

## **Marine Mammal Commission 2017 Annual Meeting**

**April 5-7, 2017, North Falmouth, Massachusetts**

### **Day Two: Gray Seal – Human Interactions Session Summary**

In New England, the gray seal population is increasing after being significantly reduced from pre-exploitation/culling numbers, but probably remains below the carrying capacity of their environment. Some coastal communities and fisheries have reported that the increased number of gray seals has had undesirable consequences for them, such as increasing occupancy and fouling of beaches, health concerns, alteration of coastal habitats, attraction of large sharks, decreased availability of commercially or recreationally valuable fish species, and direct fishery conflicts. Increased gray seal numbers have also been reported to have positive impacts, such as recreational (viewing), educational, and tourism opportunities. Overall, we learned in this session that gray seals are creating problems for some coastal communities and industries, but opportunities for others.

Gray seals can cause significant problems for some recreational and commercial fishermen. For example, they are reported to take catch and bait from a number of commercial fisheries. In addition, shore-based fishing opportunities for striped bass on Cape Cod, an iconic fishery, have been largely lost in the last twenty years on many traditional fishing beaches, apparently due, at least in part, to depredation by gray seals. These changes may have affected businesses as it was reported that many tackle shops have closed their doors as this fishery has been affected. Unfortunately, research is not available that would quantify the extent of depredation of catch (or bait) from various types of fishing gear, or whether other factors such as water temperature or changes in distribution of bait fish might have been contributing factors.

On the other hand, the increase in gray seals has created economic activity that is part of a new “Blue Economy” on the Cape. Several businesses on the Cape are offering seal-watching cruises, and shore-based organizations are leading walking tours that provide the public with close-up views of gray seal rookeries and haul-outs. The recent increase in numbers of white sharks, possibly due, at least in part, to the increase in gray seals, created human safety concerns at first but now has become another economic opportunity – shark watching and associated retail opportunities. However, again, research is lacking that would quantify the economic benefits of these activities.

Human health and coastal habitat alteration are two other concerns that were addressed. The Town of Chatham, which is close to the center of the region undergoing the increase in the gray seal population, has concluded that gray seals do not pose a significant threat to human health, a finding that is supported by scientific research. Concerns were raised that large rookeries and haul-outs of gray seals are having negative impacts on coastal habitats in certain locations, e.g., on Muskeget Island, the site of the largest U.S. breeding rookery, however research addressing these concerns are also is lacking. An important question that was not addressed is whether such changes are undesirable and in need of management and mitigation, or whether they are part of a ‘natural’ process associated with a previously extirpated species expanding to reoccupy its historic range.

A survey that polled residents, anglers and tourists on Nantucket Island produced very interesting results. There was broad agreement that seals and sharks are important to the marine ecosystem, but mixed opinions regarding the impacts of seals on fishing and tourism. All groups opposed lethal deterrents, even if the seals are 'caught' interfering with fisheries, but there was support among residents and anglers for measures that would reduce the size of the population. There was near universal support for the goals of Marine Mammal Protection Act (MMPA), and strong support for the rescue of stranded or entangled seals. Because public attitudes on Nantucket may not be representative of those on the Cape or in the broader region, the researchers hope to administer the survey to a broader range of communities as funding becomes available.

An overview of the MMPA and its provisions that address marine mammal interactions with human activities underscored that, unlike the Endangered Species Act, there is no "listing" or "de-listing" process under the MMPA, but rather a classification of status as depleted if numbers fall below a certain threshold. All marine mammal species are protected equally by the Act, although it provides numerous exemptions designed to allow human activities to take place as long as they do not significantly diminish a species' capacity to recover and maintain itself at its optimum sustainable population level. The MMPA and implementing regulations offer a variety of tools to manage human – marine mammal interactions, such as fishing regulations, gear modification, ship-strike prevention measures, approach guidelines, research and monitoring, education and outreach, and non-lethal deterrence guidelines. The latter, which could be very useful in mitigating seal-human interactions, are under development, and NOAA Fisheries will be releasing them as a proposed rule for public comment later this year.