**SWOT – The State of the World’s Sea Turtles**

**Terms of Reference for Data Providers**

**(updated February 2021)**

This document describes the Terms of Reference for individuals and organizations that contribute data to OBIS-SEAMAP/SWOT. SWOT’s top priority is to protect the integrity of your data and your rights as a data owner and provider. Please read carefully the terms below, and be sure to indicate how you would like us to manage your data in cases of external requests (see #6). If you have any suggestions about possible changes or clarifications to the data provider Terms of Reference, please contact Dr. Bryan Wallace, SWOT Scientific Advisory Board Chair and Connie Kot, SWOT Database Manager (swotdata@gmail.com).

By contributing data to SWOT, the data providers and SWOT agree to the following terms:

1. Data providers will always have their data explicitly attributed to them in all SWOT online maps and printed SWOT reports. All data received, whether raw counts or binned values for nesting data, or raw locations or binned locations for telemetry data, will be viewable online at the OBIS-SEAMAP site (<http://seamap.env.duke.edu/swot>) and on the SWOT website (<http://seaturtlestatus.org>), and will be subject to the SWOT Terms of Use and OBIS-SEAMAP Terms of Use (see #7) to protect against use without permission from the original data provider.
2. In printed [SWOT Reports/Publications](http://seaturtlestatus.org/report/view), contributed nesting data provided as exact count data will be displayed as binned values, and contributed telemetry data provided as raw locations will be displayed as binned locations.
3. Data contributed to SWOT will be used to fulfill SWOT’s long-term scientific goals (see below for details), including estimates of population abundance and trends (long-term) at global and regional management unit levels for nesting data, and identification of globally important areas for sea turtles based on telemetry data. SWOT anticipates that these analyses will be performed in the future, and that data providers will be notified at that time.
4. SWOT has implemented Minimum Data Standards for nesting beach monitoring, as developed by the Scientific Advisory Board (SAB), which will be applied to all nesting data provided to SWOT. Data providers must include the SWOT data level (1 or 2) of the count data provided to SWOT as well as basic information on monitoring effort to allow SWOT to standardize data contributed to the database. Records with insufficient information about monitoring effort provided to SWOT will be assigned to MDS Level 2 pending further information from data providers. Instructions for assessing data levels and other information about Minimum Data Standards are available at: <http://seaturtlestatus.org/data/standards>.
5. Data providers are responsible for keeping their contact information current with the SWOT database manager. By keeping your information current, you will help SWOT to garner permissions for data use from original data providers and to pursue additional uses of the database under the advisement of the SWOT SAB.
6. When 3rd party researchers request SWOT nesting site locations, distribution of data will be contingent upon SAB approval (i.e., proposed use of the data will advance sea turtle research and conservation in support of SWOT’s scientific long-term goals). However, when nesting count and telemetry data are needed for 3rd party research projects, providers can indicate the level of protection for all of their contributed data, as follows:
	1. STANDARD (default): After SAB approval, permission will be requested from the current primary data contact on file. If the current primary data contact information is no longer valid, or there is a lack of response within a reasonable time period after permission is requested (minimum two weeks), SWOT has permission to release the data. This approach ensures that data contributed to SWOT do not become unusable at a future date.
	2. PROTECTED: After SAB approval, permission will be requested from the current primary data contact on file. Data provided to SWOT will not be released to a 3rd party without explicit written consent from the current primary data contact (i.e., lack of response does not give consent).

In summary, the Standard option (a) will be applied to all SWOT data by default and providers have the option to indicate data as “protected” as needed. Any uses for SWOT nesting numbers data will require attempts to acquire permission. All users need to adhere to SWOT/OBIS-SEAMAP terms of use for proper use and citations (see #7).

1. All contributed data will be protected under the SWOT Terms of Use and OBIS-SEAMAP Terms of Use, as follows:

**SWOT Terms of Use**

* + - 1. Prior to delivery of data from SWOT, the Researcher will provide to the SWOT SAB a detailed prospectus of the planned methodology and analyses in which the SWOT data will be used. Included in the prospectus should be an outline of anticipated products (e.g., journal articles, tools, models) or other public presentation of results. Pending approval from the SAB of the Project’s scientific justification and methodological approach, the SWOT database manager will release the described data to the Researcher.
				1. Individual nesting beach locations will be not be shown in any figures relating to the Project whether in online or printed format, unless permission is requested and granted from the SAB.
				2. No attempt will be made by the Researcher to include associated count data from SWOT maps into any analyses or products of the Project, unless permission to do so is obtained from the current primary data contact. (While the beach locations belong to SWOT as a whole, count and effort data belong to the individuals and organizations that provided them and individual permissions would need to be acquired for each record.) If count data are also required for the Project, SWOT will be notified.
				3. Any significant changes in the methodology of the Project MUST be reported to the SAB and could prompt another review as to whether data use will be permitted.
			2. SWOT gives no warranty, expressed or implied, as to the accuracy, reliability, or completeness of these data. The researcher understands that the nesting locations do not always represent accurate GPS locations of nesting beach center points and in some cases can be considered to be qualitative approximations of nesting beach locations where more accurate information was unavailable.
			3. Data provided for this Project may not be modified, copied, or distributed to individuals outside of the Project described in the prospectus, or to be used for any purposes other than what was described here without prior consent of the SWOT SAB.
			4. In all products of the Project in which SWOT data was used explicitly or peripherally, SWOT Reports and the OBIS-SEAMAP/SWOT website must be explicitly cited. These, along with an OBIS-SEAMAP citation, satisfy #2 of the OBIS-SEAMAP Terms of Use.

Required citation format: *SWOT Report* - *State of the World’s Sea Turtles*, vol. I (2006); *SWOT Report* - *State of the World’s Sea Turtles*, vol. II (2007); *SWOT Report* - *State of the World’s Sea Turtles*, vol. III (2008); *SWOT Report* - *State of the World’s Sea Turtles*, vol. IV (2009); *SWOT Report* - *State of the World’s Sea Turtles*, vol. V (2010); *SWOT Report* - *State of the World’s Sea Turtles*, vol. VI (2011); *SWOT Report* - *State of the World’s Sea Turtles*, vol. VII (2012); *SWOT Report* - *State of the World’s Sea Turtles*, vol. VIII (2013); *SWOT Report* - *State of the World’s Sea Turtles*, vol. IX (2014)*; SWOT Report* - *State of the World’s Sea Turtles*, vol. X (2015)*; SWOT Report* - *State of the World’s Sea Turtles*, vol. XI (2016)*; SWOT Report* - *State of the World’s Sea Turtles*, vol. XII (2017); *SWOT Report* - *State of the World’s Sea Turtles*, vol. XIII (2018); *SWOT Report* - *State of the World’s Sea Turtles*, vol. XIV (2019); *SWOT Report* - *State of the World’s Sea Turtles*, vol. XV (2020); *Kot, C.Y., A. DiMatteo, E. Fujioka, B. Wallace, B. Hutchinson, J. Cleary, P. Halpin and R. Mast. 2021. The State of the World's Sea Turtles Online Database: Data provided by the SWOT Team and hosted on OBIS-SEAMAP. Oceanic Society, IUCN Marine Turtle Specialist Group (MTSG), and Marine Geospatial Ecology Lab, Duke University.* <http://seamap.env.duke.edu/swot>.

* + - 1. Citations and electronic or hard copies of any final products from the Project will be provided to SWOT (e-mail swotdata@gmail.com).

**OBIS SEAMAP Terms of Use**

1. For datasets under CC0 sharing policy, data are free to use without permission or restrictions. Proper credit/citations for individual datasets and OBIS-SEAMAP are appreciated (see below for more details),
2. For datasets under the CC-BY or CC-BY-NC sharing policy, permission is not required from the data provider(s) for use. Proper credit/citations for individual datasets and OBIS-SEAMAP are required (see below for more details),
3. For datasets under the "permission required" sharing policy, **including all datasets coming directly from seaturtleorg/STAT as a default**, it is required that users contact and get permission from the original data provider(s) for the use of individual observation records from the datasets registered in the OBIS-SEAMAP database. Proper credit/citations for individual datasets and OBIS-SEAMAP are required (see below for more details),
4. Gridded summary data that OBIS-SEAMAP has generated are under CC-BY sharing policy and permission is not required from the original data provider(s) for use. Proper credit/citation for OBIS-SEAMAP is required (see below for more details),
5. The citation of any publication, report, or product that made use of the data or tools provided by OBIS-SEAMAP will be forwarded to the OBIS-SEAMAP Technical Team (seamap-contact@duke.edu) for inclusion in our list of references,
6. OBIS-SEAMAP and the original data providers are not liable for errors in the data. While we have made every effort to ensure the quality of the database, we cannot guarantee the accuracy of these datasets,
7. The burden for determining fitness for use of the downloaded data for any analyses lies entirely with users. OBIS-SEAMAP or the original data providers do not support outcomes of your analyses that used the data downloaded from OBIS-SEAMAP,
8. Be encouraged to consider inclusion of the accompanying transect (effort) dataset(s) if available into the methodology of your analyses, and
9. Not to redistribute the data you downloaded from OBIS-SEAMAP through any media without consent from OBIS-SEAMAP and the original data providers unless the datasets are explicitly shown under the CC0 sharing policy.

Details on the proper OBIS-SEAMAP data credit/citations:

Except for data under CC0 sharing policy, proper credit/citations for all individual datasets are required, even when multiple datasets are used together. The citation section in the metadata of individual Dataset Page(s) should be used as the proper credit/citations. For your convenience, the zipped file for download data includes datasets\_and\_citations.csv that lists all the datasets, their citations and links to online metadata (notes: datasets\_and\_citations.csv has only one row for the daatset when users downloaded data with "Dataset on Dataset Page" option. For other options, the csv file lists all the datasets that provided data users downloaded),

**Example citation for a dataset (Dataset ID: 1201):**
Lockhart, G.G., DiGiovanni Jr., R.A., DePerte, A.M. 2014. Virginia and Maryland Sea Turtle Research and Conservation Initiative Aerial Survey Sightings, May 2011 through July 2013. Downloaded from OBIS-SEAMAP (http://seamap.env.duke.edu/dataset/1201) on xxxx-xx-xx.

**Additional citation for any telemetry dataset originally from seaturtle.org/STAT:** Coyne, M.S. and B.J. Godley. 2005. Satellite Tracking and Analysis Tool (STAT): An integrated system for archiving, analyzing and mapping animal tracking data. Marine Ecology Progress Series 301: 1-7.

**Suggested citation for OBIS-SEAMAP:** Halpin, P.N., A.J. Read, E. Fujioka, B.D. Best, B. Donnelly, L.J. Hazen, C. Kot, K. Urian, E. LaBrecque, A. Dimatteo, J. Cleary, C. Good, L.B. Crowder, and K.D. Hyrenbach. 2009. OBIS-SEAMAP: The world data center for marine mammal, sea bird, and sea turtle distributions. Oceanography 22(2): 104-115.

[***Long-term Scientific Goals of SWOT***](http://seaturtlestatus.org/data-provider-instructions#SWOTgoals)

In recent years, SWOT has developed a strategy and been working toward the long-term science goal of making SWOT the premiere global monitoring system for sea turtle populations and species. To do this, we have developed minimum standards for nesting beach data contributed to SWOT that: 1) allow comparison across sites with different levels of monitoring effort, and 2) allow for estimation of population abundances and long-term population trends. SWOT brought together some of the sea turtle community’s top leaders in data collection and statistical techniques, and developed a one-of-a-kind statistical modeling program that estimates real numbers of nesting turtles from incomplete data sets. The results and products—including a user-friendly handbook and modeling software—[are available here](http://seaturtlestatus.org/data/standards). We look forward to the input from the SWOT Team as products are tested and put to use.

In addition to SWOT’s scientific goals for nesting beach monitoring, SWOT is expanding its database through the Global Sea Turtle Tracking Initiative to identify important areas for sea turtles throughout the world’s oceans by aggregating available satellite telemetry data into a single, common database. We are collating satellite tracking data from all species and geographies to identify “Important Turtle Areas” at regional and global scales to guide spatial management of threats to sea turtles. This system will augment the global nesting database to provide the most comprehensive perspective of sea turtle biogeography available, and will allow user-driven updates and improvements to maintain currency.