

WHY SHARING DATA WITH SWOT IS GOOD FOR YOU

...and good for your turtles

by BRYAN WALLACE, RODERIC MAST, BRIAN HUTCHINSON, and CONNIE KOT

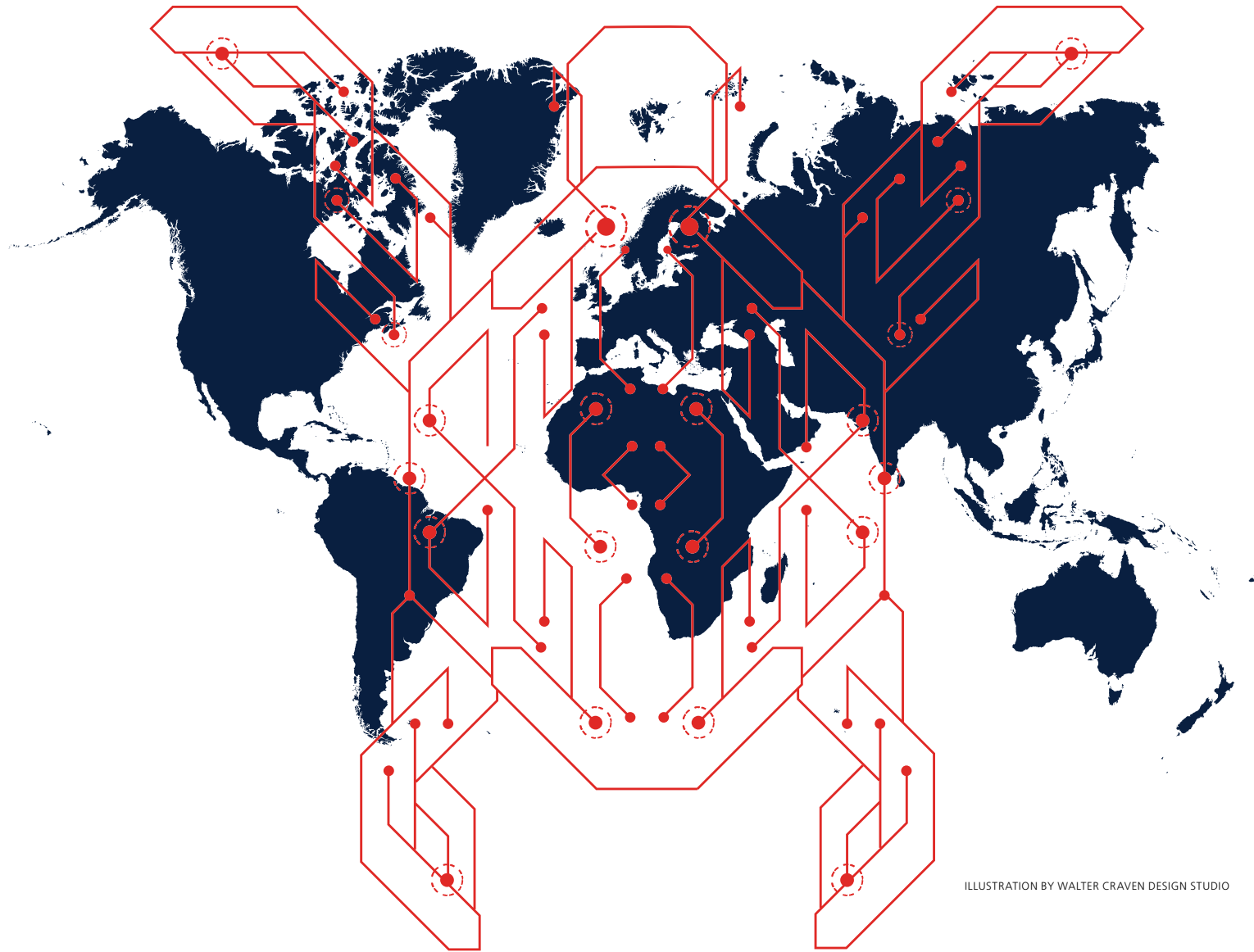


ILLUSTRATION BY WALTER CRAVEN DESIGN STUDIO

What is the SWOT program, really? What role does it play in the sea turtle world? At its core, SWOT is a platform for *sharing* information, data, and resources to enhance sea turtle conservation worldwide. SWOT's products include the annual *SWOT Report*, the regularly updated SWOT database of sea turtle biogeography, maps that are published online and in print, a website (<http://seaturtlestatus.org>), annual small grants, and more. Among all those products, the best example of what SWOT is and does is the SWOT database of sea turtle biogeography, which is a central feature of the SWOT effort.

Since SWOT began compiling information with a single year's of nesting abundance data for a single species (the leatherback) back in 2004, the goal has always been to facilitate and encourage the sharing of knowledge within a global network to get the greatest

conservation value possible for all the world's sea turtles. Through its database, SWOT brings sea turtle researchers together virtually and physically through shared information, then synthesizes the data to create products and tools that make our collective conservation work more effective.

From modest beginnings, the SWOT database has grown incredibly. It now contains data from more than 500 people and organizations, representing in excess of 3,000 nesting beaches in over 100 countries. It also contains telemetry data from more than a thousand satellite tracked sea turtles, as well as freely downloadable shapefiles featuring global distributions, regional management units, and genetic stocks for all species. And all of this is easily accessed by the public at <http://seamap.env.duke.edu/swot>. It is important to recognize that the data SWOT compiles does not belong to SWOT, but

rather to all of the people who have gathered them and openly chosen to share them through the platform SWOT provides.

Although this range of data might seem impressive, the data housed in SWOT for most nesting sites are several years old, and very few sites have more than a year or two of data. Therefore, the SWOT database is not yet able to achieve its long-term goals to be a truly global resource for (1) tracking changes in turtle population abundance through time, (2) identifying key areas for focused conservation and research, and (3) contributing to marine policy and management in areas within and beyond national jurisdictions. These are not just SWOT's goals; they are big gaps in sea turtle conservation globally.

WHY SHARE DATA?

Sharing is the key to making SWOT work. That should be easy, right? We've all been taught to share with others from the time we were in diapers, begrudgingly taking turns with our toys in the sandbox. But sharing isn't always simple. Sharing is especially hard when it comes to things we care about greatly, have invested a lot in, or deeply identify with personally or professionally. So why share data? Here are some reasons to consider.

- 1) **Have strength in numbers.** Ask yourself: how broadly can you apply your results about abundance, trends, behavior, habitat use, and other things if data come from a single site or only a few sites? Would your sample size or geographic scope be sufficient by itself? Or might the data have even more impact and interpretative power if they were combined with similar data from adjacent areas, or even in regional or global contexts? Sharing can help make the most of your data.
- 2) **Make new friends.** Do you have all the skills in-house to do the types of analyses you want to do? Do others outside your project or your field site have similar data that might be relevant for your work? Sharing can foster new collaborations and insights that can benefit you, your project, and sea turtle conservation globally.
- 3) **Make an even bigger impact.** How many and what kinds of products have your data been used for? Have your data informed regional or international policy or management? By sharing, you can make sure that big picture analyses, policies, and conservation plans include your data and your perspective.

WHY SHARE DATA WITH SWOT?

Over our years of requesting data contributions to SWOT, we've learned a lot about sharing—mostly about why it doesn't always happen. There are a handful of common reasons why people don't share data with SWOT, and our responses can be summarized like this:

Reason #1: I want to publish my data before sharing with SWOT.
SWOT's response: Contributing data to the *SWOT Report* and the SWOT database absolutely does not preclude you from publishing your data elsewhere. The *SWOT Report* is a magazine, not a scientific publication, and data contributed to SWOT are simply displayed, not analyzed.

The State of the World's Sea Turtles Program (SWOT)

OUR VISION

A permanent global network of specialists working to accelerate the conservation of sea turtles and their habitats—pooling and synthesizing data and regularly sharing the information with audiences who can make a difference.

You can publish your data whenever and wherever you want! There are countless examples of people contributing data to some collective database or broader-scale analysis project in addition to publishing their own data in their own way (for example BirdLife International's Important Bird Areas).

Reason #2: We need to protect our project's or students' data.

SWOT's response: No problem! SWOT has very robust data protections in place, including a thorough "Terms of Reference" for data providers, which outlines explicitly that SWOT will not share your raw data with others without your permission, following a formal request process. Additional steps may be taken to protect your data upon request, such as reporting binned values only rather than raw count data. The bottom line is, data provided to SWOT are not SWOT's data; SWOT is merely a repository for those data. The data providers are the data owners.

Reason #3: That's all great, but still, no.

SWOT's response: Okay, maybe some time in the future! We understand that there could be a variety of reasons for not sharing data, and we are open to discussing them further with you. Please feel free to contact us with any questions and concerns so that we can be aware of them and find ways to address them. All are welcome, and there is strength in numbers and power in community (think of the ways you already participate in synergistic global communities from Airbnb to Facebook), so we hope you'll consider contributing again in the future!

SWOT takes the responsibility of data stewardship very seriously, and we continue to strive to be a free reference tool and a global monitoring system to support sea turtle conservation around the world. Despite the challenges, we have already achieved a lot. Nesting data contributed to SWOT became the anchors for delineation and assessment of regional management units (RMUs) for all sea turtle species worldwide. SWOT data have provided a catalyst for dozens of innovative conservation research projects and for many school and university GIS course requirements. SWOT data have also given life to first-ever global and regional maps that include both nesting and telemetry data for multiple sea turtle species (see maps in this issue and in past *SWOT Reports*).

And we're not done yet. We have big goals for supporting sea turtle conservation around the world. SWOT is partnering with Duke University's Marine Geospatial Ecology Lab on a project to define marine migratory corridors around the world to help international policymakers see the importance of those areas for marine management outside national jurisdictions. SWOT has also helped launch an effort to define Important Marine Turtle Areas, akin to BirdLife International's Important Bird Areas, to fill a major data gap in marine conservation policy.

For SWOT to reach our long-term goals, we need the continued contributions of the SWOT team—you! So, please keep those data coming, tell us how we're doing, and suggest what we can do better.

Who knows? You might even like the feeling you get when you share. ■