MARALLIANCE
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Project Brief
## Tiger Shark Spatial Ecology
Northeastern Cabo Verde

We have surveyed large-bodied coastal sharks in northeastern Cabo Verde since 2016, with a focus on the higher trophic predator - the tiger shark (Galeocerdo cuvier).

Using standardized scientific fishing techniques we capture, measure, sex, tag and release large animals. We have also deployed 12 fin-mounted SPOT tags to study their spatial ecology. To date we have gathered data on tiger shark abundance and distribution which has been used to highlight potential residency/connectivity and identify critical foraging and nursery habitats.
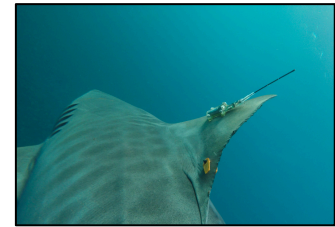
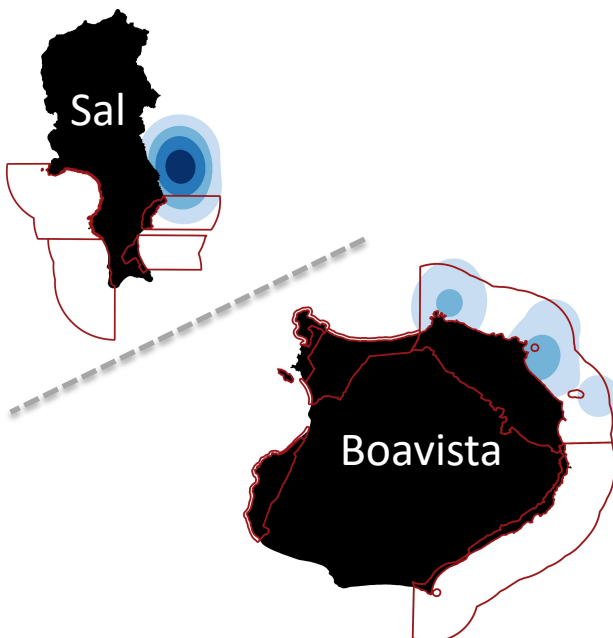**8** Fishers and students trained in monitoring methods

38 Sharks conventionally tagged

6 Number of species caught

12 Number of SPOT tags deployed

Sal

Boavista

< Map of northeastern Cabo Verde with the distribution of tiger sharks caught during monitoring (2016-2018). Darker shades indicate higher relative abundance. The areas in red are the current protected areas possessing a marine component.

Scientific fishing allows us to identify species, take biometric measurements and DNA samples. It also allows us to tag individuals, which is not possible with other methods. These data provide information on population demographics, distribution and hotspots of abundance, as well as changes over the years and in relation to environmental parameters such as temperature and salinity.

Graph showing the size (total length, TL in cm) and sex ratio of tiger sharks (*G. cuvier*) caught during scientific fishing surveys. Most captures were sized as sub-adults and adults.
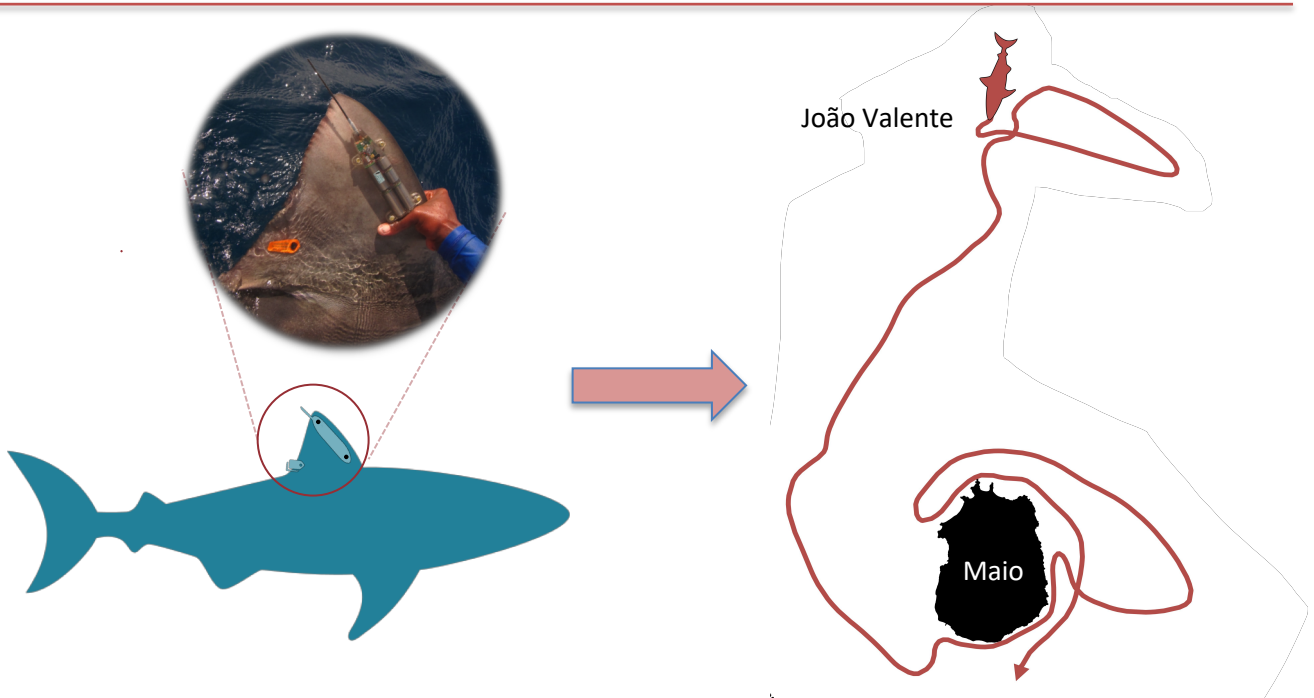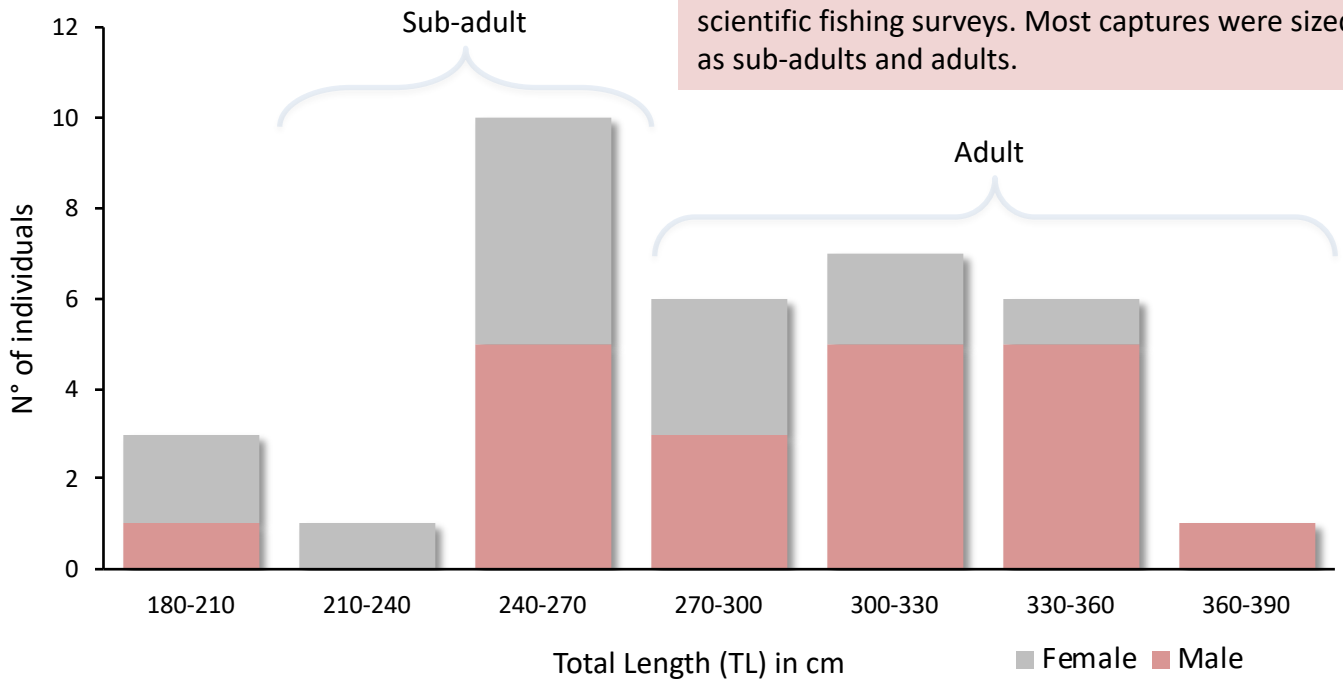
A fin-mounted SPOT tags (Smart Position Only Tracking satellite tags, Wildlife Computers, Redmond WA) is attached to the first dorsal fin (pictured). These tags connect with overhead satellites every time the fin breaks the surface. They provide high quality, near real time satellite-mediated location data with an accuracy to within 75m. These tracks help to understand tiger sharp spatial ecology and how they move throughout the Atlantic Ocean in relation to fisheries threats.

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