from the sky.” Their vibrant colouration, striking patterns, and unusual reproductive strategies have made them highly sought-after by aquarium enthusiasts: over 30 killifish specialist groups exist worldwide! Their unique life cycles, stunning colours, and urgent need for conservation action, have made killifish somewhat of a SHOAL flagship, and with support from the Rufford Foundation, we kickstarted work in 2025 to wave the flag for killifish conservation.



**DR. TIM DAVENPORT, Africa Director, Re:wild**

“Little is known about the colourful, short-lived *Nothobranchius* Killifish and yet more than 72% are threatened with immediate extinction. SHOAL, the University of Dar es Salaam and Re:wild have set up the Africa Killifish Society in order to shed light on the 90 Eastern Africa species, and to mobilise conservation action before many species disappear forever.”

### SHOAL New Species report

In March 2025, SHOAL released its annual New Species Report in collaboration with California Academy of Sciences. One of the highlights was two new killifish descriptions: Adriana’s Pearlfish (*Argolebias adrianae*) and the Guarani Pearlfish (*Argolebias guarani*), that were discovered in tiny temporary pools near the stunning Iguazú Falls in Argentina.



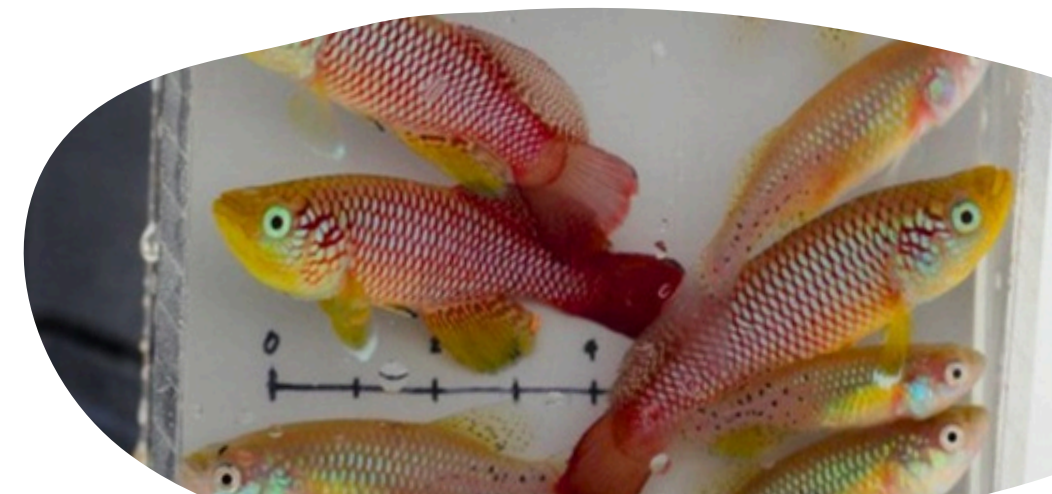
### From the Field: Dr. David Alila’s *Nothobranchius* Surveys

Tanzania is particularly important for killifish, hosting 40% of Africa’s killifish species, with some coastal localities supporting up to six Critically Endangered species. A targeted conservation initiative funded by the Rufford Foundation focusing on *Nothobranchius* species began in 2025. A seven-day field survey of the Mbezi River Basin confirmed the continued presence of all seven endemic *Nothobranchius* species at historically documented sites. However, habitats are under severe threat from agricultural conversion, water abstraction, pollution, invasive species, and urban development. Some seasonal pools that previously supported viable populations no longer exist, indicating that multiple populations are at imminent risk of local extinction.



**DR. DAVID ALILA, University of Dar es Salaam**

“Working with SHOAL on the killifish project in Tanzania’s Mbezi River Basin has been a truly rewarding and impactful experience. Their support has been instrumental in advancing conservation efforts for threatened *Nothobranchius* species, enabling critical field research, documenting these remarkable fishes, and launching community-led awareness initiatives. Through this collaboration, we are generating essential scientific knowledge while actively engaging local stakeholders to protect fragile seasonal wetland ecosystems. SHOAL’s dedication to freshwater conservation is making a real and lasting difference on the ground, and I am proud to partner with them in safeguarding these unique species and their habitats.”



© Dr. David Alila



# THE MEKONG

The Mekong River system is one of SHOAL's highest conservation priorities. The river and its associated waterways traverse the six countries of China, Myanmar, Laos, Thailand, Cambodia, and Vietnam, supporting some of the world's most biologically diverse freshwater ecosystems. It plays a critical role in the livelihoods of tens of millions of people from diverse communities: supporting the largest inland fishery in the world (Lower Mekong: 2.3 million tonnes valued at USD 11 billion in 2015), transports vital nutrients and sediments that enable the rich agricultural yields of the Mekong River Delta, and provides a plethora of other ecosystem services both widespread and localised. More than 1,100 fishes and a wealth of other highly threatened organisms (such as freshwater turtles and dolphins) can be found in the Mekong, and it supports the world's largest non-marine migration.

Eleven Critically Endangered ASAP freshwater fish species can be found the Mekong and its tributaries, found across a range of habitats and distributions from the sprawling Mekong Delta and the massive seasonal expanses of the Tonle Sap, up into the rheophilic highland headwaters of the Annamites. Significant progress is underway to ensure the incredible fish diversity of the Mekong is maintained.

The Critical Ecosystem Partnership Fund through its programme in the IndoBurma Hotspot and via the IUCN Asia Regional Office provided a series of grants, facilitated and supported by the SHOAL core team, for three projects in the Mekong. Two of these focused on site-based conservation action for the Giant Freshwater Stingray (*Urogymnus polylepis*) in Cambodia and Lao PDR led by WCS and WWF respectively and the other supported the development of the Mekong Fish App (see below). SHOAL and IUCN ASAP have also supported partners such as ComNetMekong and its efforts to create a transnational effort to protect and recover the Jullien's Golden Carp (*Probarbus jullieni*).



**CHEA SEILA, Project Manager, The Wonders of the Mekong**

"A regionally rooted, globally recognised initiative, Wonders of the Mekong integrates scientific research, policy engagement, education, and community action to protect Southeast Asia's most vital river system. We achieve this through close collaboration with local people from more than 20 communities, who help design, implement, and share the results of research and conservation efforts. Working with SHOAL has allowed us to safeguard the health of Mekong River and save the world's most threatened freshwater species – especially Mekong Giant Catfish (CR), Giant Barb (CR), Jullien's Golden Carp (CR), Mekong Salmon Carp (CR), and the Giant Freshwater Stingray (EN) – while strengthening community-based fisheries management, habitat protection, and science-policy integration."

## Wonders of the Mekong

SHOAL's main partner in the Mekong Region is the Wonders of the Mekong project. This project was, originally started in 2017 as a USAID funded project primarily in Cambodia, and is led by Dr. Zeb Hogan. The Project is now the main focal point for focused conservation action, not just for the remarkable giant fish of the Mekong such as the Giant Mekong Catfish (*Pangasianodon gigas*), the Siamese Giant Barb (*Catlocarpio siamensis*) and the Giant Freshwater Stingray (*Urogymnus polylepis*) but also all threatened fish and fisheries of the Mekong.

In 2025, the project together with SHOAL has led the development of Conservation Action Plans for nine species:

- **Jullien's Golden Carp (*Probarbus jullieni*)** – CR
- **Thick-lipped Barb (*Probarbus labeamajor*)** – EN
- **Giant Freshwater Stingray (*Urogymnus polylepis*)** – EN
- **Mekong Freshwater Stingray (*Himantura laosensis*)** – EN
- **Wolf Barb/Pa Sak (*Luciocyprinus striolatus*)** – EN
- **Giant Salmon Carp (*Aptosyax grypus*)** – CR
- **Mekong Giant Catfish (*Pangasianodon gigas*)** – CR
- **Siamese Giant Barb (*Catlocarpio siamensis*)** – CR
- **Giant Pangasius (*Pangasius sanitwongsei*)** – CR



© Wonders of the Mekong

SHOAL Annual Review 2025 |

**Protecting and Rewilding the Mekong's Fish Migration Corridors to Safeguard Biodiversity and Sustain Fisheries**

In 2025, SHOAL was awarded a grant by the Disney Conservation Fund, administered through Re:wild to support the work of the Wonders of the Mekong project, primarily in Cambodia. The project will establish protection and restoration of migration corridors, improve protection and management of Fish Conservation Zones in three provinces, and secure legal protection for at least two additional Critically Endangered migratory fish. It will also establish long-term monitoring of deep pool spawning habitats through trained community rangers and expanded use of the Mekong Fish App in 10 fishing villages. It will also increase education and awareness of the Mekong fishes and fisheries while also solidifying the importance of these with national policy.

**Mekong in Balance**

SHOAL is partnering with WWF on a Swedish International Development Cooperation Agency (SIDA) funded project called Mekong in Balance. This project (described further on p. 13) aims to create the first science based systematic conservation plan for freshwater biodiversity conservation in the lower Mekong. During 2025, experts on the biodiversity of the region including scientists from the Mekong River Commission have identified the rich freshwater biodiversity of the region and begun to identify priority actions. The results of the project will help further develop a comprehensive conservation plan for one of the world's richest, important and diverse freshwater biodiversity hotspots.



**DR. PENG BUN NGOR, Dean, Faculty of Fisheries and Aquaculture, Royal University of Agriculture, Cambodia**

*"This project successfully developed and piloted a near real time reporting system to monitor highly threatened freshwater fish species in the Cambodian Mekong, a process that was achieved by marrying technological innovation with extensive stakeholder engagement and community participation. By providing up-to-date data and information about fish species with high threat status, the app supports effective species-focused conservation action plans and decision making for timely management interventions. If continuously implemented, the system will be able to track the fish species' population status, trends, and distribution."*

**The Mekong app**

With startup funding from the CEPF, the Royal University of Agriculture in Cambodia has developed an innovative app to enable fishers across the country to record any catch that include the most threatened fishes. This rich source of data feeds into a database managed by the university and will provide a deeper understanding of the movement and distribution of these species. The further rollout of the app is now being supported by SHOAL to the Wonders of the Mekong Project, funded by Disney.





© Michael Köck



## GOODEIDS: MEXICO

Mexico is one of the world's most important countries for freshwater fish diversity, supporting more than 500 native species, many found nowhere else on Earth. Yet this remarkable freshwater fish is in crisis: nearly 40% of assessed freshwater fish species are threatened with extinction, driven by habitat degradation, pollution, invasive species, water extraction, and altered river flows.

Among the most threatened are Mexico's goodeid fishes, a unique group of 40 endemic species. A volunteer-based group, the Goodeid Working Group (GWG), was formed in 2009 to run as a coordinated effort to halt extinctions and restore populations through science-based action, strong partnerships, and long-term recovery planning. By mobilising a global network of hobbyists, scientists, aquaria, and conservation organisations, GWG supports genetically diverse conservation breeding programmes while linking these efforts to habitat restoration and species reintroductions in central Mexico through initiatives such as Fish Ark Mexico, based at the Universidad Michoacana de San Nicolás de Hidalgo in Morelia.

Through Plan G Mexico, an international 10-year action plan for the conservation of Mexico's goodeid fishes, eight priority projects have so far restored critical freshwater habitats across central Mexico by combining conservation breeding, invasive species control, habitat rehabilitation, and community engagement. At the Teuchitlán River, where two-thirds of native fish species have disappeared, restoration efforts are supporting the recovery of the Tequila Splitfin (*Zoogoneticus tequila*) and advancing reintroduction efforts for the Golden Skiffia (*Skiffia francesae*) through habitat restoration, invasive species removal, and community-led education activities. In the drainage of the Sayula lagoon in Jalisco, surveys rediscovered remnant populations and enabled experimental releases of 330 Golden Skiffia in mesocosms and 120 individuals into restored habitats, while restoration in Agua Azul Park in Guadalajara established a population of 200 *Skiffia multipunctata*, demonstrating that conservation success is possible even in urban environments.

Additional actions include updated management plans for Zacapu Lake, restoration of the La Zarcita spring, breeding trials for *Skiffia lermae*, and invasive-species removal in the Zempoala lagoons.

Together, these efforts are helping stabilise highly threatened species, restore degraded freshwater ecosystems, and strengthen local stewardship of Mexico's freshwater fishes. By integrating conservation breeding, habitat restoration, research, and public engagement, Plan G Mexico provides a scalable model for reversing declines in freshwater fish populations while contributing to national biodiversity conservation priorities.



MICHAEL KÖCK, PLAN G

"Over the past year, Plan G Mexico brought several projects into their second stage, with the first individuals of the Spotted Skiffia (*Skiffia multipunctata*) being brought back to the species' type locality in Guadalajara, with the reintroduction of the Golden Skiffia (*Skiffia francesae*) gaining speed in Amacueca and Teuchitlán, with the beginning of the construction of a protected artificial habitat for the Polkadot Splitfin (*Chapalichthys pardalis*) in Tocuambo, and other crucial steps like the start of restorations and reintroductions in a key habitat in Morelia for two Goodeid species."

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## RED WINE BETTA: INDONESIA

Work on the highly-threatened Red Wine Betta (*Betta burdigala*) from Bangka Island, Indonesia continued in 2025 with the support of the IUCN SSC Asian Species Action Partnership (ASAP). While the situation for the species remains extremely dire, the project team, headed by Veryl Hasan from Airlangga University and including collaborators from University Bangka Belitung, the University of Leeds, the Lee Kong Chian Natural History Museum, and local community and advocacy groups, has made significant strides in securing a future for this beleaguered little fish.

Comprehensive habitat surveys have identified a single location as being suitable for in situ conservation. A fundraising campaign, launched through the release of the film Sanctuary, which tells the story of the Red Wine Betta's conservation challenges, generated enough funding to secure legal protection up to the provincial government level for this location. A local community-led NGO named "Aquatic Conservation" was established to monitor and manage this sanctuary.

Ex situ insurance conservation was also identified as an important intervention for the species, and support for this project has allowed for the intensification and scaling up of these activities in a genetically informed manner. The upgraded facility now produces larger numbers of fry in more stable conditions, and the ex situ programme has progressed to the F3 generation.

Community outreach and education activities that had been started as part of an earlier SHOAL-IUCN ASAP grant in 2024 were also continued in this project in a more strategic manner, engaging with villages and communities located close to the sanctuary. These also included educational workshops to train local community members (notably members of Aquatic Conservation NGO, and University Bangka Belitung students) in population and environment survey techniques.



*"Two years ago, basically no one knew what Betta burdigala or Bangka island was. Now both are on the map due to the work of the team and our film 'Sanctuary'. Getting people excited about saving obscure fish is how you leave a legacy, ours is in the two new Yayasan set up to protect Betta burdigala and so much more in the future."*

**Dr. Josie South, University of Leeds**



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# SHOAL IN THE WORLD

The SHOAL core team have had a busy year of travel, with staff members visiting partners in India, Indonesia and Thailand, holding workshops in Cambodia and Mexico, and attending the IUCN World Conservation Congress in Abu Dhabi – the first time the entire core team has met in person!





Michael Edmondstone

Nathaniel Ng

Grace Brady

Georgie Bull

Chouly Ou

Mike Baltzer

## IUCN WORLD CONSERVATION CONGRESS: ABU DHABI

In October, the full SHOAL core team convened in Abu Dhabi for the IUCN World Conservation Congress – the first time all six team members had met in person. Bringing together thousands of conservationists from around the world, the congress provided a rare opportunity to align as a team while engaging directly with the global conservation community.

SHOAL played an active role across the programme, contributing to six sessions in total. Three Forum sessions enabled in-depth discussion on key challenges facing freshwater biodiversity, while three Exhibition sessions created space to showcase collaborative approaches and on-the-ground conservation efforts. Across these sessions, a clear message emerged: freshwater species are gaining recognition, but urgent, coordinated action is still needed.

The congress also marked a significant policy moment. Fifteen motions relevant to freshwater conservation were brought forward and approved, helping to embed freshwater priorities more firmly within IUCN's global agenda. These motions will help guide conservation policy and action over the coming years.

Beyond the formal programme, the congress was an opportunity to strengthen partnerships, build new relationships, and generate momentum behind SHOAL's 1000 Fishes initiative.

*'Having the opportunity to meet many of our partners in person for the first time, or for the first time in a long time, was very special to me. I am in constant awe of the passion and determination within the SHOAL community, so to be in the presence of so many brilliant conservationists was just fantastic. I was particularly inspired by Shera's insights from PROGRES at the SHOAL-IUCN ASAP Pavilion session, and the discussions within the freshwater funder roundtable hosted by Synchronicity Earth. I was also especially happy to finally meet Nat and Chouly, who are wonderful assets to the SHOAL team'*

**- Georgie Bull, Senior Programme Officer**

*'Having the movers and shakers of the global conservation community together under the same roof is not something that happens frequently, and I am particularly proud to have participated as a panel member in SHOAL's joint session with ASAP, the IUCN Asia Regional Office, and PROGRES. The session provided me and my fellow panellists with a valuable opportunity to share about the uniquely collaborative approach we are taking to change the trajectory for IUCN ASAP fishes; raising awareness as well as stimulating downstream discussions and collaborations on what more should and can be done.'*

**- Dr. Nathaniel Ng, SHOAL / IUCN SSC ASAP Southeast Asia Programme Coordinator**

*'Within a month of joining the SHOAL Core Team, I met everyone in-person at the WCC! It was great to meet people from the Synchronicity Earth team as well. I joined for the final few days of the WCC and attended the Global Mechanisms for Overlooked Species panel. Along with this, I enjoyed engaging with other organisations, scientists, students, and members of the community at the SHOAL stall to share our work. It was incredible to join and represent the initiative at a global conference so early into my role.'*

**- Grace Brady, Data Officer**

*"Convening the springs session at the IUCN World Conservation Congress 2025 was especially meaningful for me. Just a year before that, I was reaching out to many government institutions and NGOs within the IUCN network to encourage them to sponsor the springs motion. I had the opportunity to meet several of these supporters in person and to connect with new partners who are dedicated to springs conservation. It was truly inspiring to see the motion adopted at the Congress and to feel the growing momentum and shared commitment to elevating springs as a priority for global freshwater conservation."*

**- Dr. Chouly Ou, SHOAL US Coordinator**

# IUCN WORLD CONSERVATION CONGRESS: IN PHOTOS



Nerissa Chao (ASAP), Nathaniel Ng (SHOAL), Shera (PROGRES), Alex McWilliam (IUCN) - ASAP Fishes Session - Asia Pavillion



Mike Baltzer (SHOAL) presenting at a connectivity session - Green Pavillion



Dr. Chouly Ou (SHOAL) hosting a session on Spring Conservation



Dr. Sanjay Molur (Zoo Outreach Organisation) presenting at a Connectivity Session - Green Pavillion



SHOAL booth fishing fun with Shera (Progres)



SHOAL's booth was a hub for fish conversation!



ASAP Fishes Session Team (Progres, ASAP, IUCN, SHOAL)

## MEKONG IN BALANCE: LOWER MEKONG



SHOAL is a partner with WWF on a Swedish International Development Agency-funded project, Mekong in Balance. As part of this project, and together with Simon Linke of Commonwealth Scientific and Industrial Research Organisation, the partners have been working with experts to design the first systematic conservation plan for freshwater biodiversity in the Lower Mekong. Mike Baltzer and Nathaniel Ng are the key experts from SHOAL involved.

In 2026, experts began identifying species of high conservation value and mapping their distribution. Given the disproportionate role of fishes in shaping conservation priorities, and the high number of species to consider (close to 1,500), partners convened regional fish experts for a workshop in Phnom Penh, Cambodia. The group worked through all species, identifying those most critical (including their value for fisheries) and mapping each one. Following the workshop, the experts formed a permanent working group and have since continued sharing information, with leadership provided by the Wonders of the Mekong project.



## DESERT FISH COUNCIL MEETING: MEXICO



In November, Chouly Ou attended the 2025 Desert Fishes Council Symposium in Cuatrociénegas, Mexico – her first visit to the country. Founded in 1969, the Desert Fishes Council aims to bring together scientists, conservation practitioners, and resource managers who work to protect highly threatened desert freshwater species affected by groundwater extraction, habitat loss, and river modification. The annual symposium provides an important space to share knowledge and build partnerships across the U.S. and Mexico.

Together with the Springs Stewardship Institute’s Larry Stevens, Joseph Holway, and Michi Tobler, Chouly co-organised a session on springs that explored global momentum following the adoption of the IUCN motion on springs. Discussions highlighted the need for stronger collaboration through the proposed IUCN Springs Task Force and Global Springs Alliance. A key takeaway was the urgent need to elevate springs as global conservation priorities and strengthen connections between science, policy, and on-the-ground action.

Chouly said of the visit, “Seeing the springs of Cuatrociénegas and the striking blue waters and endemic fishes was unforgettable, and reinforced how unique and fragile these ecosystems are.”

## SHOAL PARTNER VISIT - ZOO OUTREACH: WESTERN GHATS, INDIA



In February, Georgie Bull and Michael Edmondstone travelled to India's Western Ghats to visit Zoo Outreach and the Kerala University of Fisheries and Ocean Studies (KUFOS), SHOAL partners working on Denison's Barb and subterranean fishes respectively.

The trip began with Remya L. Sundar of KUFOS, who guided them through sites where several subterranean species have recently been discovered and described. Among them was the now well-known Pathala Eel Loach (*Pangio pathala*), first brought to wider attention after appearing in a local resident's shower in 2020 and later gaining global visibility through a viral post by Leonardo DiCaprio.

Arjun C.P., a conservation biologist with the Kerala Forests and Wildlife Department and a key contributor to recent subterranean fish research in the region, then led visits along sections of the Periyar River, a stronghold for Denison's Barb. Here, Georgie and Michael encountered multiple individuals of the species, alongside 14 other endemic fishes, which Georgie documented.

At Thootha village on the Kunthipuzha River, Zoo Outreach's Executive Director Sanjay Molur and researcher Priyanka Iyer showed further Denison's Barb habitat, where recent development is beginning to place pressure on the system.

Visiting these sites provided a clearer understanding of both the richness of these freshwater ecosystems and the challenges facing their conservation.





*"Meeting the teams from KUFOS and Zoo Outreach was an incredible experience. The community work they do demonstrates that conservation is as much of a social science as it is an ecological one. Whether navigating human-wildlife conflicts in the case of highly sensitive subterranean fishes making their way into people's showers, or navigating the challenges of fostering collaborations across communities sharing the same riverbanks, Zoo Outreach and KUFOS are doing remarkable work to bridge the gap between conservation need and community engagement.*

*I'd be lying if I said that the fish sightings weren't a highlight for me, too! I remember watching Denison's Barb darting around the tank at my local garden centre as a five-year-old and being completely captivated. To have the privilege to see and film them foraging in the wild (thanks to Sanjay and Priyanka's expertise!) was a full circle moment for me. A huge thank you to the team for hosting us."*

**- Georgie Bull, Senior Programme Officer**



*"Visiting partners and project sites in person allows understanding of the projects to move from the academic to the tangible. When being on the ground, seeing the species first hand, talking with the local communities that live in and around the project sites, you can really get an appreciation of the intricacies of conservation. This deepening of the understanding is invaluable in translating stark conservation fact into communications outputs that resonate well beyond conservation echo chambers.*

*On a personal level, this visit was incredibly inspiring. The Western Ghats is an astonishing place, absolutely buzzing with biodiversity. Seeing first-hand the work of our partners Zoo Outreach and KUFOS has renewed my appreciation for the levels of work they do - it is fantastic to see."*

**- Michael Edmondstone, Communications Lead**



# IUCN CEPF AND ASAP PARTNER VISITS: THAILAND, INDONESIA

## CEPF PARTNER VISITS: FEB 2025, JUL 2025

In February 2025, Nathaniel Ng travelled to two project sites in Thailand as part of SHOAL's engagement with CEPF IndoBurma IUCN Asia Regional Implementation team:

- Nakhon Nayok, where the Seub Nakasathien Foundation runs a project on *Trigonostigma somphongsi* headed by Chavalit Vidthayanon
- Krabi, where the Bird Conservation Society Thailand runs a project on *Betta simplex*, headed by Khwankhao Sinhaseni.

Besides meeting with project partners, and attending meetings with local government and community stakeholders, these visits also afforded the opportunity for SHOAL to assist with project progress assessment and provide input and guidance.

In July 2025, Nathaniel attended the CEPF Final Assessment Workshop in Bangkok, which gave the opportunity to hear more and learn about the breadth of work CEPF's support is enabling in the Indo-Burma region. It also enabled Nathaniel to meet and speak with existing and potential conservation partners and collaborators both regional and international, and contribute meaningfully to the consultation process for CEPF's next round of investment into the region.

## ASAP/SOAL PARTNER VISITS: MAY 2025

In May 2025, Nathaniel and ASAP's Indonesia programme coordinator Cahaya visited Central Sulawesi and West Kalimantan provinces in Indonesia with conservation partners Celebica and TCS.

In Central Sulawesi, Nathaniel and Cahaya visited Lake Lindu, the site of Celebica's project on *Sarasins buntingi* (*Xenopoeilus sarasinorum*). They met with the Celebica team and members of the local community, and discussed the species, the project, and potential future work. They conducted interviews, and worked with videographer Ivan Batara to collect communications materials.

In West Kalimantan, they had a series of in-depth discussions and activities with Tropical Conservation Society (TCS). Activities included visiting field sites, meeting with local stakeholders including community members and local fish collectors, conducting interviews, and collecting communications materials.

These two visits provided a lot of valuable information, including insights into the situation and challenges on the ground for both the target species and other threatened fishes in the same habitats, types and natures of the difficulties the partners face, and the kind of support most urgently needed for the short and long terms.

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# 1000 FISHES

In 2024, SHOAL, in partnership with the IUCN SSC Freshwater Fish Specialist Group (FFSG), launched 'A Blueprint for Accelerated Conservation Action for 1,000 Freshwater Fishes by 2035'. This Blueprint provided the strategy for the SHOAL 1000 Fishes initiative, which aims to mobilise conservation action for 1,000 of the world's most threatened freshwater fish species, as assessed by the IUCN Red List, by 2035. These Priority Fishes are found across six continents, so global collaboration is essential for us to work at the scale needed to mobilise recovery.

Earlier this year, SHOAL collected conservation action data through surveying global freshwater fish experts. Formal species assessments are timely undertakings, and while they often include information on conservation action, they may not reflect the most recent developments in on-the-ground conservation action. Our Critically Endangered Priority Fishes were the focus of this effort, given their urgent need for conservation action.

Over 70 experts provided input on conservation action in their regions. For the purpose of this exercise, defined conservation action as any in situ or ex situ work being done to recover a species. This includes: captive and ark-type breeding, legislative and habitat protections, habitat quality improvements, translocation, engineering modifications, community outreach and stewardship, as well as habitat sampling and eDNA collection. This effort was not aimed at assessing the efficacy of these actions, but rather to discern if they are taking place at all. By understanding who is doing what working on our Priority Fish species, we can target gaps and support pre-existing efforts.

SHOAL would like to thank the freshwater fish conservation community for their astonishing response to this data collection. We have listed all contributors on page 48.

## METHODS

In order to categorise conservation action type and level, we devised the below categories to assign to SHOAL Priority Fishes (see the [SHOAL Blueprint](#) for selection criteria). Species were then organised by geography for ease of data entry.

We conducted multiple waves of outreach between January and April 2026, continually identifying gaps in order to source local and regional experts for countries and/or fishes. The IUCN SSC FFSG Regional Chairs were our first point of contact and were an invaluable asset to this effort for providing their own knowledge, as well as connecting us with other experts who could help fill data gaps. An open call was launched in March across our social channels to continue the data collection effort.

### Conservation Action Presence Categories:

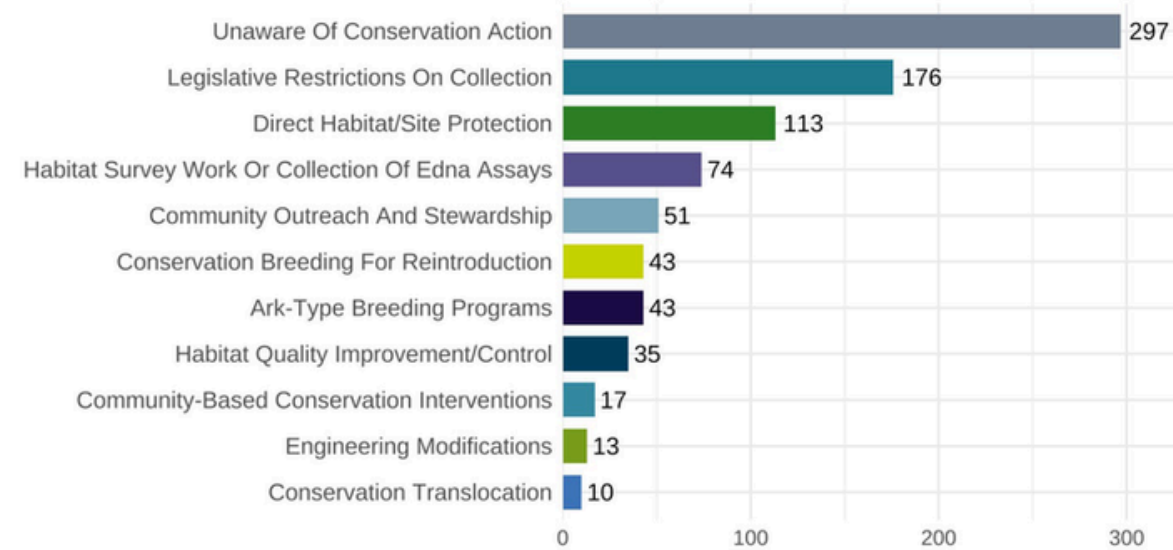
- Active targeted conservation action
- Passive protection (non-targeted action)
- Conservation action planned, but not implemented
- Little to no conservation action
- Unknown

### Conservation Action Types

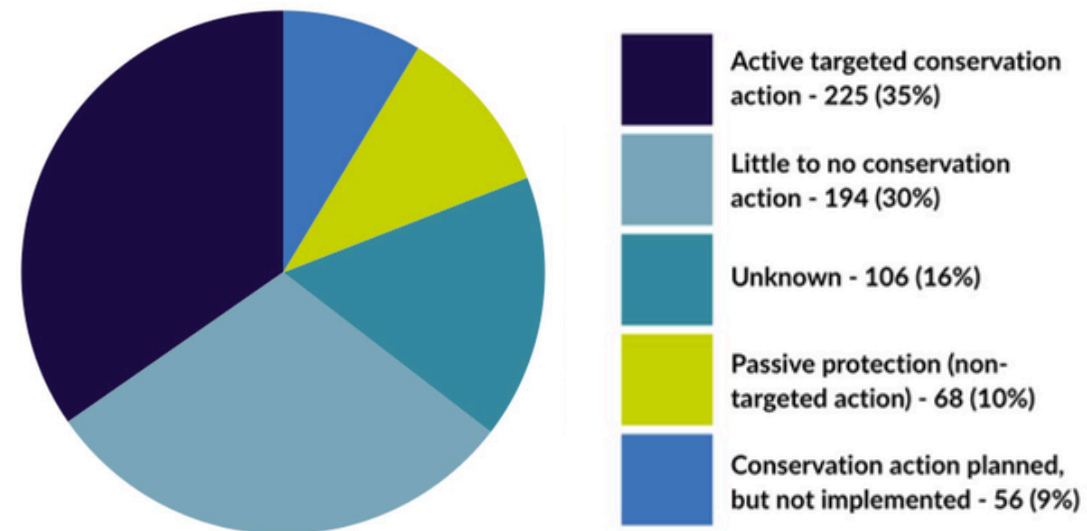
#### (multi-select was permitted for species):

- Ark-type breeding
- Community-based conservation interventions
- Community outreach and stewardship
- Conservation breeding for reintroduction
- Conservation translocation
- Direct habitat/site protection
- Engineering modifications
- Habitat quality improvement/control
- Habitat survey work and/or collection of eDNA assays
- Legislative restrictions on collection
- Unaware of specific conservation action

## CONSERVATION ACTION TYPE



## CONSERVATION ACTION PRESENCE



# RESULTS

In total, we received responses for **641 out of 766 (84%) CR Priority Fishes**. All percentages for each of the categories are rounded to the nearest whole number.

Many Critically Endangered fishes did not have comprehensive information available. Many did not have information available at all. We would like to highlight that the goal, at this stage, is not to assess the effectiveness of conservation action for each species, but rather to ascertain whether there is any action in place for each species.

### CONSERVATION ACTION TYPE (n=872) \*multiselect allowed

- 297 (34%) - Unaware of specific conservation action
- 176 (20%) - Legislative restrictions on collection
- 113 (13%) - Direct habitat/site protection
- 74 (8%) - Habitat survey work and/or collection of eDNA assays
- 51 (6%) - Community outreach and stewardship
- 43 (5%) - Conservation breeding for reintroduction
- 43 (5%) - Ark-type breeding programs
- 35(4%) - Habitat quality improvement/control
- 17 (2%) - Community-based conservation interventions
- 13 (2%) - Engineering modifications
- 10 (1%) - Conservation translocation

### CONSERVATION ACTION PRESENCE (n=641)

- 225 (35%) - Active targeted conservation action
- 194 (30%) - Little to no conservation action
- 106 (16%) - Unknown
- 68 (10%) - Passive protection (non-targeted action)
- 56 (9%) - Conservation action planned, but not implemented

# 35%

of CR Fishes are receiving targeted conservation action

# 125

Countries with conservation action data

# 70+

Experts contributed their time and knowledge

# 46%

of CR Fishes are receiving little to no, or unknown levels of conservation action

# 5

Countries have no conservation action data

# 641

CR species we collected conservation action data for

# 872

Entries of conservation action types recorded

# 60%

CR species categorised as having conservation action that are listed with none on the Red List

# 10%

CR species with passive protection (non-targetted action)

## CALL TO ACTION

While this initial effort is directed at our Critically Endangered Priority Fishes, we intend to expand this initiative for all Priority Fishes in the future. The process of collecting data on Critically Endangered fishes has informed our future approach and strategy to collect and share current data on conservation action for all Priority Fishes. These responses formed part of the first global picture of conservation efforts for freshwater fishes and support the aims of the FFSG work to mobilise conservation action for these species.

In order to collect conservation action information, we rely on sourcing and collaborating with experts with species and conservation knowledge. For the below regions, we are actively seeking contributors to help us fill in data gaps: riparian countries of the African Great Lakes, west and central Africa, and the tropical Andes

## ACKNOWLEDGEMENT OF CONTRIBUTORS

This outreach effort was made possible by local and regional experts who took the time to submit data for these species. We are incredibly grateful for their time, attention, and thoroughness to share current conservation action data for Critically Endangered freshwater fishes. We would especially like to thank the IUCN SSC Freshwater Fish Specialist Group for their support and guidance with this effort.

SHOAL would like to extend their gratitude towards the FFSG Co-Chairs: Kathy Hughes and Brian Zimmerman, the FFSG Regional Chairs: Jörg Freyhof, Dmitry Lajus, Bakhtiyor Sheraliev, Rajeev Raghavan, Junxing Yang, Katsutoshi Watanabe, Yoshinori Taniguchi, Chavalit Vidthayanon, Amirrudin (Amir) Ahmad, Heok Hui Tan, Gerry Closs, Nicolas Ling, Stephen Walsh, Topis Contreras-MacBeath, Roberto Reis, Abebe Getahun, Philippe Laleye, Jos Snoeks, Albert Chakona, Ravelomanana Tsilavina Illitch, Paul Loiselle, and experts across the globe: Aileen Anderson, Guilherme Souza, Graden Z.L. Froese, Fabrice Dufatanye, Matt Ford, Farahnaz N. Solomon, Ingo Schlupp, Dušan Jelić, Irma Popovic Dujmovic, Matthew Sloat, Pete Rand, Eva B. Thorstad, Catherine Sayer, Monni Böhm, Felipe Alonso, Carlos Luis DoNascimento, Carlos Lasso, Claudio Quezada Romegialli, Brian Dyer Hopwood, Donald Charles Taphorn Baechle, Chouly Ou, Nathaniel Ng, Bo Baxter, Felicity Edwards, Elisabeth Henschel, Catherine Sayer, Eunjin Kim, Alex Cliffe, Olabisi Atofarati, Nathan Lujan, Amy Deacon, Kirk Winemiller, Ian Harrison, Jenny Daltry, Justin Springer, Jeffrey McCrary, Claudio R. M. Baigún, Matthew Gollock, Sergio del Castillo, Ivan Mikolji, Reynaldo Estrada, Ad Konings, Julie Gagoe Tchoko, Baran Yoğurtçuoğlu, Beate Striebel-Greiter, Mark Lintermans, Jeremy Shelton, Simon Linke, Michael Hammer, Patricia Torres, Ya-Hui Zhao



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Zoo Outreach Organisation  
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# LOOKING AHEAD

2026 is set to be another pivotal year for SHOAL

The priority remains sustaining momentum in the **1000 Fishes Initiative**. Following completion of the baseline for all Critically Endangered fishes (see page 45), we will expand efforts to all remaining Priority Fishes, working with partners globally and engaging conservation organisations and experts in new regions.

We will intensify action for Priority Fishes in **Latin America and China**, identifying projects and partners to join the initiative while exploring ways to support and catalyse new conservation actions. In November 2026, SHOAL will co-host the first **Conference on the Conservation of Sulawesi's Freshwater Biodiversity** in Makassar, Indonesia. Regional and international experts will define conservation priorities and develop a plan for Sulawesi's ancient lakes, which face increasing pressure from invasive species, mining, and pollution.

Through the INSPIRE programme, we will publish a **report on the cultural significance of freshwater fishes**, featuring contributions from global partners, with a planned launch at the Convention on Biological Diversity COP in Armenia in October.

Engagement with the **aquaria trade** will advance through new collaborations with influential hobbyists, linking aquarium species to their often highly threatened wild counterparts.

A major milestone will be the **Multispecies Ex Situ Conservation Assessment** workshop in June 2026, planned and organised by New Mexico BioPark Society, SHOAL, Re:wild, the IUCN SSC Conservation Planning Specialist Group (CPSG), and the IUCN SSC Freshwater Fish Specialist Group, with additional funding made possible by the Seaworld Conservation Fund. This first-of-its-kind meeting will identify strategies and plans for Priority Fishes requiring ex situ conservation.

Also in June, SHOAL will conclude its WWF partnership on a **conservation plan for Lower Mekong** freshwater biodiversity, funded by the Swedish International Development Agency. Led by Dr Simon Linke (CSIRO), this work has involved extensive expert consultation on species status and distribution, with the final plan to be released in the second half of 2026.

Finally, over the last few years SHOAL's work has characterised by our involvement in advising on, conceiving projects for and issuing small grants to Local Action Partners, such as those provided in Southeast Asia alongside IUCN SSC Asian Species Action Partnership. SHOAL now seeks further funding to formalise and increase this facility by making an annual set of **SHOAL Awards**, comprising small grants and recognising the best efforts to conserve and protect freshwater species.



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