



# 40<sup>th</sup> International Sea Turtle Symposium

## Session Descriptions

### **Special Session: COVID-19 and Sea Turtles**

Changes in human behaviour and movement associated with the global COVID-19 pandemic has seen a decrease in human use of, and impact on, marine turtle habitat. This session will explore how anthropogenic activities have led to behavioural changes in marine turtles.

### **Special Session: Integrating Pure Research into Practical Environmental Management.**

Using sound science-based data to find solutions to potential risks to sea turtles from coastal development activities, including the industry resource sector. This session will involve studies that have used or developed practical tools that could be applied by environmental practitioners and regulators to better manage the anthropogenic footprint on sea turtles and their habitats.

### **Anatomy, Physiology and Health**

This session includes research on all aspects of sea turtle form and function, as well as the causes and consequences of individual and population-wide health problems and how these relate to the environment. Relevant topics include studies and reports on anatomy, physiology, reproductive biology, thermoregulation, osmoregulation, functional morphology, diseases, veterinary care, rehabilitation, epibionts, parasites, health assessment, embryology, and pathology. Priority for oral presentations will be given to studies that follow a clear scientific methodology, those that report new or novel findings, and those that involve innovative approaches, methods, technology, and/or analysis.

### **In-water Biology (Behaviour, Ecology, Migration, Telemetry, and Foraging)**

After entering the ocean as hatchlings, sea turtles do not leave the sea again except to nest (or occasionally to bask). This session broadly encompasses the biology of sea turtles in the ocean. It includes research on turtles of all life-history stages, with the goal of better understanding the biology and ecology of turtles in their underwater habitats. Suitable topics include behavioural or observational studies related to migration, diving, foraging, or navigation, as well as sightings, surveys and monitoring of turtles at sea (e.g., in developmental habitats or foraging areas), conservation status evaluations, and the structure and dynamics of populations, subpopulations, and metapopulations. Other topics include telemetry and movements, patterns of resource use and residency, mating behaviour and social interactions, feeding behaviour and diet composition, the ecological role turtles play in their diverse habitats, and the implications of habitat condition on the health and sustainability of turtles. Priority for oral presentations will be given to those works developed under a scientific method approach and those reporting new or innovative findings.

### **Nesting Biology (Ecology, Behaviour, and Reproductive Success)**

This session will focus on nesting beaches, nesting females, nests, hatchlings, eggs, and closely related topics. Relevant subjects include assessments of nesting population size, modelling of population parameters, long-term monitoring of nesting trends, forecasting population change, behaviour of turtles on nesting beaches, hatching/emergence success and hatchling production, sea-finding behaviour, environmental impacts on egg viability or nesting, newly discovered or newly colonized nesting areas, and related topics. Reports of nesting activity for short-term periods (<10 years) may be included in the poster session; studies revealing long-term nesting trends may be suitable for oral presentation if they reveal lessons relevant to other geographic areas. Priority for oral presentations will be given to studies that have a clear scientific methodology, report new findings, and/or involve innovative methods, technology or analysis.

### **Population Biology and Monitoring (Status, Modelling, Demography, Genetics, Nesting Trends, and In-Water Trends)**

This session focuses on sea turtle population assessments and related topics. Specific topics include: population demography (i.e. survival probabilities, growth rates and reproductive rates); abundance and trends; population structure and population connectivity; population genetics (e.g., mixed stock analysis); management unit/population segment definitions. Studies from both nesting and foraging habitats are welcomed, as are modelling approaches to population biology in which mathematical or simulation models are used to elucidate marine turtle population parameters and vital rates. Priority for oral sessions will be given to presentations that involve novel, integrative approaches to defining demography and population structure, as well as reports involving long-term monitoring programs. Short-term assessments of nesting populations and descriptive studies should be submitted as poster presentations.

### **Fisheries and Threats**

This session focuses on the evaluation of natural and anthropogenic threats that degrade the condition of critical sea turtle habitats, or which increase the risk of mortality and major population declines of sea turtles on any geographic scale. Topics include: fisheries bycatch, characterization of fishing gear and fishing effort, directed take, strandings due to any factor (including cold-stunning), impact of degradation of nesting and feeding habitats, impacts of urban development in coastal areas, and emerging threats from climate change, among others. Presentations may also include evaluation of potential impacts of either known or newly discovered threats, as well as proposed or actual measures taken to reduce risks to turtle populations. Priority for oral presentations will be given to those studies showing a clear scientific method approach, and those presenting innovations in their approaches, technology and/or analysis.

### **Conservation, Management and Policy**

This session will highlight work on economic, legal, policy, and management aspects of sea turtles and their conservation. Topics include studies and reports that address issues of legislative support and enforcement, policies and programs that safeguard sea turtles and their habitats, management issues related to sea turtle monitoring and conservation, and related matters. This session will also include reports on the implementation, results, and impact of initiatives and international agreements pertaining to sea turtle protection. Priority for oral presentations will be given to presentations that meet several of the following criteria: includes new data and/or a new perspective; presents novel approaches to sea turtle conservation, management, and/or public policy; highlights a global geographic area that has previously been under-reported; includes robust evaluation of

implementation, methodology and policy; describes use and application of new tools in management initiatives that result in successful conservation outcomes.

### **Education, Outreach, and Advocacy**

Sea turtles cannot be protected or conserved unless people take an interest in their continued survival. This session focuses on innovative educational methods for raising awareness of sea turtles and promoting their conservation in different parts of the world, as well as efforts to develop and enhance advocacy efforts on behalf of sea turtles at any level of community or government. Topics include a broad range of approaches to educational outreach and to advocacy, as well as strategies for influencing decision-makers and efforts to convert potential adversaries (e.g., fishermen or egg poachers) into allies. Priority for oral presentations will be given to those who highlight innovative

approaches, methods, results, and lessons that may be widely applicable to outreach and advocacy efforts in many regions worldwide.

### **Social, Economic, and Cultural Studies**

Sea turtles play a crucial role not only in marine ecosystems, but also in human societies. This session includes presentations that broadly explore the human dimension of sea turtles and the importance of turtles in diverse cultures and societies around the world.

Some presentations focus on research projects, but others highlight initiatives related to the conservation of sea turtles and their habitats, or efforts to understand local attitudes toward sea turtles and conservation. Topics include but are not limited to: social science and/or anthropological research; discussions of cultural considerations related to conservation and management; sea turtles in local folklore, mythology, and culture; examinations of conflict and conflict resolution; studies of information and/or technology transfer between local peoples and other experts. Priority in oral presentations will be given to authors who provide clear indications of social science or other recognized approaches in their abstracts, those discussing under-reported geographic regions, and those with compelling case studies that may hold global lessons.