



The Humboldt Penguin Can Survive If We Choose to Act

- Science – Environmental Education – Advocacy -

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Sphenisco – Conservation of the Humboldt-Penguin

Sphenisco is a non-profit organization based in Landau, Germany. In 2024, the organization founded Fundación Sphenisco Chile. The mission of both organizations is to prevent the extinction of the Humboldt penguin.

Research Supported by Sphenisco

Breeding population in Chile	Surveys conducted on the seven most important breeding islands (2021/22 vs. 2025): 63% decline, from 2,443 breeding pairs to 910. A. Simeone (1) (2)	Foraging in Chile	Study using GPS tracking and, for the first time, underwater cameras: – Data on diet – Data on hunting behaviour – Overlap of foraging areas with fishing activities – Bycatch risk much greater than previously assumed P. Acre (1) (2) (3), I. Bastias-Aguilar (1), U. Ellenberg (4), K. Lau (5), T. Mattern (4)
Breeding Success in Chile	Monitoring 2021/2022 vs. 2024/2025 on the breeding islands of Chañaral and Choros: Decline in breeding success by 47.45% on Chañaral and by 58.04% on Choros. G. Luna-Jorquera et al. (5)	Breeding Success in Peru	Monitoring (using drones) 2022 vs. 2024/25 on the Ballestas Islands: – Decline in breeding pairs: 56.45% – Decline in active nests: 40.34% – Higher breeding success: 0.8 vs. 1.28 per active nest despite avian influenza and El Niño. Milagros Ormeño B. (6)

Environmental Education Supported by Sphenisco

Chile	Since 2010, environmental education and advocacy by Nancy Duman B. and Fundación Sphenisco Chile in the Coquimbo and Atacama regions. Great public attention through literary competitions as well as a textbook and a photo exhibition about the Humboldt Archipelago.	Peru	Since 2010, environmental education in the provinces of Pisco, Chincha, Nazca, Ica and Lima by the NGO Acorema. Approximately 2,500 students and about 70 teachers are reached each year.
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Advocates for Nature

	Through research, education and advocacy together with stakeholders, the destruction of important ecosystems has been prevented and their protection improved: – In 2010, three coal-fired power plants and, to date, two loading ports in the immediate vicinity of the Humboldt Archipelago were prevented. – In 2023, the Humboldt Archipelago was declared a Marine Protected Area. – In 2024, the National Plan for the Conservation of the Humboldt Penguin was adopted. The plan has the force of law. – In 2026, the Humboldt penguin was declared a Natural Monument. The current government has suspended the declaration indefinitely. Fundación Sphenisco Chile and Acorema are currently informing political decision-makers and the public about the critical situation and are appealing for improved protection in the short term.
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Academic sources
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Ellenberg, U. (4). 2026. Living with the enemy: Humboldt penguins appear to defy fisheries and coastal development in central Chile. Presentation IPC12.
Lau, K. (5). 2026. Same trait, different cost: scale-dependent variation in foraging ecology and reproductive performance of the Humboldt penguin. Doctoral thesis in progress.
Luna-Jorquera G. (5). Interview 29 May 2026
Mattern, T. (4). 2026. From linear foraging to seabed mining, from marathon to super-charged penguins - 25 years of penguin research in Aotearoa New Zealand Keynote presentation IPC12.
Milagros Ormeño B. (6). 2026. Impact of El Niño and avian influenza on population dynamics and reproductive success in the Humboldt penguin (Spheniscus humboldti) colony of the Ballestas Islands, Peru.
Simeone, A. (1) (2), P. Arce (1) (2) (3), M. Dalgre (2), U. Ellenberg (4), T. Mattern (4). 2026. Size of the breeding population of the Humboldt penguin on islands in north-central Chile (2024/2025). Final report, Proyecto Sphenisco. Santiago, Chile. 18 pp.
Simeone, A. (1) (2). 2026. Declining Humboldt penguins in Chile: trends, possible causes and future perspectives. Presentation IPC12.

Institutions
(1) U. Andrés Bello, (2) Humboldt Penguin Research Group. Santiago, Chile, (3) U. Santo Tomás, (4) U. Otago, (5) Catholic U. of the North, (6) NGO Acorema, Peru.

