

**CONVENTION ON
MIGRATORY
SPECIES**

UNEP/CMS/Concerted Action 15.2

English

Original: Spanish

**CONCERTED ACTION FOR
LAHILLE'S BOTTLENOSE DOLPHIN (*Tursiops truncatus gephyreus*)¹**Adopted by the Conference of the Parties at its 15th Meeting (Campo Grande, March 2026)**Proponent(s)**

Argentina, Brazil and Uruguay.

Target species, lower taxon or population, or group of taxa with common needs**Taxonomy**

- 1.1 Class: Mammalia
- 1.2 Order: Cetartiodactyla
- 1.3 Family: Delphinidae
- 1.4 Genus or species, and in this case, subspecies: *Tursiops truncatus gephyreus* (Lahille, 1908)
- 1.5 Scientific name synonyms: *Tursiops gephyreus*
- 1.6 Common names in all languages used by the CMS

Spanish: Tonina, Delfín mular, Delfín nariz de botella, Tonina común, Delfín nariz de botella de Lahille y Ferón.

English: Lahille's bottlenose dolphin, Bottlenosed dolphin, Bottlenose dolphins

Portuguese: Golfinho-nariz-de-garrafa, boto-de-Lahille, boto-da-tainha.

Geographical distribution area

The Southwest Atlantic (ASW) is home to two distinct ecotypes of bottlenose dolphins (genus *Tursiops*): One that predominantly inhabits open water, including coastal regions, and another that is limited to open coastal waters, estuaries and bays. Over the past decade, numerous studies analyzing cranial, postcranial and external morphology, as well as genetics, have led the Taxonomy Committee of the Marine Mammal Society to recognize coastal populations (ecotype) as a distinct subspecies (*Tursiops truncatus gephyreus* Lahille, 1908) (see Costa et al., 2016; Prat et al., 2023); it should be noted that, according to some evidence, this ecotype is further elevated to species status (*Tursiops gephyreus* Lahille, 1908) (see Wickert et al., 2016, Hohl et al., 2020).

¹ The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CMS Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

T. t. gephyreus (hereinafter referred to as Lahille's bottlenose dolphin) is endemic to the coastal waters of Argentina, Uruguay and southern Brazil (Costa et al., 2016, Wickert et al., 2016, Simões-Lopes et al., 2019). Within this distribution area, two different subpopulations can be found: One in southern Brazil and Uruguay, between the state of Paraná and southern Uruguay (Fruet et al., 2014; Figure 1) and another in Argentina, which extends from the south of the province of Buenos Aires to the province of Chubut (Vermeulen et al., 2017). The geographical gap between the two subpopulations is related to the estuary of the Rio de la Plata and the north coast of the province of Buenos Aires (Vermeulen et al., 2017).

Summary of activities

Activities and expected results:

1. Formation of a Steering Committee (SC) among stakeholders (government representatives, Secretariat of the Convention on the Conservation of Migratory Species of Wild Animals (CMS), Secretariat of the International Whaling Commission (IWC), non-governmental organizations) from the Lahille's bottlenose dolphin range states with a view to organizing the proposed meeting (see below). The SC shall be responsible for organizing the meeting, including seeking funding, selecting the venue and date, defining the agenda, inviting participants and all other practical and logistical aspects necessary.
2. Convening of a Conservation Policy Meeting of the range states to define an Action Plan in line with the IWC Conservation and Management Plan (CMP) of the species.

The timing, venue and duration of the meeting, as well as other parameters, will be decided in consultation with range states and the CMS Secretariat, under the coordination of the Steering Committee. The proposed dates for the meeting will be decided by the three parties.

3. Discussion and formulation of a viable Plan of Action (PoA) for the five-year period 2026-2031, including conducting an assessment of the state of Lahille's bottlenose dolphin in each of the range states.

Associated benefits

Time frame

It is recommended that the meeting of range states take place between 2026 and 2027. The SC will be responsible for defining all specific actions in consultation with range states, the CMS Secretariat, the IWC Secretariat and the IWC CMP Coordinator by the end of 2026.

Relationship with other CMS actions

The listing of this species in Appendices I and II (in CMS COP14) reflects the strong consensus and growing awareness among parties and stakeholders in range states, recognizing that its critical conservation status requires the highest priority and attention from the international community.

By including the species in Appendix II, CMS parties have already agreed that the species would benefit from an international agreement. As such, the species is included in the IWC's Conservation and Management Plan (CMP). This Concerted Action would enable the development of a short-term conservation action plan, specifically involving the *T. t. gephyreus* range states.

The CMS COP has adopted resolutions and decisions addressing the main threats to the species:

- Resolution 14.1² *Samarkand Strategic Plan for migratory species 2024 – 2032*
- Resolution 14.3 *Engagement in CBD processes, including the Global Biodiversity Framework*
- Resolution 14.4 *State of the World's Migratory Species*
- Resolution 14.5 *Reducing the risk of vessel strikes for marine megafauna*
- Resolution 14.6 *Deep-seabed mineral exploitation activities and migratory species*
- Resolution 14.9³ *Conservation priorities for cetaceans*
- Resolution 14.16⁴ *Ecological Connectivity*
- Resolution 12.22⁵ *Bycatch*
- Resolution 10.04⁶/12.20 *Marine Debris*
- Resolution 11.30⁷ *Management of Marine Debris*
- Resolution 12.13 *Important Marine Mammal Areas (IMMAs)*
- Resolution 12.14 *Marine noise*
- Resolution 11.23 (Rev.COP12)⁸ *Conservation Implications of Animal Culture and Social Complexity*
- Resolution 10.14⁹ *Bycatch of CMS-listed Species in Gillnets Fisheries*
- Resolution 10.15¹⁰ *Global Programme of Work for Cetaceans*
- Resolution 10.19¹¹ *Migratory Species Conservation in the Light of Climate Change*
- Resolution 11.26¹² *Programme of Work on Climate Change and Migratory Species*
- Resolution 10.24¹³ *Further Steps to abate Underwater Noise Pollution for the Protection of Cetacean and other Migratory Species*
- Resolution 11.10¹⁴ *Synergies and Partnerships*

This Concerted Action is aligned with the above-mentioned resolutions adopted by CMS.

As well as the renewal of the Concerted Action of the Franciscana dolphin, as its distribution over the distribution range area overlaps with Lahille's dolphin.

The IWC recently carried out a reassessment of the taxonomy of *Tursiops* worldwide validating the existence of three subspecies of the genus, among which is *Tursiops truncatus gephyreus* (IWC, 2018). In 2021, the IWC established a working group comprising researchers from the three countries of the range as well as other international specialists. The IWC69 adopted the proposal presented by Argentina, Brazil and Uruguay of the Management and Conservation Plan for Lahille's bottlenose dolphin.

² Editorial note from the Secretariat: The Resolution was revised at COP15.

³ Editorial note from the Secretariat: The Resolution was revised at COP15.

⁴ Editorial note from the Secretariat: The Resolution was revised at COP15.

⁵ Editorial note from the Secretariat: The Resolution was revised at COP15.

⁶ Editorial note from the Secretariat: The Resolution was repealed at COP12.

⁷ Editorial note from the Secretariat: The Resolution was repealed at COP12.

⁸ Editorial note from the Secretariat: The Resolution was revised at COP15.

⁹ Editorial note from the Secretariat: The Resolution was repealed at COP12.

¹⁰ Editorial note from the Secretariat: The Resolution was repealed at COP14.

¹¹ Editorial note from the Secretariat: The Resolution was repealed at COP12.

¹² Editorial note from the Secretariat: The Resolution was repealed at COP12.

¹³ Editorial note from the Secretariat: The Resolution was repealed at COP12.

¹⁴ Editorial note from the Secretariat: The Resolution was revised at COP14.

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) includes it in Appendix II, which covers species that are not necessarily threatened with extinction but could become so unless their trade is strictly controlled.

Conservation priority

The conservation of Lahille's bottlenose dolphin is an urgent priority due to its unfavorable conservation status and the high degree of threat it faces in its range in the Southwest Atlantic. This subspecies, endemic to the coastal region between southern Brazil, Uruguay and northern Argentina, presents small, fragmented populations subject to multiple anthropogenic pressures, including bycatch in small-scale coastal fishing gear (especially gillnets and purse seines), habitat degradation and pollution due to intensified coastal and port activities, as well as the increasing incidence of diseases, possibly associated with exposure to pollutants and deterioration of environmental conditions.

From the perspective of CMS, this action is aligned with the principles of urgency and the need for international cooperation for the protection of migratory species. Since these dolphins cross jurisdictional boundaries, their effective conservation requires coordination among the three range countries. The formal inclusion of this subspecies in international instruments such as CMS can catalyze improvements in management and monitoring at the national and regional levels, encouraging the development of joint actions and integrated action plans.

In addition, Lahille's bottlenose dolphin has a strong symbolic and cultural value in coastal communities, further reinforcing its importance as an iconic species. Its presence has marked the identity of localities such as Las Toninas (Argentina) and has historically been linked to traditional collaborative fishing practices in Laguna and Tramandaí (Brazil). Protecting this subspecies also means preserving a deep cultural link between people and the marine environment.

Conservation actions aimed at this subspecies would also have collateral benefits over other marine migratory taxa that share the same ecosystem, thus promoting an ecosystem approach in accordance with CMS resolutions.

In short, the urgency of its population situation, its ecological, cultural and symbolic value, and its cross-border nature make this initiative a clear conservation priority under the CMS framework.

Importance

The conservation problem facing Lahille's bottlenose dolphin is closely linked to its migration behavior and its cross-border distribution, which requires multilateral collective action. This subspecies uses coastal marine habitats along an ecological corridor that covers waters from Argentina, Uruguay and Brazil. Connectivity between these areas means that threats cannot be effectively addressed in isolation by a single country. Overfishing, bycatch in artisanal and industrial fishing nets, increased maritime traffic and chemical and noise pollution are common pressures across the region, requiring coordinated and coherent strategies at the regional level.

In this context, the proposed action directly complies with the key mandates of CMS, in particular those set out in **Appendix II**, which calls on parties to conserve migratory species and their habitats through **concerted action**. In addition, it is aligned with resolutions promoting cooperation for vulnerable migratory marine species, the implementation of **regional plans**, and the development of institutional capacities for monitoring, research and mitigation of threats.

The formal inclusion of Lahille's bottlenose dolphin under CMS instruments will facilitate the design and implementation of a **trilateral action plan**, encouraging the exchange of scientific information and capacity building, institutional strengthening, and the adoption of **good practices in fisheries management, coastal tourism and pollutant control**. It would also make the critical situation of this subspecies more visible internationally, which could attract technical and financial resources for its conservation.

In brief, the proposed action not only responds to an urgent ecological need but also meets the spirit and specific objectives of CMS, strengthening international cooperation for the benefit of this and other migratory marine species in the Southwest Atlantic.

Absence of better solutions

The proposed action responds directly to key CMS mandates:

1. **Appendix II** – Urges all parties to conserve migratory species and their habitats through **concerted action**, underlining the importance of cross-border coordination in highly mobile species.
2. **Resolution 12.17** – Promotes the conservation of whales and cetaceans in the South Atlantic through concerted regional plans.
3. **Resolution 12.14** – Establishes guidelines on the negative impacts of underwater noise on cetaceans and migratory species and recommends environmental impact assessments for maritime activities.
4. **Resolution 12.20** – Urges countries to address marine debris (lost plastics and fishing gear), which pose a threat to all migratory marine species, including dolphins.
5. **Resolution 11.23 (Rev.COP12)¹⁵** - Strongly encourages all parties to consider the role and dynamics of culturally transmitted behaviour in determining conservation measures.

Formal inclusion of this subspecies in CMS instruments would allow:

- The development of a **trilateral action plan** agreed between Argentina, Brazil and Uruguay, aligned with resolutions 12.17, 12.14 and 12.20.
- **Scientific data exchange** and joint monitoring.
- Adoption of **best fishing practices**, regression of pollutants, noise control and regulation of coastal tourism.
- **International visibility that facilitates obtaining funding and technical assistance.**

The proposed action therefore follows the core objectives and mandates of CMS by:

- Promoting **international cooperation** (Appendix II and relevant resolutions).
- Strengthening the **conservation of shared habitats** and the management of emerging threats.
- Creating synergies that will benefit not only Lahille's dolphin, but also other migratory marine species of the Southwest Atlantic.

Preparation and feasibility

The proposed action has concrete perspectives of **regional leadership, technical feasibility and funding possibilities**, which makes it feasible and enforceable in the short and medium term. There is a history of scientific cooperation and marine conservation between Argentina, Brazil and Uruguay, particularly in the academic and technical field, which lays a solid basis for the development of a **trilateral action plan**.

¹⁵ Editorial note from the Secretariat: The Resolution was revised at COP15.

Several scientific institutions and NGOs in the three countries have generated robust information on the biology, ecology and threats facing Lahille's bottlenose dolphin, allowing for a solid technical baseline. In addition, several universities, research institutes and government agencies have already expressed interest in collaborating with regional coastal cetacean conservation efforts.

In terms of funding, there are clear opportunities to access funds through:

- **International cooperation instruments**, such as the United Nations Development Programme (UNDP), the Global Environment Facility (GEF) and other multilateral mechanisms aligned with marine conservation.
- **Regional funds** for marine conservation in the South Atlantic and European Union funding lines and South-South cooperation.
- Possible **public-private partnerships** with sectors linked to responsible tourism, sustainable fisheries and environmental education programs in coastal communities.

From an operational point of view, action is feasible thanks to the existence of capacities installed in the three countries for the implementation of activities such as monitoring, community awareness, impact assessment, and adoption of mitigation measures. Existing cooperation between technical teams also facilitates the harmonization of methodologies and the development of common monitoring indicators.

Finally, the fact that Lahille's dolphin is an iconic species with strong cultural roots in coastal communities generates a favorable social environment for the implementation of conservation measures. This increases the chances of success and sustainability of long-term actions.

Taken together, these factors ensure that the proposed action is not only necessary, but also **practically feasible, technically supported and financially promising**.

Likelihood of success

The proposed action for the conservation of Lahille's bottlenose dolphin has a **high likelihood of success**, supported by a combination of favorable ecological, scientific, institutional and social factors.

From a scientific point of view, there is a **solid knowledge base** on the distribution, population structure, behavior and main threats faced by this subspecies, thanks to decades of research led by regional teams. This information allows for the design of targeted and evaluable interventions. Although certain gaps persist (e.g. the use of migration corridors or bycatch mortality rates), overall ecological uncertainty is **relatively low** for effective initial actions.

At the institutional level, the three countries involved have **technical, legal and operational capacities** to carry out the proposed actions, and there is a history of scientific cooperation and participation in multilateral forums such as the IWC and the United Nations Environment Programme (UNEP). In addition, the possible formalization of a **regional action plan** under the CMS framework will provide the necessary "mechanism" to sustain results over time, ensuring continuity through intergovernmental commitment and periodic monitoring.

Socially, the strong cultural and symbolic link of Lahille's bottlenose dolphin with coastal communities reinforces local support for conservation measures, which is key to long-term implementation and sustainability. This social component also facilitates active participation in citizen science, environmental education and community surveillance programs.

Among the **risk factors** that could limit success, the following are considered:

- **Lack of stable financial resources** or difficulties in their effective channeling.
- **Sectoral interference** that could delay the implementation of some measures.
- **Limitations in inter-agency policy coordination** among countries, which could delay concerted action or lead to inconsistencies in the implementation of measures.

However, these risks can be **mitigated** through good action plan design, early inclusion of key actors in planning, and endorsement of multilateral legal instruments such as the CMS and IWC, which promote formal commitments and structured cooperation.

In short, the action is **highly likely to lead to the expected results**, provided that a collaborative implementation is ensured, with progressive funding and with clear mechanisms for monitoring, evaluation and adaptive adjustment.

Magnitude of likely impact

The proposed action has the potential to generate a significant impact at the ecological, geographical, institutional and cultural level, with benefits that go beyond the conservation of *T. t. geophyreus*.

From a geographical and ecological perspective, the action would cover a vast coastal stretch of the **South-West Atlantic**, including coastal territorial waters of **three countries** (Argentina, Uruguay and Brazil). This would enable the protection of an essential marine corridor for multiple migratory species. In addition to Lahille's bottlenose dolphin, conservation measures would indirectly benefit **numerous other migratory marine species** – such as other coastal cetaceans (e.g. Franciscan, Southern-Right Whale), sea turtles and seabirds – that share the same habitats and face similar threats (such as bycatch, underwater noise and pollution).

In terms of **catalytic or multiplier effect**, this initiative could serve as a **replicable model** for other regions of the world with cross-border species requiring inter-state cooperation. Building a trilateral regional action plan could set precedents in terms of shared marine governance, good fishing practices, coastal tourism management and environmental education.

This action would also contribute directly to **synergies between international treaties**. Aligned with CMS objectives, it would also support commitments made by countries under the **International Whaling Commission (IWC)**, the **Convention on Biological Diversity (CBD)**, the **Agreement on Marine Biodiversity Beyond National Jurisdictions (BBNJ)**, and the **Inter-American Convention for the Protection and Conservation of Sea Turtles (CIT)**. -.

In turn, this proposal **would consolidate the Important Marine Mammal Areas (IMMAs) of the International Union for the Conservation of Nature (IUCN)** by being developed in four IMMAs (coastal waters of Santa Catarina, Paraná and São Paulo; coastal ecosystems of Southern Brazil and Uruguay; coastal corridor of marine mammals in Northern Argentina, and the North Patagonian Gulfs and the Valdés Front).

In terms of visibility and symbolic impact, Lahille's bottlenose dolphin – due to its strong cultural link with coastal communities – represents an **iconic species**, ideal for mobilizing public support, generating environmental awareness and positioning marine conservation as a regional priority. Its case can act as a **gateway** to strengthen institutional cooperation between countries and sectors (fisheries, tourism, conservation) around the sustainable management of the marine-coastal ecosystem. It will also **preserve a relationship between dolphins and artisanal fishermen** that is practically unique in the world.

In short, the action has a **wide margin of impact**: it will directly benefit multiple species and habitats, involve several countries, promote synergies between multilateral agreements, and can serve as a flagship case for **scaling collaborative marine conservation strategies** at the regional and international levels.

Cost-effectiveness

The proposed action offers **high cost-effectiveness**, considering that relatively moderate investment can generate large-scale and long-term environmental, regional and institutional impacts.

Resources needed to implement a **regional action plan for Lahille's bottlenose dolphin** include:

- **Inter-institutional and technical coordination** between Argentina, Brazil and Uruguay.
- **Monitoring and evaluation** of populations and threats using standardized methodologies.
- **Training** of key actors (technical staff, coastal communities, tour operators, fishermen).
- **Development and implementation of mitigation measures**, such as protocols to reduce bycatch and guidelines on underwater noise.
- **Public awareness campaigns and environmental education.**
- **Operational and logistical costs** for workshops, technical meetings and dissemination materials.

In comparative terms, this investment is low relative to expected benefits, which include:

- Direct protection of a vulnerable and iconic subspecies.
- Indirect benefits for another **20–30 migratory marine species** that share habitats and threats.
- **Geographical coverage covering more than 2,000 km of coastline in three countries.**
- Strengthening **regional cooperation** in marine conservation.
- **Contribution to compliance with relevant international treaties.**
- Multiplier effects on coastal communities through sustainable tourism, green employment and education.

In addition, many of the proposed activities – such as monitoring, training and institutional articulation – can be integrated into existing country programs, **optimizing already available resources** and reducing marginal implementation costs.

The possibility of co-funding through multilateral funds (GEF, CMS Small Grants Programme, EU-LAC regional cooperation, etc.) and synergies with NGOs and regional universities further reinforce the **environmental and strategic return on the investment.**

In short, it is a **relatively economic action in absolute terms**, but with a **high ecological, political and social return**, which makes it a highly cost-effective option.

Consultations planned/conducted

In order to ensure the technical coherence, political support and operational feasibility of the proposal, a series of **consultations with key actors** have been initiated or are planned in the three range countries of Lahille's bottlenose dolphin (Argentina, Brazil and Uruguay).

Activities and expected results

Activity	Results	Time frame	Responsibility	Funding
Continue investigating population dynamics	Periodic assessment of conservation status, measurement of the impact of management actions and support for decision-making oriented to long-term viability.	3 years	Argentina, Brazil and Uruguay	Funding needed
Cooperation	Generate memorandums of understanding between universities, NGOs and research institutes in Argentina, Brazil and Uruguay within the framework of the applicable agreements to establish common research programs.	3 years	Argentina, Brazil and Uruguay	No funding needed
Monitoring the dynamics of artisanal fishing and its impact on bycatch.	Continue monitoring fisheries likely to result in bycatch of <i>T.t. gephyreus</i> , including fishing characteristics (e.g. type of nets, operating season, fishing areas), including fishing effort.	3 years	Argentina, Brazil and Uruguay	Funding needed
Other threats				
Development and implementation of a comprehensive population health program within the framework of the One Health approach	Integrated population health assessment and development of standardized monitoring protocols to guide mitigation measures, strengthen health surveillance and support management decisions for the conservation of Lahille's dolphins and their habitat.	3 years	Argentina, Brazil and Uruguay	Funding needed

Activity	Results	Time frame	Responsibility	Funding
Mitigating bycatch	Develop strategies to evaluate and/or implement measures for bycatch reduction and organize meetings with decision makers to assess the most practical ways of implementing/adjusting monitoring and mitigation actions.	3 years	Argentina, Brazil and Uruguay	Funding needed
Develop a strategy to increase public awareness of the need for conservation of the species.	Continue the development of awareness campaigns about Lahille's bottlenose dolphin and its conservation problems.	3 years		Funding needed

References

- Bastida, R. and Rodríguez, D. 2003. *Mamíferos Marinos de Patagonia y Antártida*. Vazquez Mazzini Editores, Buenos Aires.
- Bezamat, C., Simões-Lopes, P.C., Castilho, P.V., Daura-Jorge, F.G. 2018. The influence of cooperative foraging with fishermen on the dynamics of a bottlenose dolphin population. *Marine Mammal Science* <https://doi.org/10.1111/mms.12565>.
- Cantor, M., Farine, D. R., and Daura-Jorge, F. G. (2023). Foraging synchrony drives resilience in human–dolphin mutualism. *Proc. Natl. Acad. Sci.* 120:e2207739120. doi: 10.1073/pnas.2207739120
- Castello, H.P. y Pinedo, M.C. 1981. Problemas de conservación de mamíferos marinos en el Atlántico Sudoccidental. Seminario Prot. Cetáceos y sus ecosist. En el hemisferio occidental. Centro Tinker/OEA, 8-12 Junio 1981, Florida, EE.UU.: 27.
- Cauhépé, M.E. 1999. Management of the Argentine hake. Final project UNU Fisheries Training Program, Reykjavic, Iceland.
- CFP (Consejo Federal Pesquero) (2016). Plan de Acción Nacional para reducir la interacción de mamíferos marinos con pesquerías en la República Argentina 2015, 1a ed., Consejo Federal Pesquero. Buenos Aires. 168 pp.
- Committee on Taxonomy. 2018. List of marine mammal species and subspecies. Available at: www.marinemammalscience.org. (Accessed: April 2023).
- Coscarella MA, Dans SL, Crespo EA, Pedraza SN (2003) Potential impact of unregulated dolphin watching activities in Patagonia. *J Cetacean Res Manag* 5:77–84
- Coscarella, M.A. and Crespo, E.A. 2009. Feeding aggregation and aggressive interaction between bottlenose (*Tursiops truncatus*) and Commerson's dolphins (*Cephalorhynchus commersonii*) in Patagonia, Argentina. *Journal of Ethology* 28: 183-187.
- Coscarella, M. A., Dans, S. L., DeGrati, M., Garaffo, G. and Crespo, E. A. 2012. Bottlenose dolphins at the southern extreme of the southwestern Atlantic: local population decline? *Journal of the Marine Biological Association of the United Kingdom* 92: 1843-1849.
- Coscarella, M., Nieto-Vilela, R., Degrati, M., Svendsen, G., Dans, S.L., González, R.A.C., Crespo, E.A. 2016. Long range movements of bottlenose dolphins *Tursiops truncatus* and its implications for the protection of a declining Evolutionary Significant Unit in the coast of Patagonia, Argentina. Report presented to the International Whaling Commission SC66b, Bled, Slovenia 2016.
- Costa, A.P.B., Fruet, P.F., Daura-Jorge, F.G., Simões-Lopes, P.C., Ott, P.H., Valiati, V.H., Oliveira, L.R. 2015. Bottlenose dolphin communities from the southern Brazilian coast: do they exchange genes or are they just neighbours? *Marine and Freshwater Research* 66: 1201-1210.
- Costa, A.P.B., Rosel, P.E., Daura-Jorge, F.G. and Simões-Lopes, P.C. 2016. Offshore and coastal common bottlenose dolphins of the western South Atlantic face-to-face: What the skull and the spine can tell us. *Marine Mammal Science* 32: 1433-1457.
- Crespo, E.A., Corcuera, J.F. and Cazorla, A.L. 1994. Interactions between marine mammals and fisheries in some coastal fishing areas of Argentina. In: Perrin, W.F., Donovan, G. and Barlow, J. (eds), *Gillnets and cetaceans*, pp. 269-282. Report of the International Whaling Commission Special Issue 15, Cambridge, U.K.
- Crespo, E.A., N.A. García, S.L. Dans & S.N. Pedraza. 2008. Mamíferos marinos. *Atlas de Sensibilidad Ambiental de la Costa y el Mar Argentino* (D. Boltovskoy, ed.) *Secretaría de Ambiente y Desarrollo Sustentable de la Nación (Proyecto ARG 02/018 "Conservación de la Diversidad Biológica y Prevención de la Contaminación Marina en Patagonia").
- Crespo, E. A., Pedraza, S. N., Dans, S. L., Alonso, M. K., Reyes, M. K., Garcia, N. A., Coscarella, M. and Schiavini, A. C. M. 1997. Direct and indirect effects of the high seas fisheries on the marine mammal populations in the northern and central Patagonian coast. *Journal of Northwest Atlantic Fishery Science* 22: 189-207.
- Daura-Jorge, F.G., Cantor, M., Ingram, S.N., Lusseau, D., Simões-Lopes, P.C. 2012. The structure of a bottlenose dolphin society is coupled to a unique foraging cooperation with artisanal fishermen. *Biology Letters* rsbl20120174.

- Daura-Jorge, F.G., Ingram, S.N., Simões-Lopes, P.C. 2013. Seasonal abundance and adult survival of bottlenose dolphins (*Tursiops truncatus*) in a community that cooperatively forages with fishermen in southern Brazil. *Marine Mammal Science* 29: 293–311.
- Demessiano, K.Z. and Barreto, A.S. 2010. Estimativa populacional de *Tursiops truncatus*, da Foz do Rio Itajaí, SC, a partir da técnica de foto-identificação e de modelos de marcação-recaptura. *Working Paper 42 presented during the First Workshop on the Research and Conservation of Tursiops truncatus: Integrating knowledge about the species in the Southwest Atlantic Ocean, 21-23 May 2010, Rio Grande, Brazil.*
- Di Giacomo, A.B., Machado, R., Martins, A.S., Ott, P.H. 2017. Patterns of occurrence and habitat use of common bottlenose dolphins in the Mampituba river and adjacent coastal waters, in southern Brazil. *Working Paper 30 presented during the second workshop on research and conservation of Tursiops in the Southwest Atlantic Ocean, 6-8 April 2017, Rio Grande, Brazil.*
- Di Tullio, J.C., Fruet, P.F., Secchi, E.R. 2015. Identifying critical areas to reduce bycatch of coastal common bottlenose dolphins *Tursiops truncatus* in artisanal fisheries of the subtropical western South Atlantic. *Endangered Species Research* 29(1): 35-50.
- Domingo, A., Bugoni, L., Prosdociimi, P., Miller, M., Laporta, P., Monteiro, D.S., Estrades, A., Albareda, D. 2006. The impact generated by fisheries on sea turtles in the Southwestern Atlantic. WWF Programa Marino para Latinoamérica y el Caribe, San José, Costa Rica.
- Domit, C., Laporta, P., Zappes, C.A., Lodi, L., Hoffman, L.S., Genoves, R., Fruet, P.F. and Azevedo, A.F. 2016. Report of the Working Group on the Behavioral Ecology of bottlenose dolphins in the Southwest Atlantic Ocean. *Latin American Journal of Aquatic Mammals* 11(1-2): 106-120.
- Failla, M., Gasparrou, C., Melcón, M., Reyes, V., Seijas, V. e Iñíguez Bessega, M. (2014). Potencialidad del avistaje costero responsable de delfines en el Estuario del Río Negro, Patagonia, Argentina. *En: Turismo y recursos naturales: los recursos naturales como base del desarrollo turístico local, importancia de la conservación y la gestión para la sustentabilidad.* Navarro, V. and Ferrari, S. (compiladores), (pp. 242-255) 1ra ed.- Río Gallegos, 9-11 de octubre de 2013. Universidad Nacional de la Patagonia Austral. E-Book.
- Failla, M., Seijas, V. A., Vermeulen, E. 2016. Occurrence of bottlenose dolphins (*Tursiops truncatus*) in the Río Negro Estuary, Argentina, and their mid-distance movements along the Northeastern Patagonian coast. *Latin American Journal of Aquatic Mammals* 11(1-2): 170-177.
- Flores, P.A. and Fountoura, N.F. 2006. Ecology of marine tucuxi, *Sotalia guianensis*, and bottlenose dolphin, *Tursiops truncatus*, in Baía Norte, Santa Catarina state, southern Brazil. *Latin American Journal of Aquatic Mammals* 5(2): 105-115.
- Franco-Trecu V., Costa P., Abud C., Dimitriadis C., Laporta P., Passadore C. and Szephegyi M. 2009. By-catch of franciscana (*Pontoporia blainvillei*) in Uruguayan artisanal gillnet fisheries: an evaluation after a twelve-year gap in data collection. *Latin American Journal of Aquatic Mammals* 7(1-2): 11-22.
- Fruet, P.F., Daura-Jorge, F.G., Möller, L.M., Genoves, R.C. and Secchi, E.R. 2015. Abundance and demography of bottlenose dolphins inhabiting a subtropical estuary in the southwestern Atlantic Ocean. *Journal of Mammalogy* 96: 332-343.
- Fruet, P.F., Kinas, P.G., da Silva, K.G., Di Tullio, J.C., Monteiro, D.S., Dalla Rosa, L., Estima, S.C. and Secchi, E.R. 2012. Temporal trends in mortality and effects of by-catch on common bottlenose dolphins, *Tursiops truncatus*, in southern Brazil. *Journal of the Marine Biological Association of the United Kingdom* 92(8): 1865-1876.
- Fruet, P.F., Secchi, E.R., Daura-Jorge, F., Vermeulen, E., Flores, P.A.C., Simões-Lopes, P.C., Genoves, R.C., Laporta, P., Di Tullio, J.C., Freistas, T.R.O., Dalla Rosa, L., Valiati, V.H., Beheregaray, L.B., Möller, L.M. 2014. Remarkably low genetic diversity and strong population structure in common bottlenose dolphins (*Tursiops truncatus*) from coastal waters of the Southwestern Atlantic Ocean. *Conservation Genetics* 15: 879-895.
- Fruet, P.F., Secchi, E.R., Di Tullio, J.C., and Kinas, P.G. 2011. Abundance of bottlenose dolphins, *Tursiops truncatus* (Cetacea: Delphinidae), inhabiting the Patos Lagoon estuary, southern Brazil: Implications for conservation. *Zoologia* 28: 23-30.
- Fruet, P.F., Secchi, E.R., Di Tullio, J.C., Simões-Lopes, P.C., Daura-Jorge, F., Costa, A.P.B., Vermeulen, E., Flores, P.A.C., Genoves, R.C., Laporta, P., Beheregaray, L.B. & Möller,

- L.M. 2017. Genetic divergence between two phenotypically distinct bottlenose dolphin ecotypes suggests separate evolutionary trajectories. *Ecology and Evolution* 7: 9131-9143.
- Fruet, P.F., Daura-Jorge, F. Laporta, P. et al. 2023. Progress report on the research and conservation of Lahille's bottlenose dolphins – 2022. Paper presented during the Scientific Committee Meeting of the IWC, Bled, Slovenia.
- Fundación Vida Silvestre Argentina y Museo Argentino de Ciencias Naturales "Bernardino Rivadavia". 1985. Conclusiones: Primera reunión de trabajo de expertos en Mamíferos Acuáticos de América del Sur. 25-29 junio 1984, Buenos Aires, Argentina:86-92.
- Giacomo, A.B. and Ott, P.H. 2016. Long-term site fidelity and residency patterns of bottlenose dolphins (*Tursiops truncatus*) in the Tramandaí Estuary, southern Brazil. *Latin American Journal of Aquatic Mammals* 11: 155-161.
- Goodall, R.N.P. 1989. The lost whales of Tierra del Fuego. *Oceanus* 32: 89-95. Goodall, R. N. P., Marchesi, M. C., Pimper, L. E., Dellabianca, N., Benegas, L. G., Torres, M. A. and Ricciardelli, L. 2011. Southernmost records of bottlenose dolphins, *Tursiops truncatus*. *Polar Biology* 34: 1085-1090.
- Hemprich, C. G. and Ehrenberg W. F. 1832. *Symbolae Physicae Mammalia*, 2. Berlin. (Description in footnote by Ehrenberg on last page of unpaginated fascicle headed *Herpestes leucurus* H. et E. Two versions of this work were published in 1832, one with and one without the footnote; it is not known which appeared first).
- Heras, M.P. 1991. Tonina. En H.L.Capozzo y M.Junín(Eds) Estado de Conservación de los Mam. Marinos del Atlántico Sudoccidental. *Informes y Estudios del Programa de Mares Regionales del PNUMA No138*: 54-57.
- Hevia, M, Iñíguez Bessega, M.A., Reyes Reyes, M.V., Zuazquita, E.P. (2022). A review of marine protected areas in Argentina and their overlap with current cetacean distribution. A Report prepared for OceanCare. May 2022. 83p.
- Ilha E.B., Serpa N.B., Santos P.G.F., Heissler V.L., Dorneles D.R., Camargo Y.R., Santos B., Rigon C.T., Santos M.L., Gass C.M., Calabrezi R., Kindel E.A.I., Moreno I.B. 2018. Guia de apoio pedagógico para educadores: interação entre pescadores, botos e tainhas: aprendizados sobre cooperação, tradição e cultura. *Editora da UFRGS. Porto Alegre*: 90.
- International Whaling Commission. 2018. Report of the Scientific Committee. *Bled, Slovenia, 24-April - 6 May 2018*.
- IUCN. 2001. *IUCN Red List Categories and Criteria: version 3.1*. IUCN Species Survival Commission. IUCN, Gland, Switzerland and Cambridge, UK.
- IUCN. 2012. *IUCN Red List Categories and Criteria: Version 3.1*. Species Survival Commission. IUCN, Gland, Switzerland and Cambridge, UK.
- IUCN. 2019. The IUCN Red List of Threatened Species. Version 2019-3. Available at: www.iucnredlist.org. (Accessed: 10 December 2019).
- Lahille, F. 1908. Nota sobre un Delfin (*Tursiops gephyreus*). *Anales del Museo Nacional de Buenos Aires* XVI: 347-365.
- Laporta, M., Miller, P., Ríos, M., Lezama, C., Bauzá, A., Aisenberg, A., Pastorino, Ma.V. and Fallabrino, A. 2006. Conservación y Manejo de Tortugas Marinas en la Zona Costera Uruguaya. In: Ministerio do Meio Ambiente – Portaria 148, de 7 de junho de 2022. 2022. <https://www.in.gov.br/en/web/dou/-/portaria-mma-n-148-de-7-de-junho-de-2022-406272733>
- Menafrá, R., Rodríguez-Gallego, L., Scarabino, F. and Conde, D. (eds), *Bases para la Conservación y Manejo de la Costa Uruguaya*, pp. 668. VIDA SILVESTRE URUGUAY, Montevideo.
- Laporta, P. 2009. Abundância, distribuição e uso do habitat do boto *Tursiops truncatus* em La Coronilla e Cabo Polonio (Rocha, Uruguai). Universidade Federal de Rio Grande.
- Laporta, P., Fruet, P.F., Secchi, E.R. 2016a. First estimate of common bottlenose dolphin (*Tursiops truncatus*) (Cetacea, Delphinidae) abundance off Uruguayan Atlantic coast. *Latin American Journal of Aquatic Mammals* 11: 144-154.

- Laporta, P., Fruet, P.F., Siciliano, S., Flores, P.A.C., Loureiro, J.D. 2016c. Report of the Working Group on the Biology and Ecology of *Tursiops truncatus* in the Southwest Atlantic Ocean. *Latin American Journal of Aquatic Mammals* 11(1-2): 62-70.
- Laporta, P., Martins, C.C.A., Lodi, L., Domit, C., Vermeulen, E., Di Tullio, J.C. 2016b. Report of the Working Group on Habitat Use of *Tursiops truncatus* in the Southwest Atlantic Ocean. *Latin American Journal of Aquatic Mammals* 11: 47-61. Laporta, P.; P.F. Fruet; R.C Genoves; J.C. Di Tullio; C. Menchaca; E.R. Secchi.
2017. Movements of bottlenose dolphins between southern Brazil and Uruguay: an update. II International Workshop of the research and conservation of *Tursiops* spp. In the Southwest Atlantic Ocean. Cassino, Rio Grande do Sul, Brasil 06-08 April 2017.
- Lázaro, M. and Praderi, R. 2000. Problems and status of species in Uruguay. In: Hucke- Gaete, R. (ed.), *Review of the conservation status of small cetaceans in southern South America*, pp. 24.
- UNEP/CMS Secretariat, Bonn.
- Lercari, D., Defeo, O. 1999. Effects of freshwater discharge in sandy beach populations: the mole crab *Emerita brasiliensis* in Uruguay. *Estuarine, Coastal and Shelf Science* 49(4): 457-468. Lichter, A. 1992. *Huellas en la arena, sombras en el mar*. Terra Nova, Buenos Aires.
- Lodi, L., Domit, C., Laporta, P., Di Tullio, J.C., Martins, C.C.A., Vermeulen, E. 2017. Report of the Working Group on the Distribution of *Tursiops truncatus* in the Southwest Atlantic Ocean. *Latin American Journal of Aquatic Mammals* 11(1-2): 29-46.
- Marcovecchio, J.E., Gerpe, M.S., Bastida, R., Rodríguez, D.H. and Morón, S.G. 1994. Environmental contamination and marine mammals in coastal waters from Argentina: an overview. *Science of the Total Environment* 154: 141-151.
- Marcovecchio, J.E., Moreno, V.J., Bastida, R., Gerpe, M.S., Rodríguez, D.H. 1990. Tissue distribution of heavy metals in small cetaceans from the southwestern Atlantic Ocean. *Marine Pollution Bulletin* 21: 299-304.
- Mendes, M. 2017. Residence, site fidelity and abundance estimate of a coastal common bottlenose dolphin (*Tursiops truncatus*) population in southern Brazil. Georg-August Universität.
- Milman, L., Danilewicz, D., Machado, R., Santos, R.A.D., Ott, P.H. 2016. Feeding ecology of the common bottlenose dolphin, *Tursiops truncatus*, in southern Brazil: analyzing its prey and the potential overlap with fisheries. *Brazilian Journal of Oceanography* 64(4): 415-422. Montagu, G. 1821. Description of a species of *Delphinus*, which appears to be new. *Memoirs of the Wernerian Natural History Society* 3: 75-82.
- Moreno, I.G., Ott, P.H., Tavares, M., Oliveira, L.R., Borba, M.R., Driemeier, D., Nakashima, S.B., Heinzemann, L.S., Siciliano, S., Van Bresse, M.F. 2008. Mycotic dermatitis in common bottlenose dolphins (*Tursiops truncatus*) from southern Brazil, with a confirmed record of lobomycosis disease. *Paper SC/60/DW1 presented to the International Whaling Commission Scientific Committee, Santiago del Chile, 30 May–27 Jun 2008*.
- Moreno, V. J., Pérez, A., Bastida, R. O., Aizpún de Moreno, J. E., & Malaspina, A. M. 1984. Distribución del mercurio total en los tejidos de un delfín nariz de botella (*Tursiops geophysus* Lahille, 1908) de la provincia de Buenos Aires (Argentina). *Revista de Investigación y Desarrollo Pesquero* 4: 93-102.
- Passadore, C., Domingo, A. and Secchi, E.R. 2015. Analysis of marine mammal bycatch in the Uruguayan pelagic longline fishery operating in the Southwestern Atlantic Ocean. *ICES Journal of Marine Science* 72(5): 1637-1652.
- Pilleri, G. and Gahr, M. 1972. Record and taxonomy of *Tursiops geophysus* (Lahille 1908) from Playa Coronilla Uruguay. *Investigations on Cetacea* 4: 173-181.
- Pinedo, M.C. 1982. Análise dos Conteúdos Estomacais de *Pontoporia blainvillei* (Gervais e D'Orbigny, 1844) e *Tursiops geophysus* (Lahille, 1908) (Cetacea, Platanistidae e Delphinidae) na Zona Estuarial e Costeira de Rio Grande, RS, Brasil. Institute of Oceanography, Federal University of Rio Grande.
- Praderi, R. 1985. Incidental mortality of dolphins (*Pontoporia blainvillei*) in Uruguay. *National Geographic Society Research Reports* 21: 395-403.

- Praderi, R. 2000. Estado actual de la mortalidad de Franciscana en las pesquerías artesanales de Uruguay. In: UNEP/CMS (eds) *Report of the Third Workshop for Coordinated Research and Conservation of the Franciscana Dolphin (Pontoporia blainvillei) in the Southwestern Atlantic*, pp. 13-15. UNEP/CMS, Bonn.
- Reif, J.S., Peden-Adams, M.M., Romano, T.A., Rice, C.D., Fair, P.A., Bossart, G.D. 2009. Immune dysfunction in Atlantic bottlenose dolphins (*Tursiops truncatus*) with lobomycosis. *Medical Mycology* 47: 125-135.
- Righetti, B.P.H. 2018. Respostas bioquímicas e moleculares e sua relação com contaminantes orgânicos em botos-da-tainha (*Tursiops truncatus*) residentes no sul do Brasil. Universidade Federal de Santa Catarina.
- Romero, M.A., Fernández, M., Dans, S.L., García, N.A., González, R., Crespo, E.A. 2014. Gastrointestinal parasites of bottlenose dolphins *Tursiops truncatus* from the extreme southwestern Atlantic, with notes on diet composition. *Diseases of Aquatic Organisms* 108: 61-70.
- Sacristán, C., Réssio, R.A., Castilho, P., Fernandes, N.C.C.D.A., Costa-Silva, S., Esperón, F., Daura-Jorge, F.G., Groch, K.R., Kolesnikovas, C.K. & Marigo, J. 2016. Lacaziosis-like disease in *Tursiops truncatus* from Brazil: a histopathological and immunohistochemical approach. *Diseases of Aquatic Organisms* 117: 229- 235.
- Sauco, S., Eguren, G., Heinzen, H., Defeo, O. 2010. Effects of herbicides and freshwater discharge on water chemistry, toxicity and benthos in a Uruguayan sandy beach. *Marine environmental research* 70(3-4): 300-307.
- Secchi, E. -R., Botta, S., Weigand, M.M., Lopez, L.A., Fruet, P.F., Genoves, R.C., Di Tullio, J.C. 2016. Long-term and gender-related variation in the feeding ecology of common bottlenose dolphins inhabiting a subtropical estuary and the adjacent marine coast in the western South Atlantic. *Marine Biology Research (Print)* <https://doi.org/10.1080/17451000.2016.1213398>.
- Simões-Lopes, P.C. 1991. Interaction of coastal populations of *Tursiops truncatus* (Cetacea, Delphinidae) with the mullet artisanal fisheries in Southern Brazil. *Biotemas* 4(2): 83-94.
- Simões-Lopes, P.C. and Fabian, M.E. 1999. Residence patterns and site fidelity in bottlenose dolphins, *Tursiops truncatus* (Montagu) (Cetacea, Delphinidae) off Southern Brazil. *Revista Brasileira de Zoologia* 16: 1017-1024.
- Simões-Lopes, P.C. and Ximenez, A. 1993. Annotated list of the cetaceans of Santa Catarina coastal waters, southern Brazil. *Biotemas* 6(1): 67-92.
- Simões-Lopes, P.C., Fabián, M.E., Menegheti, J.O. 1998. Dolphin interactions with mullet artisanal fishing on southern Brazil: a qualitative and quantitative approach. *Revista Brasileira de Zoologia* 15: 709-726.
- Simões-Lopes, P.C., Paula, G.S., Both, M.C., Xavier, F.M., Scaramello, A.C. 1993. First case of lobomycosis in a bottlenose dolphin from southern Brazil. *Marine Mammal Science* 9: 329-331.
- Taylor, B.L., Chivers, S.J., Larese, J. and Perrin, W.F. 2007. *Generation length and percent mature estimates for IUCN assessments of cetaceans*. Southwest Fisheries Science Center. *Administrative report LJ-07-01, 18pp. (DRAFT)*.
- Van Bresseem, M.-F., Simões-Lopes, P.C., Félix, F., Kiszka, J.J., Daura-Jorge, F.G., Avila, I.C., Secchi, E.R., Flach, L., Fruet, P.F. & Du Toit, K. 2015. Epidemiology of lobomycosis-like disease in bottlenose dolphins *Tursiops* spp. from South America and southern Africa. *Diseases of aquatic organisms* 117(1): 59-75.
- Van Bresseem, M.F., Van Waerebeek, K., Reyes, J.C., Felix, F., Echegaray, M., Siciliano, S., Di Benedetto, A. P., Flach, L., Viddi, F., Avila, I. C., Bolaños, J., Castineira, E., Montes, D., Crespo, E., Flores, P.A.C., Haase, B., Souza, S.M.F.M., Laeta, M., Fragoso, A.B. 2007. A preliminary overview of skin and skeletal diseases and traumata in small cetaceans from South American waters. *The Latin American Journal of Aquatic Mammals* 6: 7-42.
- Vermeulen, E. 2017. Intertidal habitat use of bottlenose dolphins (*Tursiops truncatus*) in Bahía San Antonio, Argentina. *Journal of the Marine Biological Association of the United Kingdom* <https://doi.org/10.1017/S0025315417000856>.

- Vermeulen, E., Fruet, P., Costa, A., Coscarella, M. & Laporta, P. 2019. *Tursiops truncatus*ssp. *gephyreus*. The IUCN Red List of Threatened Species 2019: e.T134822416A135190824. <http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T134822416A135190824.en>
- Vermeulen, E., Balbiano, A., Beleguer, F., Colombil, D., Failla, M., Intriери, E., Bräger, S. 2016. Site-fidelity and movement patterns of bottlenose dolphins in central Argentina: essential information for effective conservation. *Aquatic Conservation*. DOI: 10.1002/aqc.2618
- Vermeulen, E. 2018. Association patterns of bottlenose dolphins (*Tursiops truncatus*) in Bahía San Antonio, Argentina. *Marine Mammal Science* 34(3): 687-700.
- Vermeulen, E., and Bräger, S. 2015. Demographics of the Disappearing Bottlenose Dolphin in Argentina: A Common Species on Its Way Out? . *PLoS ONE* 10(3): e0119182. doi:10.1371/journal.pone.0119182.
- Vermeulen, E., Bastida, R., Berninson, L.G., Bordino, P., Failla, M., Fruet, P., Harris, G., Iñíguez, M., Marchesi, M.C., Petracchi, P., Reyes, L., Sironi, M. and Bräger, S. 2017. A review on the distribution, abundance, residency, survival and population structure of coastal bottlenose dolphins in Argentina. *Latin American Journal of Aquatic Mammals* 12(1-2): 2-16.
- Vermeulen, E., Holsbeek, L., Das, K. 2015. Diurnal and Seasonal Variation in the Behaviour of Bottlenose Dolphins (*Tursiops truncatus*) in Bahía San Antonio, Patagonia, Argentina. *Aquatic Mammals* 41(3): 272- 283.
- Vermeulen, E.; Failla, M.; Loizaga de Castro, R. Romero, M. A., Svendsen, G.; Coscarella, M. A.; Cáceres-Saez, I.; Bastida, R.; Dassis, M. 2019. *Tursiops gephyreus*. En: SAyDS–SAREM (eds.) Categorización 2019 de los mamíferos de Argentina según su riesgo de extinción. Lista Roja de los mamíferos de Argentina. Versión digital: <http://cma.sarem.org.ar>.
- Vermeulen, E., Fruet, P., Costa, A., Coscarella, M. & Laporta, P. 2019. *Tursiops truncatus*ssp. *gephyreus*. The IUCN Red List of Threatened Species 2019: e.T134822416A135190824. <http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T134822416A135190824.en>
- Wickert, J.C., von Eye, S.M., Oliveira, L.R., Moreno, I.B. 2016. Revalidation of *Tursiopsgephyreus* Lahille, 1908 (Cetartiodactyla: Delphinidae) from the southwestern Atlantic Ocean. *Journal of Mammalogy* 97(6): 1728-1737.
- Würsig, B., and Würsig, M. 1977. The photographic determination of group size, composition, and stability of coastal porpoises (*Tursiops truncatus*). *Science* 198(4318): 755-756.