

## PALESTRAS QUINTAS DO MARE



### ANDRÉ AFONSO (MARE-IPLEIRIA)

**11 de Julho de 2019, 14: 00**

**EDIFÍCIO CETEMARES – PENICHE**

#### **A green strategy for shark hazard mitigation of Recife, Brazil**

Shark bites on humans are rare events but they produce severe socioeconomic loss, particularly in persistently hazardous shores. This study aimed at developing a non-lethal strategy to mitigate abnormally high shark peril off northeastern Brazil and assessing the bioecological processes underlying shark bite rates. We used a capture-translocation method to remove potentially aggressive sharks (PAS) from the area of risk and tagged the sharks with satellite and acoustic transmitters upon release to track their movements. Species of greater concern were the tiger, *Galeocerdo cuvier*, and bull, *Carcharhinus leucas*, sharks, with the former occurring during all their life stages and the latter occurring mainly after first maturation. Following release, sharks tended to move away from the area of risk into deep oceanic waters and generally towards north, thus validating the adequacy of the translocation method in reducing the local abundance of PAS. Tiger sharks performed wide ranging, inclusively transoceanic movements in the equatorial Atlantic and exhibited high fidelity to insular protected areas where some of their preferred prey abound. With this non-lethal strategy, we were able to reduce shark bite rates off Recife by > 90% while producing negligible environmental impact and collecting ecologically-relevant data on species highly susceptible to human pressure.