

16[™] INTERNATIONAL



24-28th February 2025, Lima, Peru



The Otter Specialist Group (OSG) is part of the Species Survival Commission (SSC) of the International Union for Conservation of Nature (IUCN) and has been leading global otter conservation since 1974

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The aims of the IUCN SSC OSG, as set out by the IUCN, are to:

- 1. Provide leadership for the conservation of all otter species (Lutrinae).
- 2. Determine and review on a continuing basis the status and needs of otters, and promote the implementation of necessary research, conservation and management programmes by appropriate individuals, organisations and governments.
- 3. Make known the status and conservation needs of otters, promoting the wise management of otter species.

Every three to four years, the OSG organises an International Otter Congress (IOC), bringing together experienced and new researchers from all over the globe to update knowledge and create strategies to pave the way for the future of otter conservation.

The 16th IOC was held at the Universidad Científica del Sur in Lima, with 97 registered participants representing 21 countries (Fig. 1). The Congress was sponsored by the Houston Zoo, San Diego Zoo Wildlife Alliance Peru, Universidad Científica del Sur, Ministry of the Environment of Peru, Projeto Ariranhas, Elakha Alliance, Hotel Las Palmas, ProDelphinus Peru, Nutrias de México, Conservacción and Parque de las Leyendas. A team of 16 dedicated young volunteers contributed to the seamless and successful execution of the event.

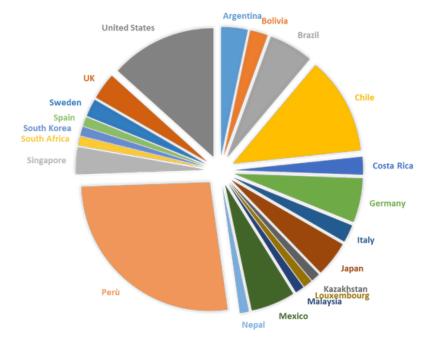


Fig. 1 - Countries represented during the 16th IOC



Fig. 2 - 16th IOC group photo

The program was articulated in seven sessions, spread throughout the five days of congress:

- Success Stories
- *In-situ* and *Ex-situ* Conservation Planning and Action
- Emerging Threats and Trade
- Conflicts and Coexistence
- "How to": Advanced Techniques for Otter Monitoring and Research
- Red List and Green Status Assessment
- Education, Communication and Networking

During the congress, we held two workshops - "Necropsy Protocols" and "eDNA Monitoring" and two Round Tables - "Peruvian OSG members and government representatives" and "IUCN SSC Otter Specialist Group Strategic Plan 2026–2030".



Fig. 3 - Necropsy workshop



Fig. 4 - eDNA workshop



Fig. 5 - Invited Speaker (Elizabeth Chadwick)

The seven sessions featured 50 oral presentations and 23 posters, including the opening lecture by Gonzalo Medina Vogel on "Long-standing otter research and conservation in Chile," as well as six invited talks:

- Klaus-Peter Koepfli: "How genetics and genomics have enriched our understanding of otter biology and phylogeny"
- Tim F. Schikora: "From exhibition to conservation pillar how the International Giant Otter Alliance makes the world's ex-situ population relevant to conservation"
- Silvio Marchini: "The rise of coexistence as a new paradigm in understanding and managing human-wildlife interactions"
- Elizabeth Chadwick: "Otter Project: Thirty years of monitoring using otters found dead"
- Magdalene Cygan: "Measuring otter recovery and conservation impact with the IUCN Green Status of species"
- Arno Gutleb: "38 years of the IUCN OSG Bulletin"



Fig. 6 and 7 - the 16th IOC in action



The round table on the "IUCN SSC Otter Specialist Group Strategic Plan 2026–2030" discussed the OSG's future targets and objectives for the next quadrennium (2026–2029), as drafted by the Co-Chairs. The 45 targets, organized under the Assess, Plan, Act, Network, and Communication components, were based on global priorities for otter conservation. These targets addressed priority species (*Lutra sumatrana, Lontra provocax*, and *Aonyx congicus*), key areas of concern (Chile, Southeast Asia, and sub-Saharan Africa), and emerging threats, including the increasing frequency and severity of climate change-related extreme events (fires, droughts, and floods), disease, novel pollutants, gold mining, ecotourism and invasive alien species. The plan also emphasized the need for genetic and disease monitoring, Green Status assessments, and capacity building for new monitoring techniques, such as genomics, environmental DNA, and artificial intelligence-based identification tools.



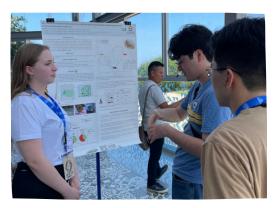


Fig. 8 Chee Yoong Woo

Fig. 9 Camilla Solari

The 16th IOC was marked by strong youth participation and initiatives led by the OSG Otter Youth Circle (OYC). The main initiatives included:

- small grants to sponsor youth
- a youth-mentor mixer with over 50 attendees
- awards for the best youth presentation and poster

The award for the best presentation went to Chee Yoong Woo for "The status and conservation effort of the hairy-nosed otter in Malaysia," while Camilla Solari received the best poster award for "Diet composition and ecological insights of sympatric populations of marine otter and American mink in the Valdivian coastal zone, Chile."







During the congress, we organised a successful silent auction that raised 1500 US dollars and a well-attended social dinner, that fostered connection and camaraderie among attendants.

The participants were also assisted in visiting both Pantanos de Villa, a Ramsar Site less than 1km from the congress venue, and Puerto Pucusana, a fishing village one hour away, for short post-congress tour outings to see the local wildlife and the elusive *Lontra felina*.



Fig. 12 - 16th IOC participants in Puerto Pucusana



Fig. 13 - Lontra felina, sighted during an outing

The OSG Management Team also discussed the future structure of the OSG, including the appointment of a new deputy chair, co-chair, and the species and working group coordinators (these updates will soon be available on the OSG website, which will be revamped in the coming months to enhance usability and provide more comprehensive information).

The closing ceremony featured a celebration honouring Co-Chair Nicole Duplaix, following her announcement that she will step down by the end of 2025. Co-Chair Anna Loy announced the establishment of the *Nicole Duplaix Otter Conservation Award*, which will be shortly described and presented during future IOCs.

The Program, Book of Abstracts and Report will be available on our website (www.otterspecialistgroup.org) and the proceedings will be published in the IUCN SSC Otter Specialist Group Bulletin and uploaded on the OSG website.

eDNA <u>Workshop</u>

The eDNA workshop was organized by **prof. Anna Loy** and **Simone Giovacchini** from *Universitá del Molise, Italy*, with the helpful contributions of Enrico Mirone, Francesco Belluardo and Pushpinder Jamwal (Universitá del Molise).

The worksop, organised only for in-person assistance, attracted 22 participants.

Prof. Loy started the event by highlighting the importance of environmental DNA to rapidly acquire information on local otter conservation status, particularly to assess the distribution of cryptic and rare otter species over large areas.

After the introduction, a lesson on the quantitative PCR approach of eDNA was led by Simone Giovacchini, aimed at defining eDNA and its ecological importance, while exploring the advantages and disadvantages of this innovative method.

Following a short coffee break, the workshop provided extensive guidelines to plan an eDNA survey campaign for large-scale monitoring of otters, from the screening of genetic databases to the extraction of eDNA. A final experience with a filtering flask and a vacuum pump showed the participants the correct procedures to filter water samples.

After the presentation, the attendees were able to ask questions and discuss any doubts they thought of with the organisers.

The workshop lasted two hours and promoted networking among otter specialists to implement eDNA-based techniques to better inform the status of poorly known species and guide international policies for otter conservation.

Necropsy Workshop

The goal of the workshop was to share existing expertise from established otter post mortem schemes in UK, Sweden and Germany, and to identify ways in which we can expand opportunities for knowledge sharing and post mortem research.

- How can we collaborate more effectively, internationally, to support post mortem examination and biobanking?
- Can network building across the IUCN (OSG, Wildlife Disease groups) help build resilient programmes that effectively contribute to conservation and environmental monitoring?

The workshop was held and organised by **Elizabeth Chadwick** (EC, Cardiff University), **Chloë Hawthorn** (CH, Cardiff University), **Simon Rohner** (SR, Frankfurt Zoo) and **Anna Roos** (AR, Swedish Natural History Museum) with the additional support of **Emily O'Rourke** (Cardiff University).

Participants were divided into four groups for discussion; groups rotated after 20 minutes of discussion. Topics discussed were:

- 1. Building an effective post mortem programme (led by SR)
- 2. Performing a necropsy (led by AR)
- 3. Data and samples (led by CH)
- 4. Impact and policy (led by EC)

Within each group, discussion was guided by the group leader, and addressed questions in four areas:

- What are we doing now?
- What are our goals / aspirations?
- What are the limitations to further development?
- How can we help overcome barriers?

Group leaders shared their experience, and asked participants to comment on each area for their own species/country. To help guide the discussion, and to collate answers we asked participants to answer questions on a printed sheet.

To conclude, a discussion was held with all participants, to summarise:

- What have we learnt?
- What are the predominant challenges/how do these vary between regions?
- Can we use this opportunity to unify our approaches/support one another?

Permission was also sought to use the findings for a paper currently in draft which aims to summarise the above topics (1-4).

Summary of the discussion: differences between countries in circumstances and feasibility were:

Building an effective post mortem programme

- Support needed in building appropriate communication channels.
- Spatial difficulties in larger countries
- Permits/bureaucracy issues in some countries (need for permitting for each animal. OSG may be able to support by providing letter of recommendation.)

Performing a necropsy

- Discussed issues with heat/preservation of carcasses
- Guidance needed re basic recording which could be achieved in field if not establishing full post mortem
- Need for clear protocol and more opportunities for knowledge transfer
- Possibility to arrange e.g. online video support

Data and samples

- Issues with heat/preservation of samples especially in areas with inconsistent power supplies
- · Lack of space and funding identified as limiting factor
- Interest in shared data sharing portal/database template
- Lack of facilities for e.g. chemical analysis in some areas, necessitating movement of samples across borders (challenges of bureaucracy)
- Guidance would be useful e.g. labelling appropriate to facilitate movement of samples
- Issues with waste disposal lack of facilities, system
- · Lack of training in e.g. GIS, data management

Impact and policy

- Most other schemes at more establishment stage, rather than policy/impact stage
- Identified need for some form of accreditation/recognition to build credibility
- Issues with instability of political regimes and management
- Issues around lack of awareness
- Shared case studies/experience would be useful

The workshop was effective and an interesting forum for sharing guidance, as well as learning about the existing work, potential, and limitations from other otter researchers. A practical workshop involving dissection would be really useful in a future IOC, considering that it had already been organised in Sweden, Denmark, and the UK. Ideally this would be pre-conference rather than during.

Peruvian OSG Members and Government Representatives Roundtable

The roundtable was organized by the local committee, led by **Joanna Alfaro** from *Universidad Científica del Sur* and *ProDelphinus*, and **Carlos Calvo Mac** from *Conservaccion*.

The event began with heartfelt words of appreciation from Carlos Calvo Mac, honoring the memory of José Pizarro, a peruvian OSG Member who passed away recently and would have contributed greatly to this event.

Following the tribute, the roundtable featured four expert presentations on otter research and conservation in Peru:

- Lady Amaro, representing *SERFOR*, discussed the progress of the National Conservation Plan for the Marine Otter (Lontra felina).
- Liliana Ayala, from *Universidad Científica del Sur*, presented her book Marine Otter Conservation (https://link.springer.com/book/10.1007/978-3-031-53931-2)
- Romina Camus, from the San Diego Zoo Wildlife Alliance Peru, addressed the impacts of alluvial mining on river otters and freshwater aquatic ecosystems.
- Rayza Calle Apolo, a park ranger from SERNANP, shared recent records of Lontra felina in the Reserva Nacional Sistema de Islas, Islotes y Puntas Guaneras.

The event attracted around 60 participants, both in-person and online.

After the presentations, an open session allowed attendees to introduce themselves and ask questions to the speakers.

Following a short coffee break, the group engaged in discussions on two preprepared questions about otter conservation in Peru.

The roundtable lasted two hours and successfully fostered an exchange of knowledge and experiences between experts and attendees. It also strengthened local engagement in the IOC, making it a valuable component for future congresses. Events like this not only promote networking among conservationists but also help encourage the development and implementation of local policies for otter conservation.

Youth-Mentor Mixer

To bring together professionals and youth up to the age of 35, a mentor mixer event was held as part of the Otter Youth Circle (OYC) coordinated activities during the 16th IOC.

The event took place on Tuesday night from 19.30-21.30pm on the terrace of Hotel Las Palmas in Miraflores, which also kindly sponsored a variety of light drinks and snacks.

Following the "speed dating method", mentors were grouped on tables according to their professional background and youth rotated between all mentors in a clockwise direction after 15 minutes of conversation. Mentors were experienced in otter conservation and research, *ex-situ* facilities, *in-situ* projects, universities, NGOs and private initiatives.

The mentors who participated were: Joanna Alfaro, Jim Bodkin, Carlos Calvo Mac, Pablo Hernandez, Heide Island, Shawn Larson, Caroline Leuchtenberger, Trevor Mcintyre, Gonzalo Medina Vogel, Melissa Savage, Tim Schikora, Tom Serfass and Alejandro Valenzuela,

With over 50 participants, the event was an enormous success, also considering it was the first that had ever been held during an IOC.

The feedback of both mentors and mentees was predominantly positive. In a relaxed atmosphere, the mentees especially had the feeling they could readily approach mentors to improve their networking skills and knowledge. As part of youth-related activities in the OSG, mentor mixer events will certainly be part of future events.











Peru















CREDITS

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Figures
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Margherita Bandini - Fig. 8, 12
Simon Rohner - Fig. 10
Gabriel Brutti - Fig. 14



Fig. 14 - Anna Loy, Nicole Duplaix and Caroline Leuchtenberger