

WELCOME TO TRACKDAT

a metadata portal to foster scientific progress in aquatic animal tracking



Photo credits: Canva

TRACKDAT WHAT?



TrackdAT is a collaborative effort aimed at advancing the application, engagement, and dissemination of acoustic telemetry (AT) research. We host metadata from the thousands of peer-reviewed articles, providing users with the tools to visualize, filter, and download useful information about research conducted throughout the world.

TrackdAT evolved from the belief that a universal understanding of existing research is needed to optimize future work with real-world outcomes. Our mission is to foster scientific progress in the field of aquatic animal tracking by encouraging global mobilization of knowledge, promoting stakeholder interaction and engagement, increasing opportunities for collaboration, and bridging persistent knowledge-action gaps.



OUR MISSION

You can access **TrackdAT** at www.trackdat.org

HOW DOES IT WORK?

We search for peer-reviewed AT journal articles in Web of Science. Articles go through at least two quality control checks from database administrators. Metadata relating to publication details, study design, technology used, and animals tagged are extracted from each article. Additional fields are also filled using Fishbase (or SeaLifeBase) and the IUCN Red List. The result is a comprehensive database populated with practical information to help plan and design future work or evaluate and communicate existing work. For a comprehensive description of methods used in **TrackdAT**, see "[Matley et al. 2024](#)".



>>> BENEFITS

- Conduct synthetic or review studies;
- Develop collaborations or improve networking;
- Identify current or ongoing gaps in research;
- A starting place for new students to learn about AT and movement ecology;
- A citable resource that has already done the heavy lifting;
- Identify areas of expertise within the AT community;
- Support for funding or animal welfare applications;
- Stay up to date on new research and technology.

>>> WHO CAN USE IT?



WHAT HAS TRACKDAT BEEN UP TO?

It has been about six months since **TrackdAT** was officially launched. We have since seen a promising uptake in users, with over 100 database accounts and more than 200 followers on Twitter/X. **TrackdAT** has also received encouraging feedback from its users, which is the real statistic that we care about. Since the launch, our team has been working diligently to continue extracting metadata from peer-reviewed articles and making them easily accessible to all users. Since February 2024, we have added over 250 new articles (updating the database to June 2024), bringing a total of 2740 acoustic telemetry articles to your fingertips. **TrackdAT** also continues to actively support new research by providing the tools to formulate new studies and evaluate existing research. Don't believe us? Check the session below!

FUN FINDING...

We are the first to recognize that publications are not the best representation of research capacity or potential among animal trackers, but sometimes it is hard to ignore just how productive some people are in converting AT data into papers. Check out the '**Charts**' tab on our website to see the passing torch from 'early-day' experts to young researchers. Leaders like Robert Lennox (Ocean Tracking Network Scientific Director), Jacob Brownscombe (Fisheries and Oceans Canada Research Scientist), and Lucas Griffin (University of South Florida Assistant Professor) are just a few that have been paving the way for a new era of tracking research focusing on advanced technology and application, as well as innovative global perspectives. Will you make the list in the future?

ARTICLES THAT HAVE USED **TRACKDAT**

- 2024. [Long-term effects of tagging fishes with electronic tracking devices](#). Fish and Fisheries.
- 2024. [TrackdAT, an acoustic telemetry metadata dataset to support aquatic animal tracking research](#). Scientific Data.
- 2023. [Making the most of aquatic animal tracking: a review of complementary methods to bolster acoustic telemetry](#). Reviews in Fish Biology and Fisheries.
- 2023. [Acoustic accelerometer transmitters and their growing relevance to aquatic science](#). Movement Ecology.
- 2022. [Global trends in aquatic animal tracking with acoustic telemetry](#). Trends in Ecology & Evolution.
- 2020. [Living until proven dead: addressing mortality in acoustic telemetry research](#). Reviews in Fish Biology and Fisheries.



RESEARCH HIGHLIGHT

>>> BEHAVIORS AND HABITAT USE OF MARINE SPECIES

By Lucas Griffin, University of South Florida



My research spans a wide range of taxa, from sea turtles to teleosts and sharks, across marine ecosystems, from tropical to temperate regions. I primarily focus on the behaviors and habitat use of marine species aimed at promoting sustainability and conservation. Understanding how marine life interacts with its environment and responds to disturbances is key to developing effective conservation strategies. However, marine species often face challenges due to a disconnect between their movement ecology and current management frameworks. Thus, acoustic telemetry has been a transformative tool in my research program.



Currently, my research is centered on movement ecology within recreational fisheries, both in the U.S. and internationally. In the Seychelles, using acoustic telemetry, I collaborate with anglers and fishing guides to assess the effects of fishing pressure and to help guide experimental fishing closures for giant trevally, a predatory sportfish in the Indo-Pacific. Domestically, within the U.S., I focus on another important sportfish, the Atlantic tarpon, using acoustic telemetry to model their regional migrations along the Gulf of Mexico and Atlantic coasts. Additionally, I enjoy integrating multi-species acoustic telemetry datasets to study predator-prey interactions, like that of sportfish and sharks in Florida, U.S.

Given the fast pace of advancements in acoustic telemetry, the trackdAT platform is an exciting and much-needed resource for our field. There's a wealth of groundbreaking research happening globally, and trackdAT offers a centralized hub where we can explore the most recent projects and connect with leading researchers driving the field forward. With the rapid advancement in acoustic telemetry analyses, **TrackdAT** is also an excellent resource for finding the most cutting-edge analytical approaches other community members develop. It's a great time to be part of the acoustic telemetry community, which I've found to be collaborative and supportive. Platforms like trackdAT only enhance this aspect, fostering further innovation and connection.



STUDENT HIGHLIGHT

>>> EXPLORING ELASMOBRANCH ECOLOGY THROUGH CUTTING-EDGE TELEMETRY TECHNIQUES By Kenn Papadopoulos

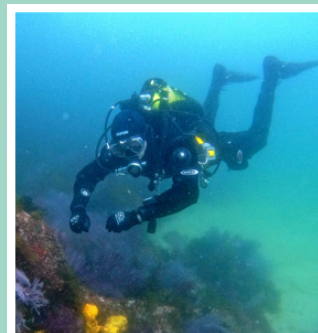


My journey into marine biology began with a B.Sc. in Organismal Biology and Ecology from Paris-Saclay University, followed by an international M.Sc. in Marine Biology, which took me across Belgium, Portugal, Spain, and Ireland. My fascination with elasmobranchs (sharks, skates, and rays) was ignited during my final year at The University of Sydney, where I encountered my first wild shark. This passion deepened during my M.Sc. thesis at the Institute of Marine Science (IIM-CSIC) in Vigo, Spain, where I studied and published on the behavioral drivers and spatial ecology of the small-spotted catshark and thornback skate in the Cíes Islands. Currently, I'm pursuing a PhD at Campus do Mar, University of Vigo, with a focus on the movement patterns, ecological interactions, and conservation of elasmobranchs in Galicia's coastal waters. This research is part of the BELAS initiative: Conservation Behaviour of Marine Resources at the Spatial-Social Interface.



My work utilizes innovative methods such as Baited Remote Underwater Video Sampling (BRUVS), Stable Isotope Analysis (SIA), and high-resolution telemetry. Acoustic telemetry, in particular, is central to my research, allowing me to track individual organisms and gather crucial data to answer interesting ecological questions. In addition to my research, I'm a certified Professional Scuba Diver for scientific and inshore commercial purposes, as well as a PADI Divemaster. These certifications enable me to engage directly with marine life through fieldwork, enhancing both my research and my connection to the species I study.

Most recently, I contributed to a groundbreaking paper on the spatial behavior of *Octopus vulgaris* in the wild using acoustic telemetry. This study, the first of its kind, focused on the socio-economically important common octopus within a marine protected area. Lastly, I'd like to commend the **TrackdAT** platform—it's an outstanding resource, intuitive, and user-friendly. It's a valuable tool for the community. Feel free to learn more about me at <https://kennpapadopoulos.com/>.



Some of the TrackdAT team with Chris at ICFT 2023 in France



REMEMBERING CHRIS

The TrackdAT family, along with the broader animal tracking community, lost someone very special recently. Chris Vandergoot was one of the most supportive people we knew, using whatever means that he had to give back to those around him. He was a dedicated scientist, tactful leader, caring mentor, and loyal friend. Words on this page will never be enough to truly capture the impact he had on the people that knew him.

Please take a moment to remember him.

A GoFundMe page is available [here](#) to show love and support for Chris' family.

OUR TEAM



Jordan Matley



Natalie Klinard



Ana Barbosa
Martins



Arun Oakley-
Cogan

»»» SUPPORT TEAM

Aaron Fisk (Canada),
Christopher Vandergoot (USA), and
Charlie Huveneers (Australia).

»»» CURRENT SUPPORT

TrackdAT is supported by the Great Lakes Fishery Commission (GLFC) as part of the Technical Assistance for Fisheries Research grant.

»»» FUTURE DIRECTIONS

Did you know that an average of 355 people become NEW acoustic telemetry authors every year? We believe there is still incredible potential to advance our understanding of the aquatic realm through groundbreaking collaborative research. **TrackdAT** will be a key resource to achieve this vision...but we need your help! We are always looking to expand and our next effort will be to engage with acoustic telemetry networks to identify ways to link the database to associated data repositories. Please contact us to discuss any other collaborative or supportive opportunities.

CONTACT US

Do you have questions, papers or ideas to share? Just send us a message!



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[@trackdatfish](https://twitter.com/trackdatfish)



www.trackdat.org