

The Seabird Tracking Database: 20 years of collaboration for marine conservation

Ana PB Carneiro¹, Bethany L Clark¹, Jonathan M Handley¹, Maria P Dias², Elizabeth J Pearmain^{3,4} & Tammy E Davies¹

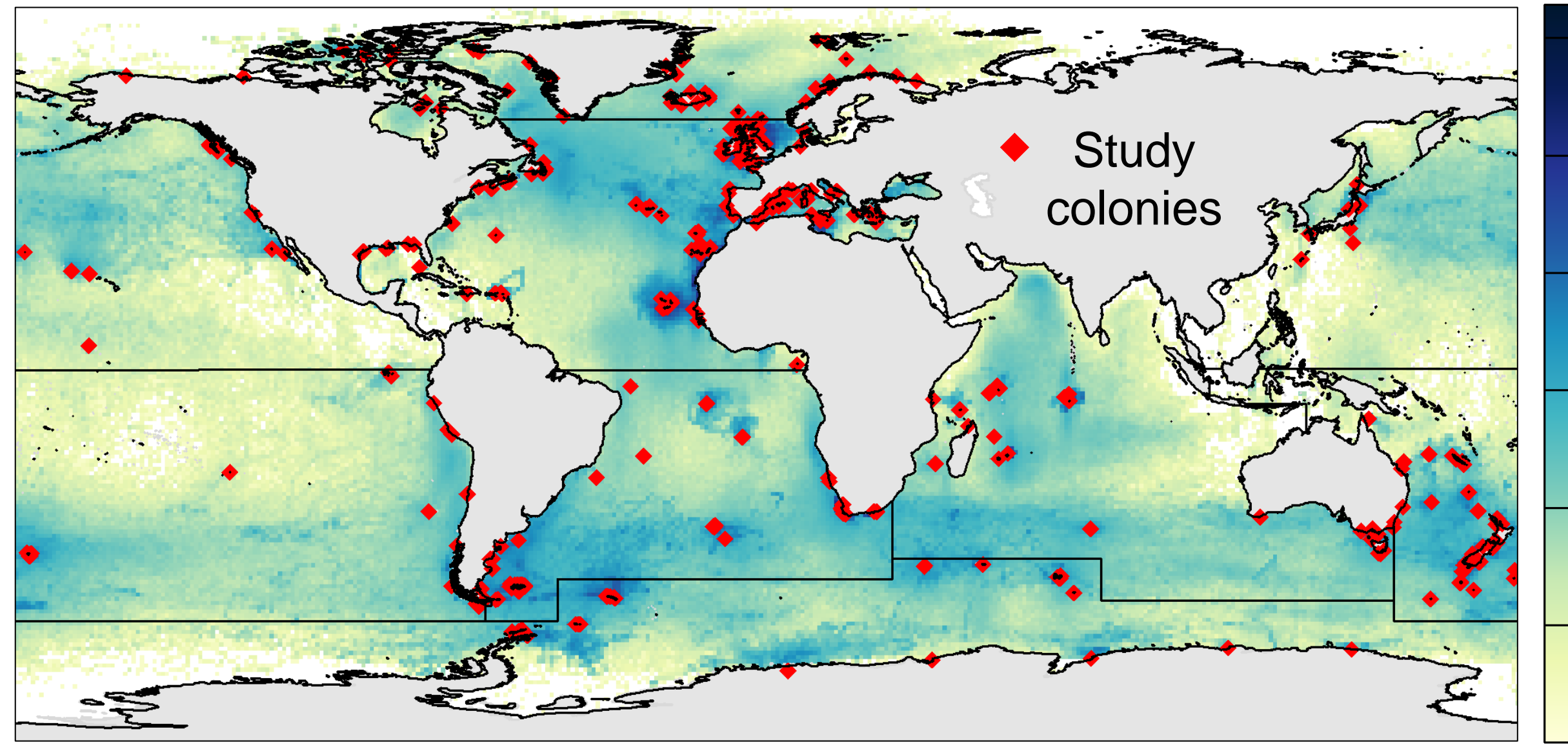
¹BirdLife International, The David Attenborough Building, Pembroke Street, Cambridge, UK; ²Faculdade de Ciências, Universidade de Lisboa, Lisboa, Portugal; ³Department of Zoology, University of Cambridge, Cambridge, UK; ⁴British Antarctic Survey, Natural Environment Research Council, Cambridge, UK.



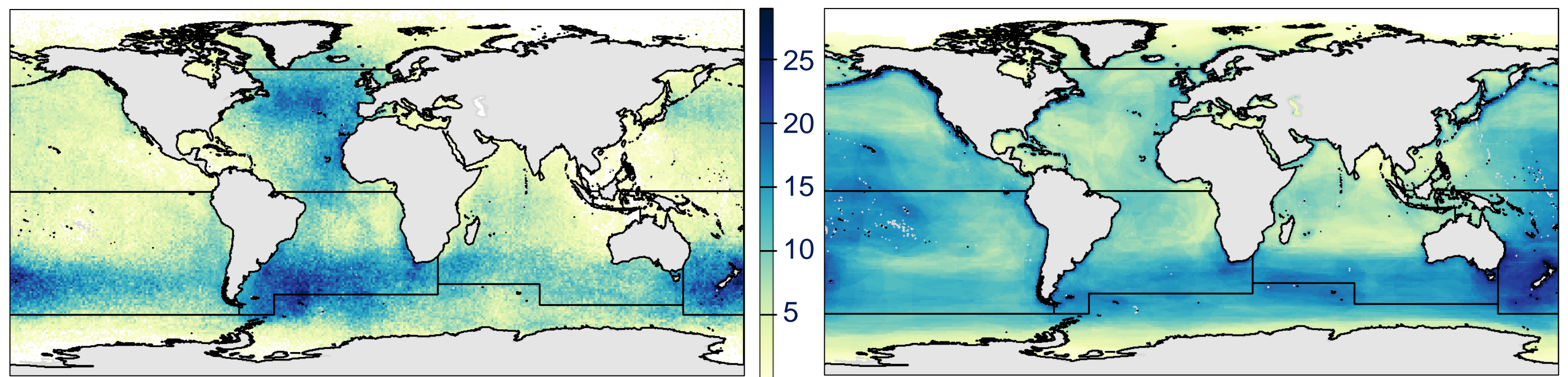
Aims

The Seabird Tracking Database (STDB) aims to support evidence-based marine conservation and facilitate collaboration worldwide.

Tracking data is global, but spatially biased

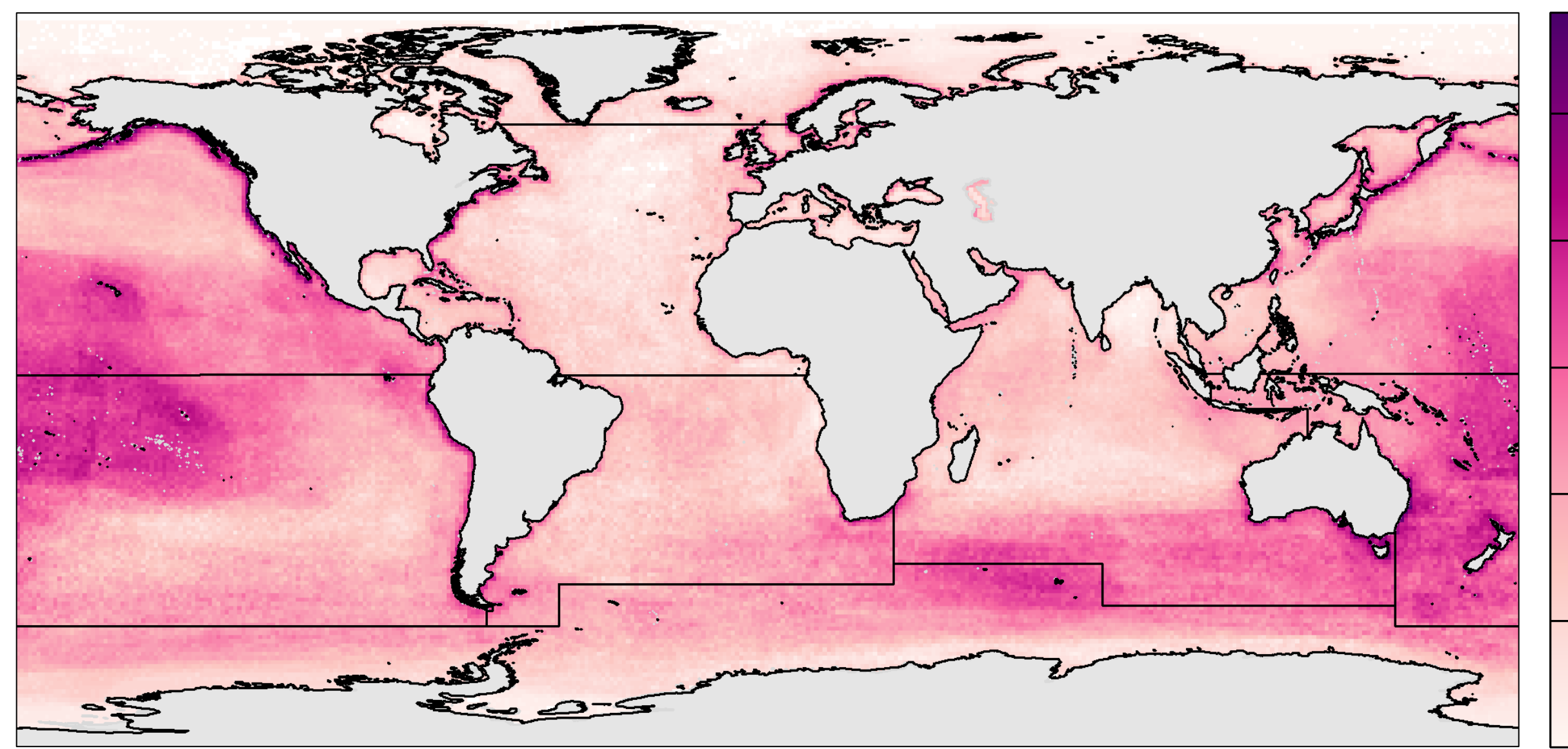


Number of seabird tracking locations in the STDB (log₁₀ scale)



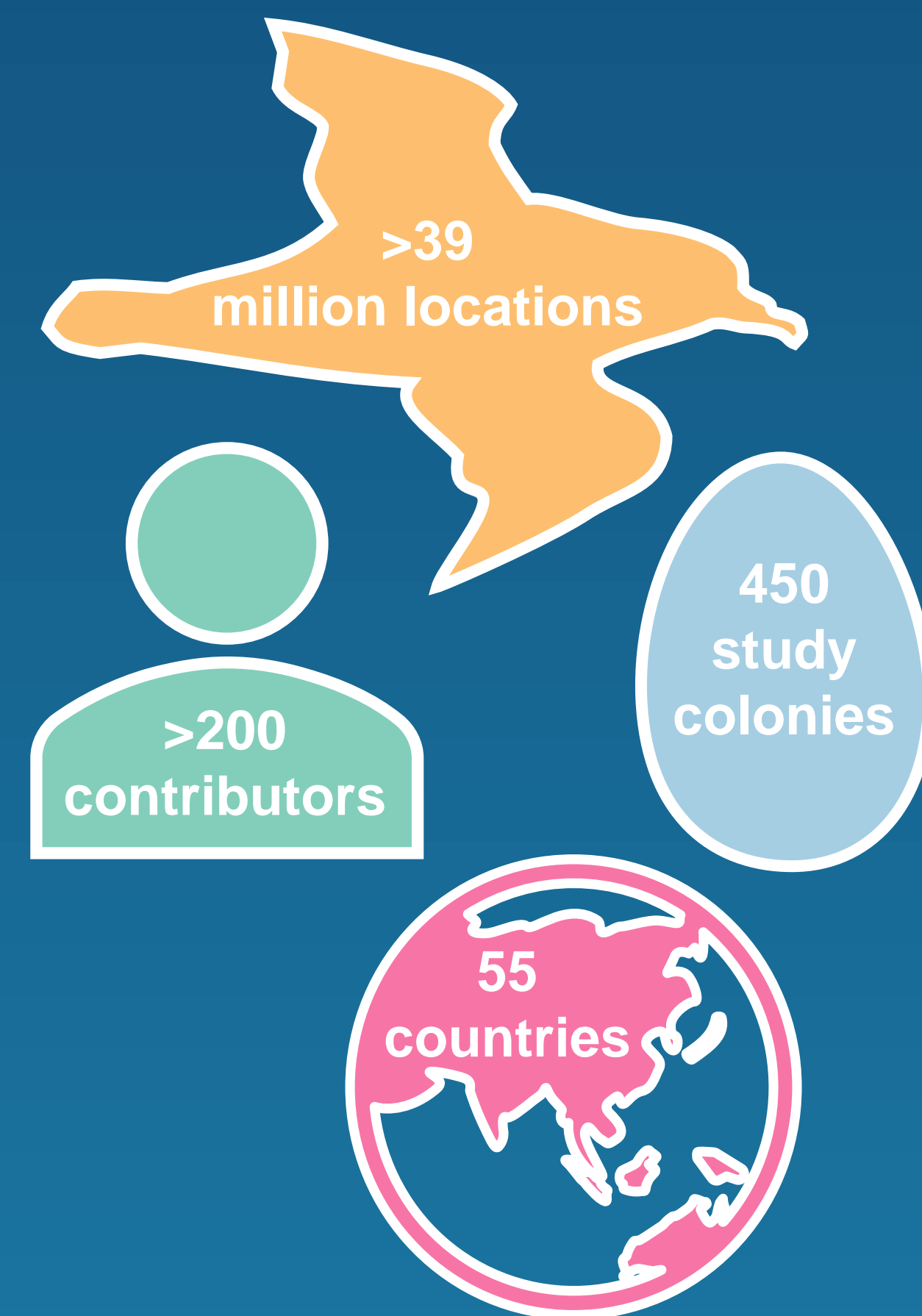
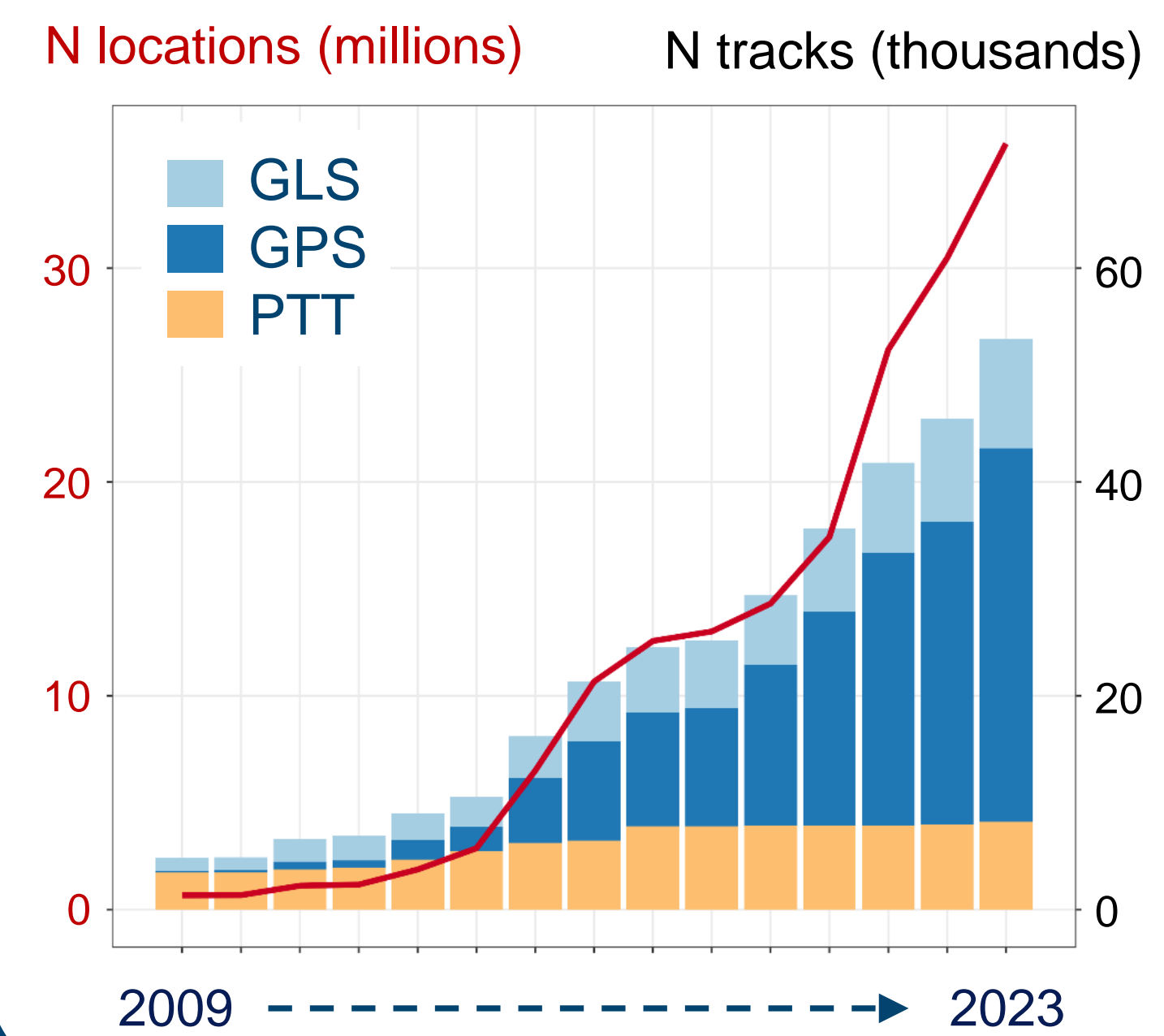
Number of seabird species in the STDB

Number of seabird species from range maps



Difference in number of species between STDB tracking data and range maps

The STDB is rapidly growing



What's next?

- Expand coverage, especially for less known species and areas, and juveniles.
- Improve user experience and maintain cybersecurity.

Facilitating collaboration

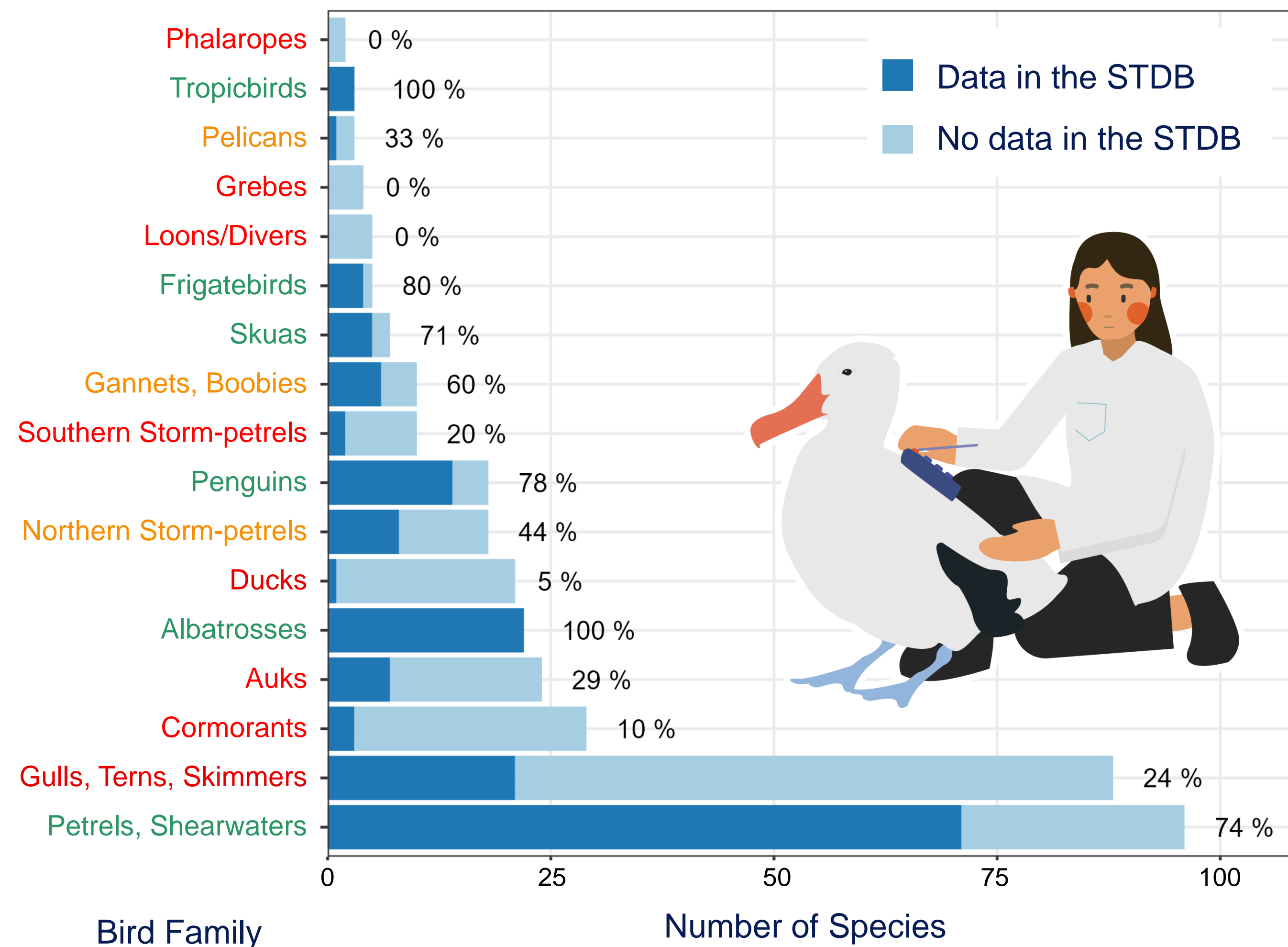
- Provides tools for sharing and analysing data in a standard format (e.g., **new toolkit** including tracking analysis R code: seabirdtracking.org/case-studies/conservation-toolkit)

- Facilitated at least 92 scientific papers.



168 species (46%)

Coverage varies massively between bird families



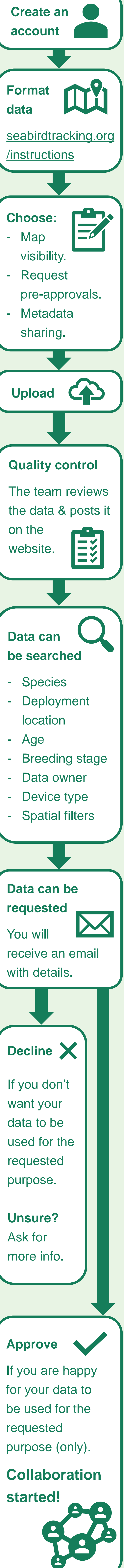
Conservation outcomes

- Identification of a global network of Important Bird & Biodiversity Areas (IBAs), Key Biodiversity Areas (KBAs) and Ecologically or Biologically Significant Areas (EBSAs).
- Support for spatial prioritisation analyses in marine spatial planning (e.g., Falkland Islands/Malvinas, Malta, French and UK Overseas Territories).
- Adoption of seabird bycatch mitigation measures by Regional Fisheries Management Organizations (RFMOs).
- Identification of the first high-seas Marine Protected Area using tracking data.
- Assessment of the risk of exposure to marine threats (e.g., fisheries, offshore wind developments, pollution).



NACES MPA

How it works



The conservation work supported by the Seabird Tracking Database is only possible thanks to all the funders of the Seabird Tracking Database since 2004 and our wonderful community of data contributors: Jacob Gonzalez-Solis, Eric Vidal, Rob William Martin, Stephen Votter, Olivier Gilg, Nobuo Kokubun, Chris Martin, Stuart Bearhop, Jose Pedro Granadeiro, James Briskie, Chris Redfern, Peter Dann, Andre Chiaradia, Bill Henry, Deon Nel, Patrick Jodice, Yuri Albores-Barajas, Niels Martin Schmidt, Greg Robertson, Ana Sanz Aguilar, Leandro Bugoni, Sven Kapel, Ian Cleasby, Ian May, Iain Stenhouse, Harley Schinagl, Morten Frederiksen, Jaime Albino Ramos, Della G Bennet, Leila Figueiredo de Almeida Silva Campos, Oliver Padgett, Taryn Morris, Jean-Claude Stahl, Yann Kolbeinson, April Hedd, Amanda Freeman, Matt J Rayner, Sarah Wanless, Thomas Clay, Paulo Catry, Peter Carr, Mark Jessopp, Melinda Connors, Peter Ryan, Juan F. Masello, Maite Louzao, Letizia Campioni, Rosemary Gales, Thomas Bodey, Andrew Westgate, BirdLife Malta, Lorna Deppe, Phil Trathan, Malgorzata Korczak-Abshire, Ellen Magnusdottir, Willem Bouten, P. Dee Boersma, Ben Dilley, Steffen Opper, Jill Awkerman, Cecilia Soldatini, Michelle Antolos, Iain Staniland, Andre Raine, Johannes Lang, Mandy Shaller, Carsten Egevang, Falklands Conservation, Rob van Bemmelen, Maria Magalhaes, Yuna Kim, Carlo Catori, Michelle Hester, Christopher Pollock, Justine Dossa, Frazer Sinclair, Simon Taylor, Jeroen Creuwels, Dave Watts, Rachael Alderman, Sarah Crofts, Petra Quillfeldt, Nick Sisson, Hans-Ulrich Peter, Samantha Patrick, Daniel Oro, Maria Saldanha Alho, Birdwatch Ireland, Wiebke Schäfer, Katherine Booth Jones, Azwanewi Makhado, Giacomo dell'Omo, Erpur Snaer Hansen, Johannes H. Fischer, Philipp Kraemer, Francis Zino, Jan Veen, Jefferson Hinke, Wildlife Management International Ltd, Rob Suryan, Borge Moe, Paul Sagar, Jerome Fort, Ben Porter, Henri Weimerskirch, Keith Hamer, Jeremy Lee Maderos, Clay Gravelle, Jose Manuel Arcos, Katrin Ludynia, Fiona McDule, Flemming Merkel, Alice Trevall, Won Young Lee, Adrian Schiavini, Richard Shirley, Wayne Trivelpiece, David Nicholls, Paul Thompson, Sophie Bertrand, Luke R. Halpin, Hannah F. R. Hereward, Daniel Costa, Anders Moshach, Robert W Furness, Ellie Owen, Dominic Rollinson, Teresa Catry, Jeong-Hoon Kim, Marco Gianchetti-Benedetti, Annette Scheffer, Benjamin Metzger, Andrea Raya Rey, Trevor Glass, Roland Gauvain, Mark Mallory, Nina da Rocha, Javier Arata, Ken Yoda, Matcoim Nicoll, Mike Dunn, Andy Schofield, Carlos Zavala, Andreu Rotger, Paul Scofield, Elizabeth Bell, Chris Powell, Manuel Bischoff, Christina Hagen, David Thompson, Peter H Becker, Todd Landers, Klemens Puetz, Jaimie Cleland, Francis Dault, Juliet S. Lamb, Jannie Fries Linneberg, Ross Wanless, Marco Zenatello, Jez Blackburn, Bindi Thomas, David Hyrenbach, Leigh Torres, Samantha Petersen, Mercedes Santos, Yvan Satge, Christopher W. Jones, Rachael Orben, Zoe Deakin, Louise Soanes, Clara Peron, Nicholas Carlie, Yves Cherel, Dave Anderson, Gregory R Balogh, Norman Ratcliffe, Jacopo G. Cecere, Sara Maxwell, Laura McFarlane Tranquilla, Akiko Shoji, Tim Gullford, Ashley Bennison, Jonathan Green, Richard Cuthbert, Matthieu Le Corre, Vegard Brathen, Giorgia Gaibani, John Quinn, Robert Alfredo Ronconi, Phil Taylor, Lucy Wright, Jude Lane, Pierre Pistorius, Andreas Ravache, Christopher Robertson, Rachel Davies, Kath Walker, Takashi Yamamoto, Vitor Paiva, Ewan Wakefield, H. Grant Gilchrist, Thorkell Lindberg Thorarinnsson, Kate J Campbell, Alex Bond, Ascunzio Ruiz, Susan Mary Waugh, Adam Kane, Richard Phillips, Monica C. Silva, Flavio Quintana, Yuriko Hashimoto, Paulo Lago, Veronica Rodrigues Costa Neves, Cara-Paige Green, David Grémillet, Akira Suzuki, Aurore Ponchon, Kiyoko Ozaki, John Arnould, Brendon Dunphy, Carina Gjerdrum, Cleo Small, Johannes Krietsch, Megan Tierney, Mark Belcher, Gail Robertson, Akitori Takahashi, Scott Shaffer, William Montevecchi, Charles-Andre Bost, Graham Robertson, Mark Andrew Hindell, Jan Eisefeld, Aivar E Petersen, Graeme Elliott, Michael Brooke, Susana Cardenas Alayza, Robert Crawford, Damian Jensen, Matthias Kopp, Laurie Wilson, Lucas Kruger, Marcio Amorim Efe, Rosana Paredes, Ingrid L. Pollet, Ivan Ramirez, Phil Atkinson, Annette Fayet, Andy Lowther, Antje Steinfurth. Illustrations by scianimationstudio.com.



seabirdtracking.org
Sign up to our email newsletter

