



40th International Sea Turtle Symposium

Workshop Proposal for ISTS40

Title of Proposed Workshop:

Understanding and quantifying cumulative and synergetic stressors to sea turtles

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Suggested Duration of Workshop: Half Day (4 hours)

Description and Justification of the Workshop:

Sea turtles experience multiple stressors across all of their life stages. The cumulative effects of multiple stressors are magnified by synergistic interactions, which can cause more impact than the additive impact of individual stressors. However, impact assessments from stressors on sea turtles are typically focused on isolated stressors at a particular time and location. Relatively few studies have investigated cumulative, synergistic, and secondary effects of different stressors across a broad spatial scale, this masks the real magnitude of potential impacts on sea turtles since the cascading effects caused by synergies are unaccounted for. This lack of consideration for cumulative and synergetic stressors is mainly driven by the lack of knowledge on the effects of interactions and the existence of appropriate approaches to quantify synergies. This workshop aims to highlight this issue and to start discussions to advance how we account for cumulative and synergetic threats. The workshop will be interactive and consist of a presentation setting the issue and bringing attention to approaches used by other fields to address the complex nature of threat assessments. This will be followed by interactive exercises to better understand the synchronous and asynchronous nature of stressors to sea turtles across multiple life-stages and environments and discussions on how we can move forward in this field. Participants should be invested in the topic and ready to contribute and participate.

Expected Outcomes of the Workshop:

The purpose of this workshop is to bring awareness to the need for threat assessments to be more holistic and considerate of interactions among stressors and as a community to brainstorm ways and ideas of how we can start addressing this within the sea turtle realm. I am hoping that by the end of this workshop we can delineate/map the multitude of stressors faced by turtles and the direction and interactions among those stressors. Discussions and material generated during the workshop will hopefully be used as a basis for a concept paper, for which all participants will be given the opportunity to be involved.