The ability to identify and track individual marine turtles over many seasons and throughout their life provides a wealth of knowledge about biology, behavior, and movement. Passive Integrative Transponder (PIT) tags are a reliable, life-long, and minimally intrusive technique to identify and track individuals. Given the cost efficiency of PIT tags, in comparison to other tagging technology, they are an attractive solution to increase sample sizes. Despite their proven utility and longevity, there is limited infrastructure for tag data sharing and collaboration. Thus, re-sighting data (and the meristic and morphometric data that are typically paired to it) may not be currently leveraged to their full potential. The Biomark Biological Services division is building an open-access, centralized database to streamline the sharing of marine turtle tag data in support of sea turtle conservation efforts.
FEATURED PROJECT

SEA TURTLE TAGGING DATABASE: SEATURTLEDB.COM

Unique individual identification is a critical component of long-term sea turtle tagging and monitoring. Unique ID can be used to evaluate individual movement and growth patterns through re-sightings, estimate population size using mark-recapture modeling, and monitor remigration intervals of nesting females, to name a few. Currently, the lack of a data sharing platform for unique ID poses a barrier to the global management of marine turtles. A centralized, standardized database has the potential to significantly advance the conservation and management of marine turtles and provides an inclusive platform for data sharing and collaboration.

In collaboration with Loggerhead Marinelife Center, we have built a platform customized to the needs of the marine turtle community. This includes identifying which data are most critical and how best to standardize them, developing data management and privacy policies, and integrating data from a variety of sources.

Biomark products, services and technology used in this project:

- MK25 Leur Lock
- MK 10
- High performance PIT Tags
- HPR Lite
- GPR Plus
- Database Development
- Data QA/QC

OTHER PROJECT APPLICATIONS

LIFE-LONG DATA
GLOBAL COLLABORATION
INFORMED MANAGEMENT