



“As we begin to understand the state of the world’s sea turtles, new priorities arise, global strategies form, and fresh hope swells for the survival of these incredible creatures...”

—Edward O. Wilson, Pellegrino University Research Professor Emeritus, Harvard University

## Experts Define the Burning Issues in Sea Turtle Conservation

A generation ago, a small group of conservationists recommended to the administrators of the brand new U.S. Endangered Species Act that certain marine turtles be listed as endangered. Despite very little data, the leatherback, Kemp’s Ridley, and hawksbill became the first sea turtles to be listed. Loggerheads, olive Ridleys and green turtles were added a few years later, after threats to sue the U.S. government over their exclusion were heeded. The flatback was included also, even though it is the least impacted of all the sea turtles, as there was a danger of fraudulent mislabeling of flatback products in trade. These early actions set in motion an incredible global cascade of events to prevent the extinction of sea turtles, and a small worldwide network of sea turtle protectors and scientists expanded to the multitude that we see today.

Urgency and limited resources have driven conservationists to be increasingly strategic in their focus, and setting priorities is critical for any effort, whether directed at a species, an ecosystem, or the Biosphere as a whole. One way to do this is to look at the risk of extinction. IUCN, through its *Red List of Threatened Species*, provides a global overview of plants and animals at risk of extinction. IUCN’s criteria are generalized to be useful for all types of organisms; hence they pose certain difficulties when applied to widely ranging, long-generation creatures such as sea turtles. The *Red List* criteria, for instance, call for analyzing “ten years or three generations, whichever is longer” of abundance data, which for sea turtles can mean over a century of data in some cases, and such long-term data sets are hard to find. Nonetheless, *Red List* assessments are an extremely valuable tool for sea turtle conservation, and IUCN continues to take its Red-Listing role seriously. All seven species of sea turtles are now on the *Red List* as either Endangered or Critically Endangered, with the exception of the flatback turtle (listed as Data Deficient); these species assessments are intended to be updated every five years.

But global-scale data are just a start. Peter Dutton’s article on pages 10–11 demonstrates that there are several stocks of leatherback turtles around the world, some of which are vastly more at risk than oth-



Resting green turtle near Sipadan Island, Sulawesi Sea, Sabah, Malaysia. © NICHOLAS PILCHER

ers. Leatherbacks in the American Pacific have witnessed a vertiginous decline in recent years, whereas some Caribbean stocks are actually on the rise. The global Red Listing of the leatherback as Critically Endangered is warranted since the mean global change in status is negative, but conservation efforts are clearly more urgently needed in the Pacific.

Endeavoring to go a step further than the *Red List*, an initiative called the Burning Issues Assessment has been undertaken by members of IUCN’s Marine Turtle Specialist Group (MTSG). The MTSG is a group of more than 300 experts from more than 70 countries that work to ensure a vision of “*marine turtles fulfilling their ecological roles on a healthy Planet where all peoples value and celebrate their continued survival.*” A select group of these sea turtle experts, hailing from several countries and representing knowledge of all the world’s major sea turtle stocks, gathered in Washington, DC, in August 2005 for this assessment.

There are several components to the Burning Issues Assessment, including the “Hazards to Sea Turtles” (p. 5), as well as lists of critical research needs and conservation tools. However, its centerpiece is the list of “The Top Ten Burning Issues in Global Sea Turtle Conservation.”

# The Top Ten Burning Issues in Global Sea Turtle Conservation

## Leatherbacks in the Pacific

*Current Status:* Major populations in Mexico, Costa Rica, and Malaysia have declined more than 90 percent in less than 20 years.

## Olive Ridleys in Orissa, India

*Current Status:* A minimum of 10,000 adults has been killed each year for the past 10 years.

## Kemp's Ridleys throughout their range (Caribbean, Gulf of Mexico, and Atlantic)

*Current Status:* Kemp's Ridleys' small population size has declined more than 95 percent in less than 50 years, and they live within a limited range.

## Loggerheads in the Pacific

*Current Status:* Nesting in the Pacific (principally Japan and Australia) has declined by more than 90 percent over the past 25 years.

## Green turtles in the Mediterranean

*Current Status:* In the major rookeries, located in Turkey, populations have declined by 60–90 percent in 17 years.

## All sea turtles in Southeast Asia

*Current Status:* Hawksbills, green turtles, and olive Ridleys have all suffered substantial declines in nesting in this region.

## Loggerheads in the Atlantic

*Current Status:* At the major rookery at Archie Carr Refuge in Florida, U.S.A., nesting has declined by more than 50 percent in the past five years.

## Hawksbill and green turtles in the Caribbean

*Current Status:* Green turtles have declined by more than 95 percent in the past 400 years. The loss of a number of rookeries has significantly reduced genetic diversity of green, and current take of adult green turtles is greater than 11,000 per year in Nicaragua. Hawksbill nesting has declined by more than 60 percent at the largest rookery, located in Mexico, in the past five years.

## Green and leatherbacks in the Eastern Atlantic (and their southwest Atlantic foraging grounds)

*Current Status:* Globally significant nesting and foraging populations are virtually unstudied and threatened by substantial take because of extreme local poverty. Leatherbacks from Atlantic African nesting beaches also face great pressure from fisheries off the coasts of Brazil, Argentina, and Uruguay.

## Hawksbills in the Indian Ocean

*Current Status:* Trade statistics going back more than 100 years indicate massive declines of up to 95 percent in hawksbill populations, specifically in Madagascar, Seychelles, and Sri Lanka.

The Top Ten draws attention to some of the sea turtle populations that are most in need of urgent conservation attention, considering one or more of the following criteria: recent precipitous declines, small population size, high degree of threat, or irreplaceability. The Top Ten list is reviewed annually to its timeliness, and it attempts to include all the major regions where sea turtles live, using best-available data and expert opinion as its principle resources. It is a compelling tool to assist the global sea turtle research and conservation community with media outreach, communications, and public education. It will serve as an internal compass for our movement, to ensure that we are focusing our attention on those species, regions, research, and conservation needs that are of the most grave and urgent concern to ensuring the survival of sea turtles. Moreover, it serves as a guide to influence governments, local peoples, and donor agencies of all sorts. It is at this national and local level that good management and enforcement of sea turtle protection are most critical and most effective.

All conservation efforts for sea turtles are worthy ones, yet what the Burning Issues Assessment and its Top Ten list provides is one snapshot of the world today and a reminder that while we must work toward conserving sea turtles and their habitats everywhere on Earth, there are certain sites and populations that are in need of immediate attention. We must ensure that extinction does not occur on our watch, and the Burning Issues Assessment will help us to keep that promise.

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*Peter C. H. Pritchard is Director of the Chelonian Research Institute and has studied sea turtles around the world for the past 40 years, including two decades of notable turtle conservation on the coasts of Guyana. He has been named a Time Magazine "Hero of the Planet" and "Floridian of the Year" for his conservation efforts.*