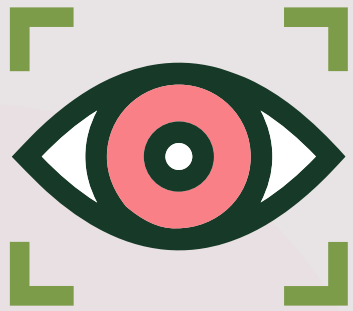


Achievements and lessons
SARDI 2023-2024



What is the work focused on?



- 1 River dolphin conservation:** we lead actions to protect and conserve river dolphins in South America, strengthening the connectivity and quality of aquatic ecosystems.
- 2 Global networking:** we foster cooperation between governments through the Conservation and Management Plan (CMP) supported by the International Whaling Commission (IWC), local communities, and international organizations, for the conservation of river dolphins and aquatic habitats.
- 3 Adaptive management:** We implement adaptive strategies to address climate change, adjusting projects and responding to events such as extreme droughts in the Amazon and Orinoquía regions.
- 4 Community empowerment:** through workshops, training, and the development of technological tools, we strengthen the capacities and skills of local communities as protectors of river dolphins and their habitats.
- 5 Applied science and citizen participation:** thanks to the monitoring of river dolphins with advanced technology, population studies, and training to prevent accidental captures in several countries, we have made progress in the conservation management of the species.
- 6 Promotion of conservation policies:** through collaboration with governments and international organizations, SARDI promotes policies for the conservation and management of protected areas and the protection of river dolphins and their habitats. This includes participation in international events and the signing of global declarations.

OUR ACHIEVEMENTS SARDI 2023-2024

ADVOCACY FOR CONSERVATION:



- The Bolivian bufeo was consolidated as an ambassador species for the conservation of its habitats.
- Three Ramsar sites (7 million hectares) were secured, one of which is the Blanco River, where management tools and a basin committee were developed.
- Also, key local stakeholders were involved in dolphin monitoring, including understanding the role of the hydrological regime and climate in dolphin population dynamics.



- With the support of the Ministry of Environment and Sustainable Development, Fundación Omacha and WWF Colombia, we conducted two estimates of river dolphin abundance in two Ramsar/OMEC sites: Tarapoto Lakes and Bitá River.
- We implemented national fisheries planning in key Ramsar sites for dolphins in Colombia, eliminating harmful practices to river dolphins and ensuring biodiversity conservation and human well-being.
- Together with Fundación Omacha, we supported the Ministry of Environment in updating the list of migratory species (including river dolphins and fish) of Colombian biodiversity and publishing a legal norm that protects them.



- We worked on the creation of an emergency network to respond to extreme weather events affecting Amazon dolphins, with the coordination of more than 23 actors at the local, state, and federal levels.
- We succeeded in positioning Amazonian dolphins as iconic species of climate change species in the region.
- We worked collaboratively with the World Bank to mitigate the impact of infrastructure projects.



- WWF Peru, together with the Pacaya Samiria National Reserve (RNPS), established a working route to promote research and conservation of river dolphins, as well as the strengthening of sustainable tourism.



- With the support of the Ministry of People's Power for Ecosocialism, the Sotalia Project, in alliance with the Omacha Foundation, WWF and Yaqu Pacha, was able to initiate the health evaluation and satellite tagging program in the Casiquiare-Río Negro watershed.



MONITORING AND EXPEDITIONS

In figures, we travelled:

Bolivia **268 km**

VI Expedition to detect population trends in the Bolivian bufeo in the Ichilo-Mamoré river.

Colombia & Venezuela **852 km**
Bi-nacional Casiquiare Expedition.

Colombia **2,594 km**

Ramsar Expeditions/OMEC Río Bitá, Ramsar/OMEC Tarapoto Lakes and Orinoco River -Humboldt route-.

Peru **210 km**

Dolphin population study in the Pacaya River.

Ecuador **614 km**

Ramsar River Dolphins 2024, Pastaza Expedition.



Brazil:

• Together with the local community, we implemented **ultrasound emitters in the Tapajós River**; the objective is to reduce the negative interaction between dolphins and fishing. With this test, we were able to identify a 40% reduction in the damage generated by gillnets. This is an important component of the Coexistence Plan that serves as a mitigation measure for dolphin-human conflict, while raising environmental awareness.



Bolivia:

• We monitored Ramsar sites to **guarantee the connectivity and quality of aquatic ecosystems**, ensuring stable populations of river dolphins.
• We assured the use of the mobile application “app BUFEO” by fishermen for permanent monitoring of Bolivian river dolphins in the Ichilo River. •The application was also introduced in the San Martín River basin (Itenez basin).



Colombia and Venezuela:

• We conducted the bi-national Casiquiare expedition (September 2023) **where we did abundance estimation and tagging of two pink river dolphins with satellite tags**.
• Thanks to the expedition in the Casiquiare River, we were able to develop a visual census of birds and preliminary sampling of fish species.



Guyana:

• We conducted **river dolphin monitoring in Rupununi**, on the Guyana-Brazil border in January, March, April, July, and August 2024.
• We recorded **47 dolphins, at seven sites during five monitoring sessions**, and detected dolphin DNA, along with 274 unique vertebrate taxa. We detected eight species of conservation concern in addition to river dolphins, including vulnerable, threatened, and endemic species from the Rupununi River.
• We observed **several juvenile river dolphins**, highlighting the importance of the Rupununi wetlands during the river dolphin reproductive period.
• We developed **multi-stakeholder workshops between community and institutions** to share results, plan conservation, and work on landscape and river dolphin management. Participants shared interest in supporting and collaborating on this project.



Peru:

• We conducted a population study in the Pacaya river together with the **Solinia association and the Pacaya Samiria National Reserve**; we recorded 77 observations in which 119 individuals were identified (69 pink dolphins -Inia geoffrensis- and 50 gray dolphins -Sotalia fluviatilis-, five of which were calves.



Colombia:

• We made **estimates of river dolphin abundance** at two Ramsar/OMEC sites: Tarapoto Lakes and Río Bitá.
• We monitored **habitats in key areas**, such as the Tarapoto Lakes and the Bitá River. These activities included monitoring and rescue techniques for stranded dolphins, intending to strengthen the capacities of local stakeholders in the conservation of these species and their habitats.
• We traveled **several rivers, such as the Guaviare and Inírida**, where transects were carried out to observe and record the presence of dolphins. These activities are fundamental to understanding the distribution and abundance of the species in their natural habitats.



Ecuador:

• During the first expedition we monitored the entire **Cuyabeno, Aguarico, Lagartococha, Napo and Yasuní Wetlands Complex (Ramsar CLY)**, in collaboration with park rangers from two protected areas (Cuyabeno and Yasuní) and the National Institute of Biodiversity (INABIO).
• We traveled 361 km, and observed 47 individuals of pink dolphins and 2 individuals of the gray dolphin species.
• The second expedition was carried out in the lower basin of the Pastaza River, this expedition was accompanied by a group of Youth monitors from the Tuna School.
• We traveled 184.3 km between the Pastaza River and its tributaries: Kapawari, Ishpingo and Bobonaza. We observed 21 individuals of pink dolphins.
• The third expedition was carried out in the Morona Santiago River, and was the first expedition to know the population status of the species in this binational basin. It was funded by the Ministry of Environment, Water and Ecological Transition (MAATE) and the Amaru Foundation. We traveled 69 km, where twenty individuals of pink dolphins were observed.
• We developed a training program aimed at technicians, park rangers, control agencies, and representatives of local communities, focused on the mitigation of illegal dolphin trafficking. We also developed a technical and legal guide to collect information from dolphins found dead or their constituent parts subject to illegal trafficking, allowing us to obtain the first tissue samples from river dolphins in Ecuador.



Venezuela:

• Two pink dolphins were rescued and moved to a safe area in **Apure state, in the plains of Venezuela**. At the same time, a health evaluation was conducted, and they were identified with satellite tags.
• Two new locations were identified where pink dolphins have been incidentally captured and hunted in the Venezuelan plains. **Awareness campaigns initiated at both locations**.

LEARNING SPACES

We strengthened technical capacities of **1,302** people Peru, Colombia and Ecuador

Workshops with fishermen and public institutions to promote good fishing practices and coexistence with river dolphins.

Ecuador

We conducted a training workshop for 15 tourist guides on responsible dolphin watching at the CLY Ramsar site. This workshop included refresher training for 15 naturalist guides, enabling them to improve their official credentials and promote sustainable tourism practices.

Ecuador and Peru

Together with WWF Peru, we developed the Binational Responsible Tourism meeting for the conservation of river dolphins where communities from the binational zone between Ecuador and Peru attended and 25 people were trained, thus forming the first bi-national network for the conservation of the species called “Dolphins without borders”.

Colombia

In lakes Tarapoto, Puerto Carreño, and the Estrella Fluvial de Inírida, we conducted workshops estimating abundance and good fishing practices with 77 strengthened participants.

Guyana

We conducted workshops to share the results of the monitoring done in Rupununi, on the border between Guyana and Brazil, with 24 participants representing indigenous communities, NGOs, and government agencies.



Peru

Solinia has achieved a total of 106 workshops (55 in 2023, 51 in 2024) in 21 different institutions, with a total of 3,149 students (1,645 in 2023, 1,504 in 2024) in Iquitos and the communities (Indiana, Mazán, Tamshiyacu, Caballococha, Nauta, San Rafael and Santa Maria de Fátima plus Buenos Aires and 20 de Enero de la RNPS). A total of 1,030 people were trained, including tourist guides, park rangers, specialists, fishermen, students and environmental authorities: Workshops were also held with fishermen and public institutions competent in fisheries and aquatic biodiversity to address good fishing practices and coexistence with river dolphins, positioning this issue on the agenda of these actors. In addition, interviews and training were conducted with tourist guides on good dolphin-watching practices, park rangers were trained in dolphin monitoring, and educational talks were given in schools.

Bolivia

We strengthened the capacities of 14 fishermen in the Itenez and Ichilo watersheds in the use of technologies and citizen science (apps, smartphones, weather stations, water quality measurements) for monitoring dolphin populations and aquatic habitats.

Brazil

In Lake Tefé, we conducted training focused on rapid response for emergency conditions, rescue, care, and release of dolphins; 20 people participated. These actions helped increase conservation awareness and improve local skills to monitor and protect river dolphins.

Venezuela

25 local stakeholders and tour guides were trained in the responsible observation of pink dolphins in the Venezuelan plains. 15 local stakeholders were trained to attend to dolphin stranding and perform dolphin and to carry out translocations in the Venezuelan plains.

14 Countries with river dolphin habitats

11 Committed Governments

The Global Declaration for River Dolphins of 2023

In an international meeting led by the Ministry of Environment and Sustainable Development of Colombia, Omacha, and WWF, 14 countries where river dolphins live, met to share experiences and create conservation strategies for the species.

The meeting closed with the declaration signing of 11 governments, who committed to stop and reverse the decline of river dolphins, strengthening their conservation and the health of rivers.

The Declaration brought a closer relationship with cooperation to strengthen and create political instruments necessary for the conservation of river dolphins, such as national regulations, the CMP led by the IWC, and a future proposal for a Ramsar resolution.

- Bolivia highlighted the importance of protected areas and their conservation.
- Brazil emphasized extreme drought and highlighted the urgency of protecting dolphins.
- Colombia supported the event and the adoption of eight priorities to accelerate conservation, and called for increased media coverage of the climate emergency in Brazil.
- Ecuador and Peru participated and endorsed the Declaration while presenting the advances in dolphin conservation in their countries.
- Venezuela signed the Declaration highlighting international collaboration.



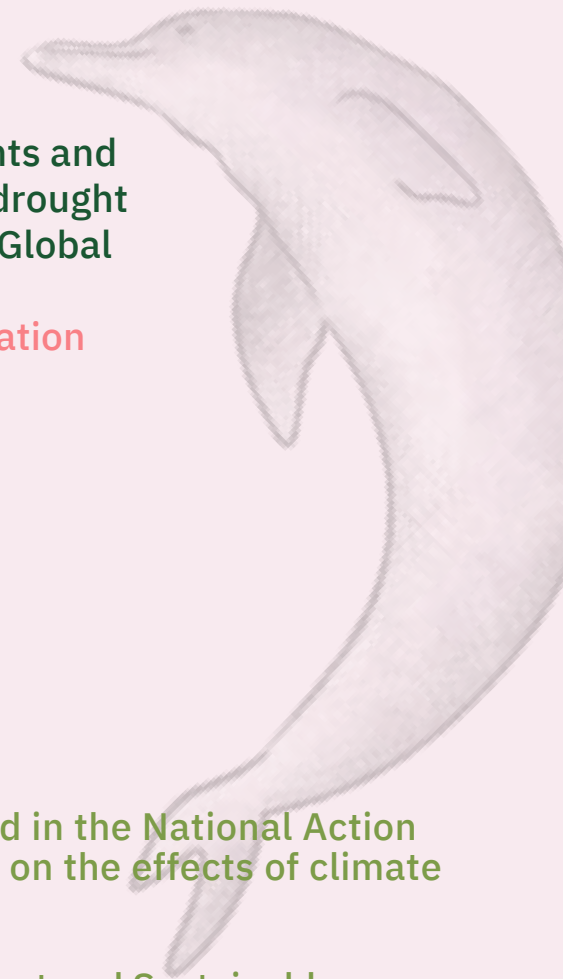
Warnings for river dolphins and their habitats

- In Colombia and Venezuela, we conducted studies that detected high levels of mercury in dolphins and fish. In Brazil, a drought alert was established for the massive death of river dolphins in the Brazilian Amazon (2023).

CLIMATE CRISIS IN THE AMAZON:

In recent years, there has been an **alarming increase in the mortality rate of Amazonian dolphins**, which has been attributed to extreme climate events, such as severe droughts and heat waves. These phenomena **have affected water temperature** and the availability of suitable habitats for these species, and in 2023 alone in Brazil, there was an extreme drought that resulted in **330 river dolphin deaths**. The crisis has captured the media's attention, which has reported extensively on the situation of the dolphins and the signing of the Global Declaration on river dolphins.

This event was a call to **action to address the impacts of climate change in the Amazon and the need to protect endangered species**. In response to the crisis, **various conservation initiatives have been implemented**, such as the creation of emergency networks to respond to extreme weather events and collaboration between multiple actors, including governments, NGOs and local communities. **These initiatives seek to mitigate the effects of climate change and protect Amazonian biodiversity**.



Our actions in the face of the crisis:



Coordinated efforts: SARDI in Brazil directs all its resources to support the Mamirauá Institute and collaborate with the federal environmental agency (ICMBio).



Fundraising: WWF-Germany is sending additional funds to purchase equipment, supplies, and water monitoring and molecular analysis tools.



Work with other regions: although no deaths were reported in other Brazilian areas (Roraima, Tapajós, Araguaia), local communities suffered from lack of access to drinking water and food.



Mitigation actions: virtual meetings and workshops to maintain stakeholder engagement and contract extensions to resume activities when possible.



Prevention strategies: in the Peruvian Amazon, we work with local communities in a collaborative approach to reduce bycatch.



Emergency response: we developed a rapid response network for dolphin-related emergencies in Brazil, ensuring an effective response to critical situations.



Preventive actions:



We advocated for an action to be included in the National Action Plan for Aquatic Mammals of the Amazon on the effects of climate change, led by WWF-Brazil.



In Colombia, the Ministry of the Environment and Sustainable Development together with the Omacha Foundation and the Humboldt Institute, made a first draft of the aimed at the rescue and recovery of aquatic animals - dolphins, manatees, otters, and caimans-threatened by extreme drought in Colombia, identifying as critical areas the Caribbean, Orinoco, and the Amazon.



In Brazil, we work collaboratively with 23 key stakeholders, such as environmental authorities, ICMBio, IBAMA, NGOs, and research centers.



WWF-Brazil and MapBioma Brazil **developed the App “Boto's Climate Emergency”**, a beta remote sensing tool to monitor water temperature in vulnerable lakes, seeking to prevent future mortality events.

We are working on developing formal protocols to address the effects of climate change on river dolphins and their habitats, which can be applied in different countries in the region. This includes adapting conservation strategies to changing conditions in protected areas.

SARDI STRENGTHS



We highlight the strong commitment of all SARDI members and the efforts of collaborative work at a regional level that aims to protect river dolphins and their habitat. Each country has made really significant efforts to continue working.

We emphasize the work with the International Whaling Commission and the governments in the development of the Management Plan (CMP), which includes the promotion of sustainable practices that benefit the health of people and the aquatic ecosystems where river dolphins live.

BOLIVIA INCREASED

knowledge of local context and relevant actors; as well as obtained reliable data from the BUFE0 app.

BRAZIL REINFORCED

relationships with governments and cooperation agencies, with the aim of developing protocols and guidelines that will support the actions defined in the International Whaling Commission's Management Plan and Brazil's National Action Plan (NAP) for Amazonian Aquatic Mammals.

COLOMBIA ESTABLISHED

a strategic alliance with the Ministry of Environment and the National Aquaculture and Fisheries Authority (AUNAP), and was very successful in implementing regional actions and fundraising.

ECUADOR STRENGTHENED

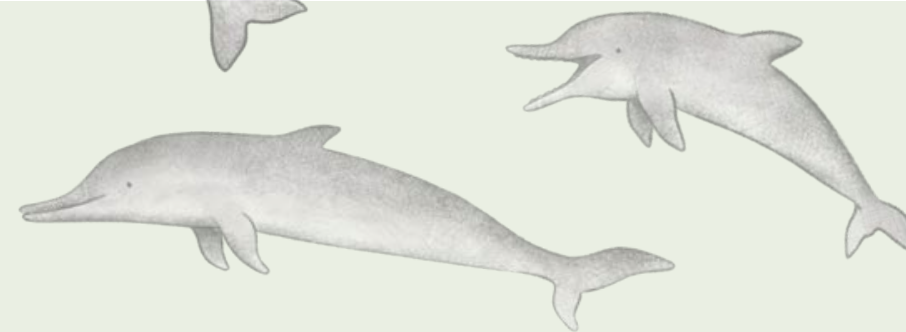
relationships with communities and authorities, and implemented activities to mitigate dolphin bycatch. As part of conservation efforts with Yasuní National Park, Ecuador's Ministry of Environment, Water and Ecological Transition (MAATE) and the National Institute of Biodiversity (INABIO), a participatory protocol was developed and implemented to prevent the trafficking of river dolphin parts and the collection of tissue samples. For the first time, pink dolphin tissue samples were obtained in the country and collected by trained personnel from the community of Martinica. Ecuador has the country's first group of experts for river dolphin conservation.

PERU WORKED

on strategic alliances with public institutions and fishermen's associations in projects in new areas such as responsible tourism and sustainable fishing programs; in collaboration with educational institutions (elementary, secondary, and universities) in the Peruvian Amazon, to strengthen knowledge about river dolphins.

VENEZUELA MOVED

on with significant institutional support for the Sotalia project and actions in line with the National Plan for the conservation of aquatic mammals.



CHALLENGES

- 1 The extreme drought in the Amazon affected the responsiveness and the execution of activities.
- 2 Motivation to work for dolphin conservation is not yet global, this is still very challenging.
- 3 Some countries present challenges in the policy mobilization to implement the roadmap of the "Global Declaration".
- 4 There is a need to coordinate the diffusion of scientific results without a political focus.
- 5 Public order made it difficult to generate actions in the field.
- 6 In other cases, tense relationships between communities delayed the work schedule.
- 7 Flow of funding and work throughout the year.



LESSONS

- 1 This year's experience challenges us to improve our emergency response capacity, and also forces us to streamline internal processes.
- 2 Adapting to extreme climate change events is key for the continuity of the project.
- 3 Reiterating clear agreements with communities and seeking written agreements is necessary.
- 4 It is important to seek additional funds to ensure SARDI's sustainability and strengthen collaborative networks in the face of climate change.



[†]The BUFE0 app allows users, mainly fishermen and tour guides, to record river dolphin sightings in a simple and user-friendly way. This includes collecting data on the number of dolphins observed, their behavior, and other relevant aspects.



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