

https://marineobserver.org

Connecting the dots 36 U EUROPEAN SOCIETY VIGATING WATERS OF CHANGE AZORES 2025

Virginie Wyss, Arnaud Conne, Laurent Bouveret, Frederick Wenzel, Pedro López Suarez, Liliana Betancourt, Kim Beddall, Jodi Frediani, Tanya Lubansky, Lindsey S. Jones, Valerie Chosson.



ATLAS

EXPEDITIONS



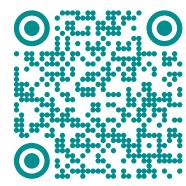








Glacialis Expedition's 11'000 km itinerary



ET-15

For more than 52 years, the **North Atlantic Humpback Whale Catalog** (NAHWC) has identified more than **12,000 humpback whale** (Megaptera novaeangliae) individuals based on their fluke ventral side pattern (Smith et al, 1999).

In recent years, **Atlas Expeditions** (NGO) coordinated **two expeditions off the western coast of Greenland** : the **Glacialis** expedition in 2021 & the **SILA** expedition in 2023.

> A total of 48 humpback whale individuals were identified: 25 during the Glacialis expedition and 23 during the Sila expedition.

> 5 feeding grounds located in the Arctic and sub-Arctic waters (namely Norway and Iceland in the Eastern North Atlantic, and West Greenland, Canada and the Gulf of Maine in the western North Atlantic)

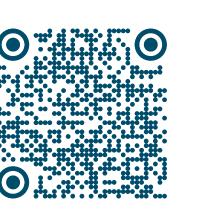
> 3 breeding grounds located in the tropical waters of the North Atlantic ocean (namely the Cabo Verde Islands (CVI) for the East, and the Lesser Antilles and the Greater Antilles for the West) have been identified.

Based on historical data, their interconnectivity follows a clear pattern:

> The Western feeding grounds have connection with only the Western breeding grounds.

> The Eastern feeding grounds have connection with all known breeding grounds on both sides of the North Atlantic Ocean (Jones et al, 2025).

Read the article: **« Ocean basin-wide movement** patterns of North Atlantic humpback whales ».



> All data collected were shared with a team of international scientists.

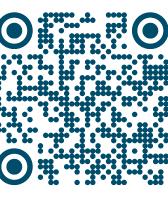
We report here, **9 connections between the West Greenland feeding ground and all the known breeding grounds of the North Atlantic** (Recapture rate of 18 %), Samana Bay and the Silver Bank for the Greater Antilles, Guadeloupe for the Lesser Antilles and the endangered breeding population of CVI. **Visit poster AD82** for more details !

« This case emphasizes the importance of citizen science and NGO support in data collection in a rapidly changing environment. »

Our **knowledge of West Greenland humpback whale migratory dynamics has been challenged by these expeditions**, as is our understanding of the humpback whale migration patterns in the North Atlantic Ocean.



**« Latitudes of Change »** Documentary movie trailer !





## **Affiliations:**

Virginie Wyss - Marine Observer, Switzerland | Arnaud Conne - Atlas Expeditions, Switzerland | Laurent Bouveret - OMMAG, Guadeloupe | Frederick Wenzel - Allied Whale, USA | Pedro López Suarez - BIOS, Cape Verde | Liliana Betancourt | Kim Beddall | Jodi Frediani | Tanya Lubansky - Allied Whale, USA | Whale, USA | Lindsey S. Jones - Allied Whale, USA | Valerie Chosson - Marine and Freshwater Research Institute, Iceland

## Acknowledgements:

Expedition **GLACIALIS 2021**: Matthew Ryle, Richard Mardens, Laurence Tremblay, Mathieu Marzelière, Virginie Wyss, Arnaud Conne. Expeditions **SILA 2023**: Angie Garz, Alex Mansfield, Richard Mardens, Arnaud Conne, Hervé Krummenacher, Roman Hapka, Claude, Fayet, Marina Fayet, Jérôme Smyrliadis, Pascal Chollet, François Biéler, David Christen, Daniel Cueroni. We would like to highlight the commitment of the entire volunteer team who took part in the projects, as well as the many individuals who supported these initiatives. Their conviction and determination to bring about change have borne fruit.