WhaleMap Update

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Anderson Cabot Center for Ocean Life at the New England Aquarium

North Atlantic Right Whale Consortium Meeting | November 16, 2026

New England Aquarium
Protecting the blue planet

What is WhaleMap?

An open-source software system for collating and displaying right whale survey data in near real-time

Aggregate

Brings together all right whale survey results

Disseminate

Shows the results online and shares approved feeds

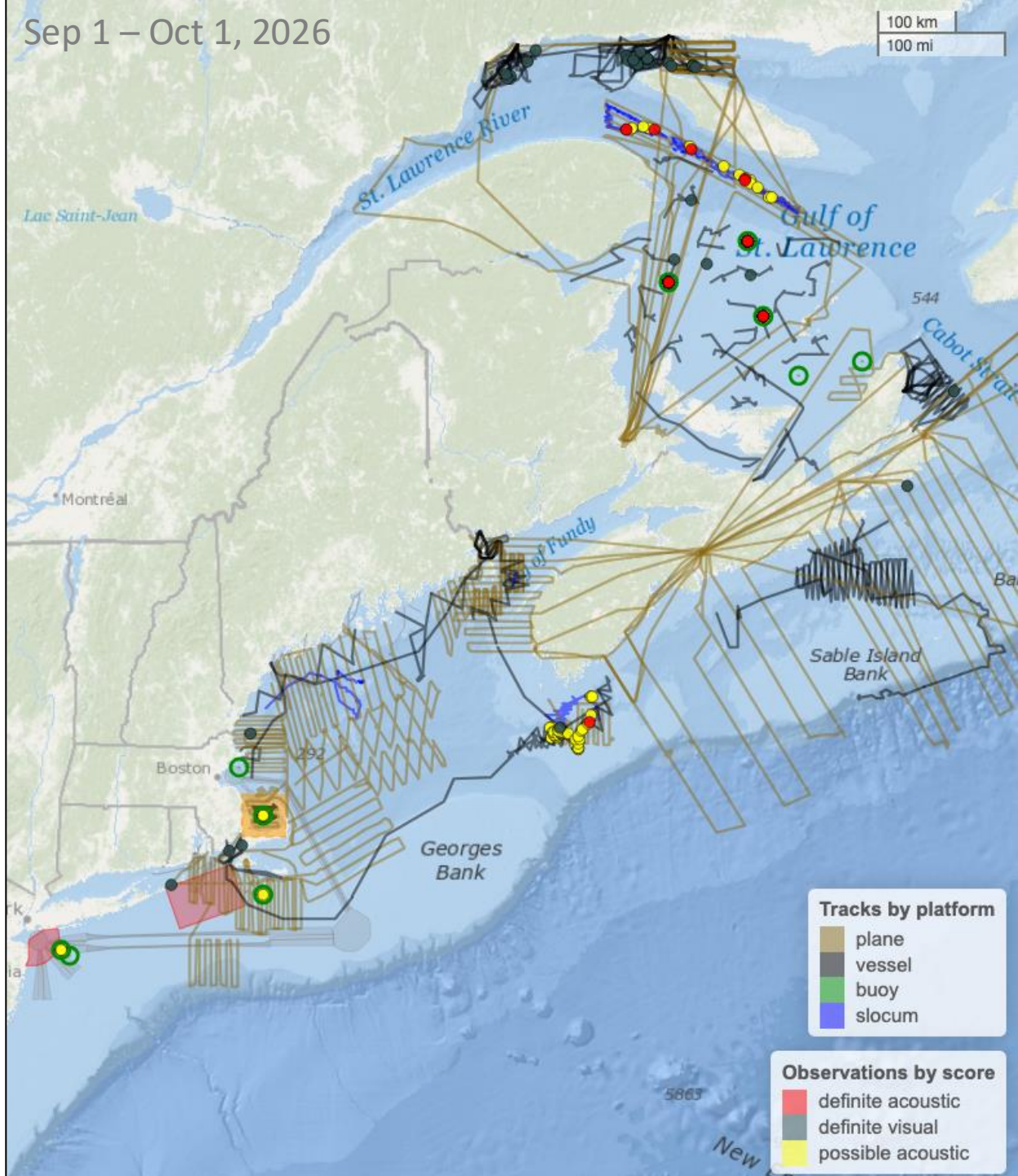
Inform

Supports research, industry and management

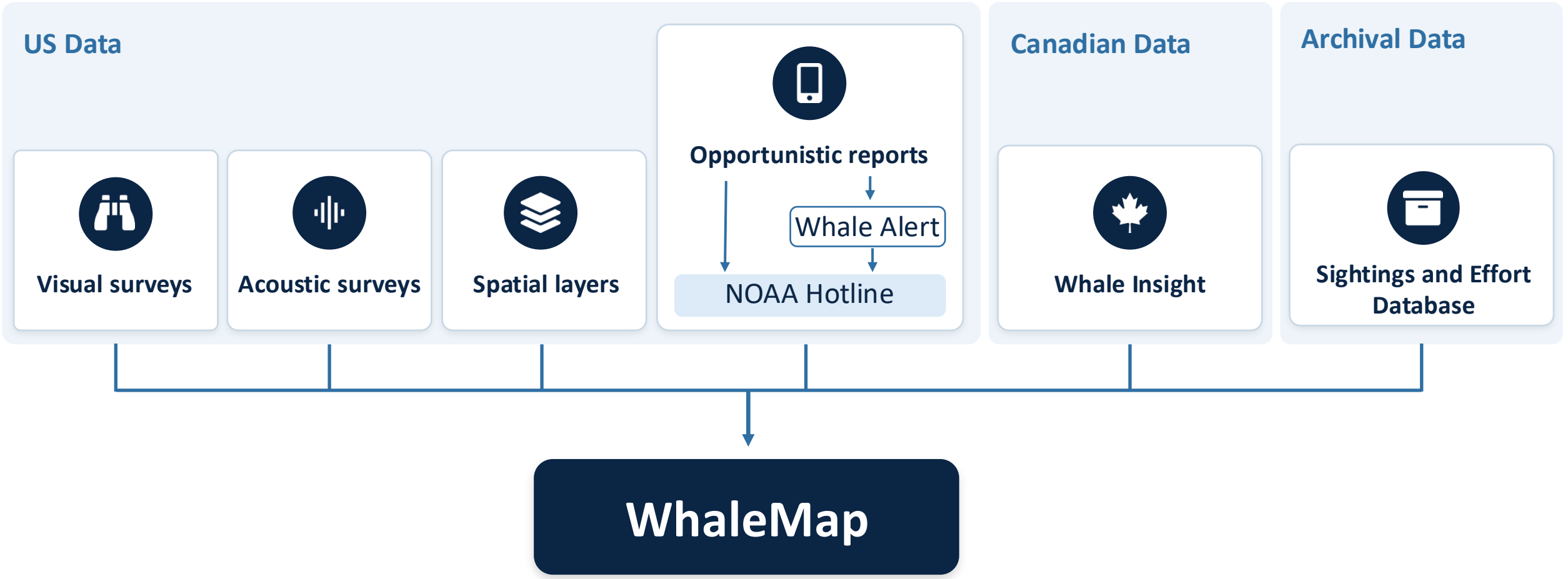
Advance

Puts the data to work for right whale conservation

Available at whalemap.org



WhaleMap Data Aggregation



WhaleMap Data Dissemination

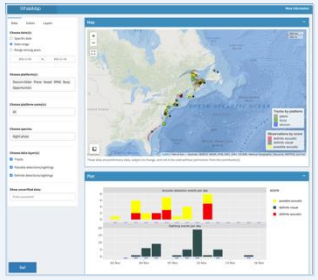
WhaleMap

Data feed accessed by NARWC permission

Summary

Dashboard





Available at whalemap.org

Web Display

NARWC request

Whale Alert

Research / Outreach

NOAA

Whale Insight

US measures

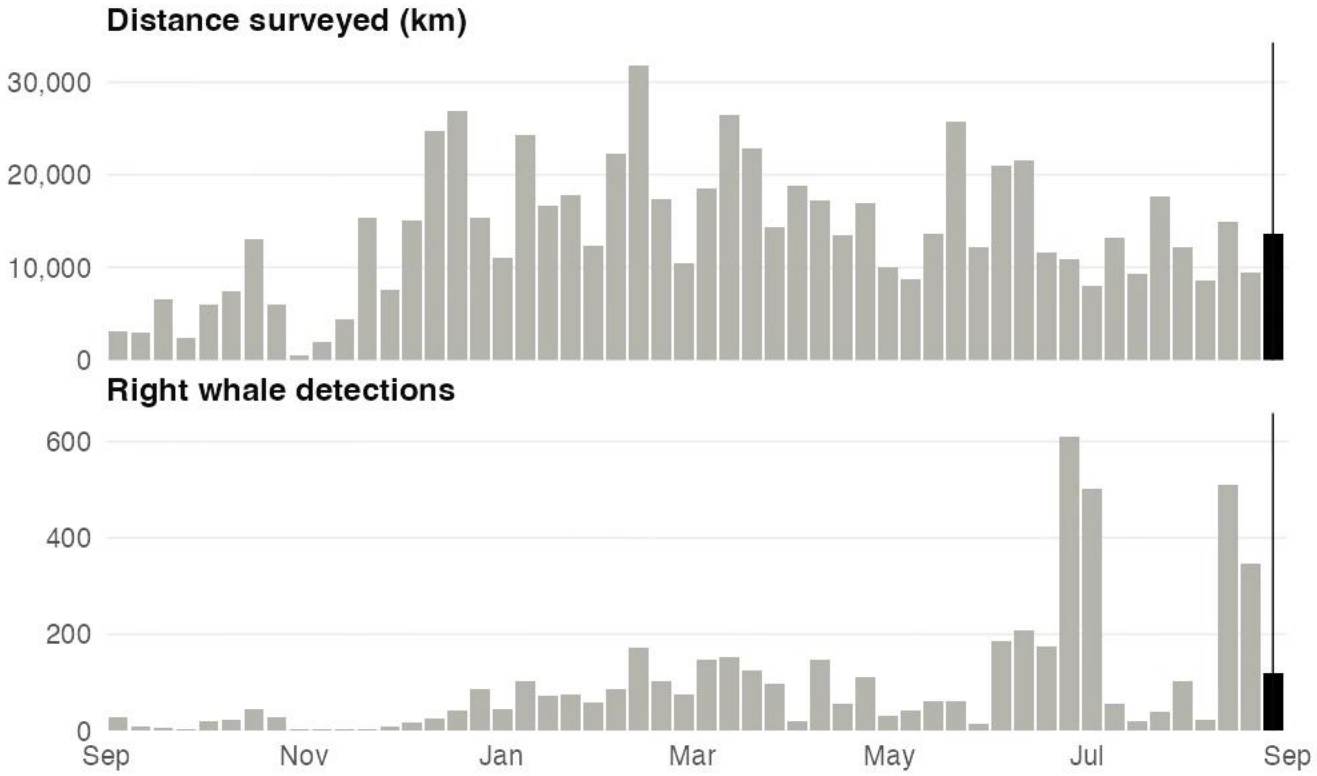
CAN measures

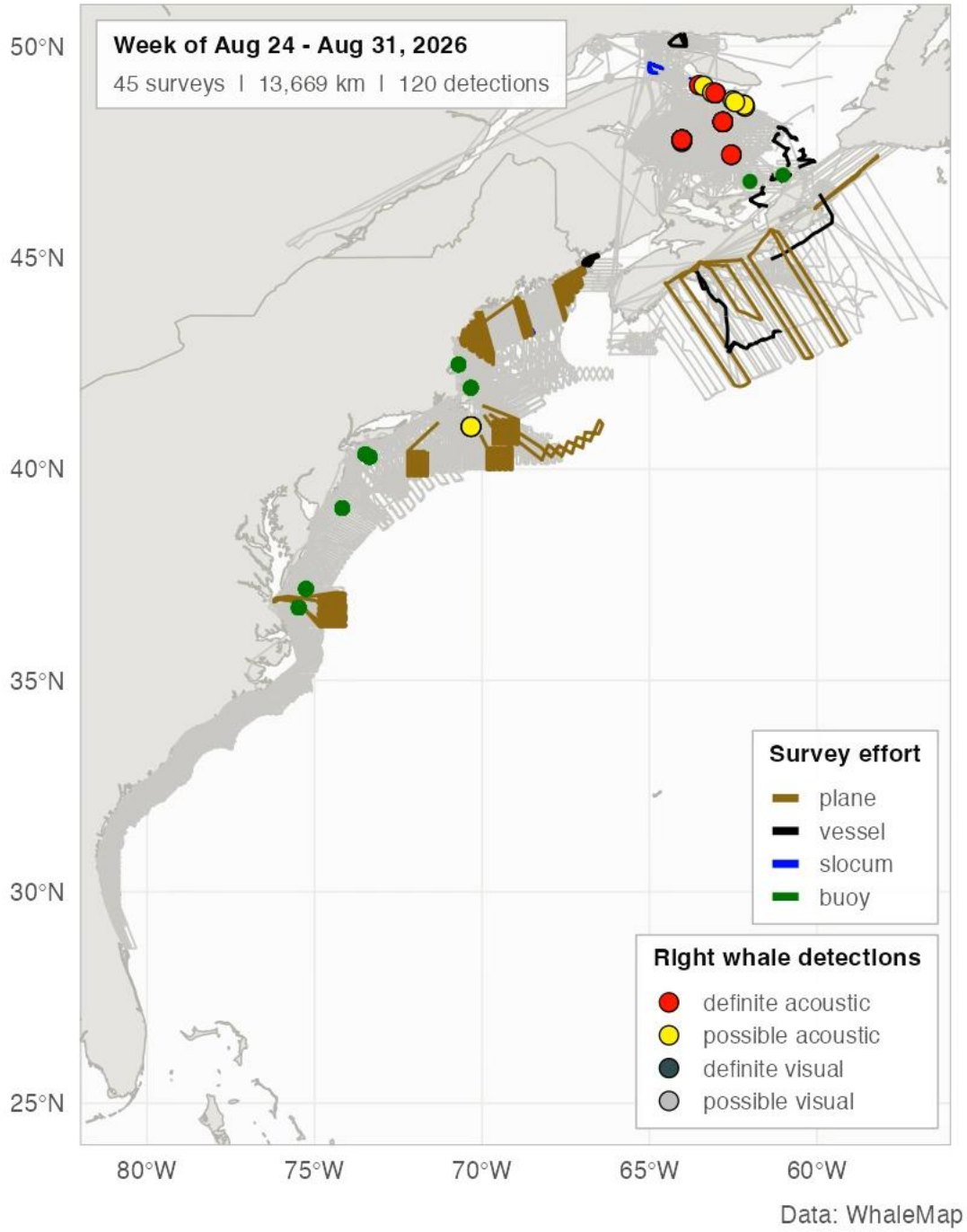
Management

WhaleMap: 2025-26

Showing data from Sep 1 2025 to Aug 31 2026

5,110 Right whale detections
1,000 Surveys
714,527 km Trackline

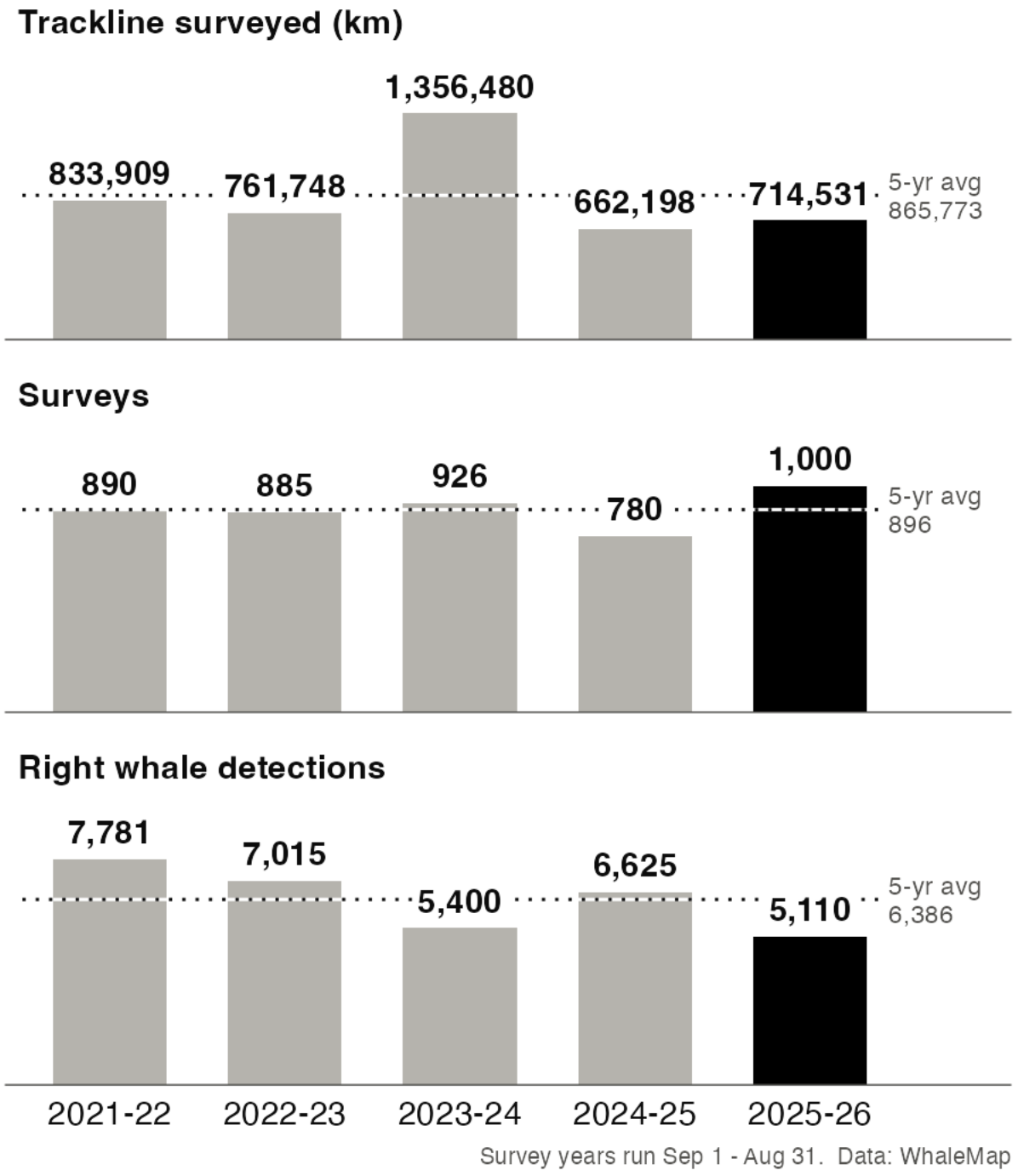




WhaleMap: 2021-26

Showing data from Sep 1 to Aug 31 each year since 2021

- Averaged almost 0.9 million km, about 900 surveys, and over 6,000 detections per year
- Submissions in 2026 are consistent with previous years
- Interpret these results carefully!



Common Questions

- Who runs it?
- Who owns it?
- How is it funded?
- How do I get data?
- How do I submit data?
- How is it different from Whale Alert and Whale Insight?
- How does it work?

Answer…

Common Questions

- Who runs it?
- Who owns it?
- How is it funded?
- How do I get data?
- How do I submit data?
- How is it different from Whale Alert and Whale Insight?
- How does it work?

WhaleMap is run by me and a team of curators (my co-authors) from other organizations

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WhaleMap is not a commercial product nor is it owned by any organization. It is hosted by NEAq. I developed and maintain it, but it remains open source.

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WhaleMap is currently funded via a NOAA contract to NEAq

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WhaleMap data are available by request to the NARWC, just like the other NARWC datasets

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For US-based survey teams, reach out to me or curators to set up direct data submission. For CAN-based survey teams, reach out to DFO managers of Whale Insight. Otherwise, submit via Whale Alert or directly to the NOAA hotline

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- How does it work?

WhaleMap directly processes observations and effort from dedicated survey teams based in the US. **Whale Insight** does the same for teams based in Canada. **Whale Alert** processes opportunistic reports (no effort) and feeds from WhaleMap and other sources.

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- How does it work?

It's complicated! For details, read the publication, review the source code on Github, or get in touch with me or one of the other curators

This would not be possible without the incredible efforts of all the survey teams, contributors, and their funders

Thank you!

This presentation:

Questions?

Contact me: hjohnson@neaq.org

More information

WhaleMap publication: https://joss.theoj.org/papers/10.21105/joss.03094

WhaleMap source code: https://github.com/hansenjohnson/whalemap

WhaleMap data request: https://www.narwc.org/accessing-narwc-data.html

Acknowledgements

- Thank you to the WhaleMap curators: Heather Pettis, Tim Cole, Brigid McKenna, Leah Crowe, Heather Foley and Julia Stepanuk
- Early technical support from Daniel Morrison (Dal)
- Helpful input from many researchers, including Chris Taggart (Dal), Stephanie Ratelle (DFO), Pam Emery (DFO), Adèle Labbé (DFO), Olivia Pisano (DFO), Tim Cole (NOAA)
- Funding support from NSERC, Fisheries and Oceans Canada, the Marine Mammal Commission, and NOAA NEFSC
- Many thanks to the survey teams doing the hard work to collect these data, and to the open-source community for making incredible tools

Anderson Cabot Center for Ocean Life at the New England Aquarium

Thank you!

New England Aquarium

Protecting the blue planet