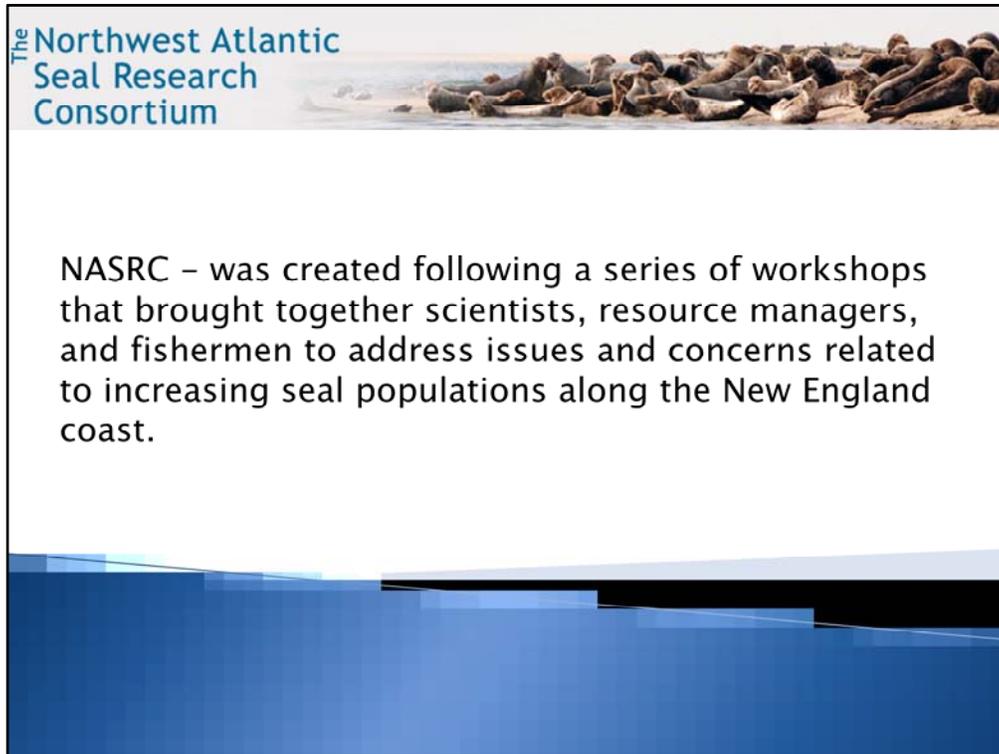




An **acronym** is an abbreviation formed from the initial components in a phrase or a word.



I'm here today to introduce you to and explain a little bit about a new group, the Northwest Atlantic Seal Research Consortium (**NASRC**).

We are a group that formed following a number of meetings and workshops focusing on seals and seal issues.

The Northwest Atlantic
Seal Research
Consortium

[Gulf of Maine Seals – Populations, Problems and Priorities](#)
May 28–29, 2009
Woods Hole Oceanographic Institution

[Gulf of Maine Seals – Fisheries Interactions and Integrated Research](#)
October 28th 2011
Provincetown Center for Coastal Studies

*Workshop Reports available on the web

There were two meetings that were our main starting point. The first was “*Gulf of Maine Seals - Populations, Problems and Priorities*”, May 28-29, 2009 held at and sponsored by Woods Hole Oceanographic Institution. The second was “*Gulf of Maine Seals - Fisheries Interactions and Integrated Research* “ , October 28th 2011, held at and hosted by the Provincetown Center for Coastal Studies. While these were by no means the first meetings to focus on seals and seal issues, part of the rationale for the first of these meetings was that there had not been a general meeting focusing on issues



The Northwest Atlantic Seal Research Consortium

Gulf of Maine Seals – populations, problems and priorities (WHOI 2009)

Goals:

1. To build community among stakeholders with an interest in pinnipeds in the region.
2. To identify issues surrounding pinnipeds living in the Gulf of Maine.
3. To formulate strategies and suggest tools for addressing important issues.

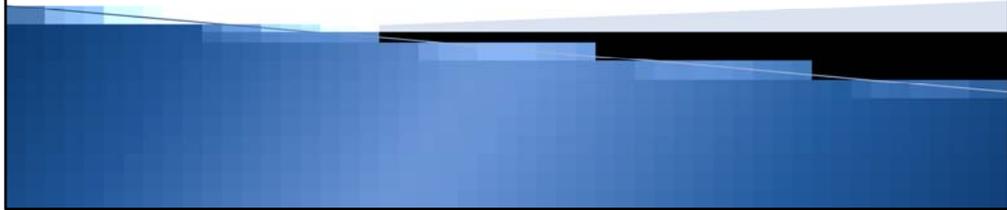


Two of the goals of that first meeting were to build community between stakeholders and scientists with an interest in pinnipeds in the Gulf of Maine and to formulate strategies and suggest tools for addressing issues identified at the meeting. The second meeting was focused more directly on issues relating to increasing seal populations and fisheries. Based on feedback from attendees of both workshops we felt that it was important to maintain an ongoing effort towards these goals. With this in mind we formed a steering committee, drafted a mission statement and working mandate for organization and guidance.



Mission

Working collaboratively to improve our understanding of the ecological role of seals in the Northwest Atlantic.



The Northwest Atlantic
Seal Research
Consortium



Mandate

To improve our understanding of the ecological role of seals in the northeast U.S. This will be accomplished through coordinated research efforts, sharing of data, collaboration amongst all stakeholders, a concentrated effort to gain knowledge, and public outreach. The consortium will include scientists (NGOs, universities, state and federal government), fishing community (commercial and recreational), and anyone who shares an interest.

The Northwest Atlantic Seal Research Consortium



Addressing Seal Issues



- Regulation (legal)
- Ethics (values)
- Science (biology, ecology)

In short we hope to strengthen the role of science in working through issues presented by changes in seal populations. But, just what is the role of science in these discussions? Pinniped problems and issues can be addressed from at least three different perspectives, legal, ethical and scientific. A legal approach focuses on regulations and laws pertaining to marine mammals. Ethical perspectives focus on values and attitudes that individuals and society as a whole hold for seals. The scientific perspective looks at scientific research and data. Ideally, a well balanced solution would incorporate aspects of all three. Unfortunately this has not always been the case. Solutions can and have been built around a single perspective.

The Northwest Atlantic Seal Research Consortium



Addressing Seal Issues



The problem is ...

Part of the problem is that all too often, there has not been a lot of good science available that could be used to help resolve a particular problem.

One of the main reasons for this, I think, is that pinnipeds are cryptic and difficult to study. They are animals that must only come ashore to breed and therefore spend the majority of their time in an environment where they are difficult to observe at best. Many species have adapted exceedingly short breeding and weaning times so they spend very minimal time where they can be easily observed. Furthermore, seals are very adaptable. They have survived through the ages by being able to adapt quickly to changing conditions in the marine environment, an environment that is far more changeable, erratic and dynamic than terrestrial ecosystems. As a result seals are ecologically dynamic, flexible and exceedingly changeable.

This, I think, means some good news and some not so good news.

The not so good news is that due to their incredible changeability and ecological flexibility, valid, broad scale assumptions about seals are very difficult to make – and therefore broad scale solutions to problems may not tend to work. For example, consider foraging behavior. What a particular seal is feeding on may change dramatically based on a wide assortment of variables such as availability of prey species, or prey size, even individual preference and experience. So broad conclusions about diet based on data collected in one place at one time may not be completely applicable to another place and time.

The Northwest Atlantic Seal Research Consortium



Addressing Seal Issues



The good news is ...

- Better information gathering tools
 - for seals
 - for people
- Better Networking
 - data collection
 - data distribution
- Better ways to visualize information

So what is the good news?

The biggest piece of good news is that our ability to collect, make sense of and disseminate data has taken vast strides in recent years. In the past the telemetry technology needed to remotely monitor animals either while at sea or on hard to reach haulouts has been crude, large and expensive. While technology is rarely cheap hardware now exists that can be used to track, monitor and collect data on free ranging animals at sea and in remote locations for long periods of time. Besides telemetry used by researchers, we now have a range of data collecting tools that did not exist a decade ago and are available to virtually anyone. For example, nearly everyone now carries equipment with them that can collect record and transmit valid, verifiable, geolinked data – your cell phone. Cell phone cameras can be used to take photos that if verified can be used as archival data. GPS enabled phones can link photos to a specific location at a specific time (geolinking). Ten years ago a single GPS enabled camera would have been a major expense for a research program. Thanks to things like cloud based software and networking sites we now have an unprecedented range of analytical and data distribution tools that can be used to collect, analyze, share and distribute information to an unlimited range of researchers and stakeholders alike. This presents exciting possibilities for improving data quantity and quality with highly flexible, adaptable, local and real-time information that can be used to overcome the problems posed by seals ecological unavailability and variability. This should mean better science to help better address pinniped problems and issues. We now have tools appropriate to the task.

The Northwest Atlantic Seal Research Consortium



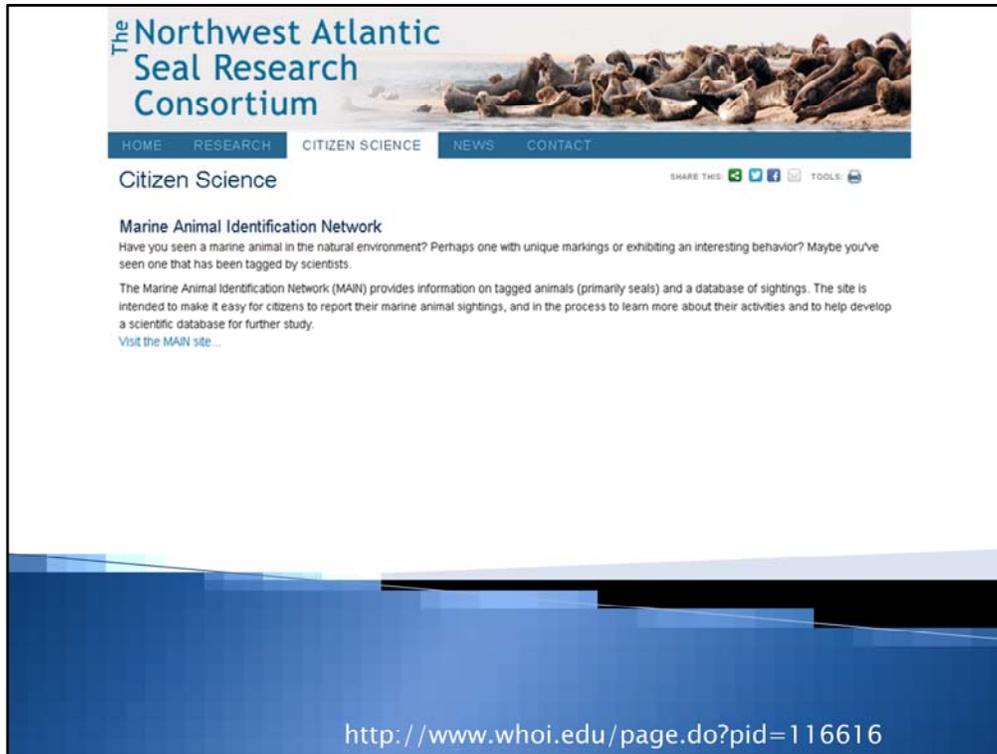
Addressing Seal Issues



The good news is ...

Better science = better decision making

Our vision for NESRC then is to harness the power of this new capacity and to help connect scientists and stakeholders make better, well informed choices towards managing issues that increasing seal populations present.



Although we are new, we have created several tools that we hope will help. The first is a webpage. This is the virtual home of the consortium. It includes links to research, news and contact information

The Northwest Atlantic Seal Research Consortium

HOME RESEARCH CITIZEN SCIENCE NEWS CONTACT

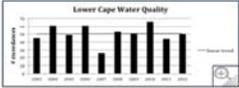
Water Quality Issues SHARE THIS: [social icons] TOOLS: [print icon]

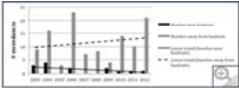
Scientists from the newly created Northwest Atlantic Seal Research Consortium (NASRC) are using data collected by the Massachusetts Department of Public Health (MDPH) to investigate whether seals may impact beach water quality along Outer Cape Cod.

A growing population of gray seals has been cited as the reason for beach closures due to poor water quality on the outer Cape. But is there evidence to support these water quality statements?

Related Files
[Water Quality Data](#)

 The study focused on beaches around three seal "haul-outs" on the lower Cape where large numbers of gray seals leave the water at low tide to avoid predators, regulate their body temperature, and socialize. Sites in the area include High Head on the outer Cape in the National Seashore/Truro area; Jeremy Point on the Cape Cod Bay side of Wilmot; and North Island in Chatham. (NMF/SUSFWS Permit No. 932-1905-00/MA-009526)

 **Lower Cape Water Quality**
 Researchers examined ten years of water quality data collected by the Massachusetts Department of Public Health, focusing on 89 sites at public beaches in six towns surrounding the large, seal haul-out areas on Cape Cod. Bathing beach water quality is highly variable from year to year, but overall, the study found no change in the trend of water quality exceedances for Lower Cape Cod region. (Courtesy Rebecca Gast, Woods Hole Oceanographic Institution)

 **Water Quality Near Seal Haul-Outs**
 Researchers divided the beaches in the lower Cape region into those within 5 miles of seal haul-outs, and those more than 5 miles from seal haul-outs. This distance was thought to be a reasonable distance for the dispersion and inactivation of fecal indicator bacteria (FIB) on a daily tidal schedule. Analysis found that the beaches near the haul-outs actually showed a decreasing trend in yearly FIB exceedance events over the last decade, while the beaches away from seal haul-outs showed an

For example, when questions were raised about a link between increasing seals and beach closures on the Cape, researcher Dr. Rebecca Gast a WHOI research scientist quickly surveyed available data on beach closures relative to seal haul outs and posted a review and analysis of the information. While, preliminary this type of information can be a useful part of the discussions about impacts seals may have on beaches and can help to show how the issue might be monitored and mitigated.

The **Marine Animal Identification Network** <http://main.who.edu/>

HOME ABOUT US REPORT A SIGHTING SEARCH SIGHTINGS SPECIES LIST TAGS

Have you seen a marine animal?

Much of what we know about marine mammal migration and behavior is the result of keen observation by patient naturalists, fishermen, citizen scientists and researchers. In many cases, we learn through the imprecise science of serendipity whereby a matrix of possibilities results in a report: the right person in the right place at the right time knowing the right person to contact.

Have you seen a tag? A uniquely marked individual? An interesting behavior? Or maybe you are not quite sure what it is you saw? The Marine Animal Identification Network provides information on tagged animals (primarily seals) and a database of sightings. We hope that YOU will help in recording these reports and invite you to join here. Learn about research on seals and other marine animals and participate in the process of learning about their travels.

Marine Animal Entanglement Response Hotline
1-800-900-3622
LEARN MORE about
The Northwest Atlantic Seal Research Consortium
 Contact sealresearch@who.edu for more information.

Marine Animal Sightings - Seals

Feature story: **New Consortium established**

The Northwest Atlantic Seal Research Consortium was created following a series of workshops that brought together scientists, resource managers, and recreational fishermen to address issues and concerns related to increasing seal populations along the New England coast. NOAA Permit 775-1875-00

Have you seen me?

Marine Animal Identification Network
 WOODS HOLE OCEANOGRAPHIC INSTITUTION

Embed our badge for your website:

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<a href="http://main.who.edu"
">img
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 Follow the evolution of Alvin.

The Evolution of DSV Alvin
www.youtube.com
 For nearly 50 years, the human-occupied submersible Alvin has helped scientists explore the hidden world of the deep ocean.
 2 hours ago

Another tool linked to the main webpage is the Marine Animal Identification Network webpage and database. This webpage was created as a place where anyone – researchers, rehabilitators or the general public - can get information about and report tagged and identified individual animals. The page contains information about tags used by tagging programs and provides a place to report sightings. Tag sightings are rare, and we hope that by increasing the number of “eyes” looking for tags will result in better reporting of tagged animals. We also hope to build a database of individually identifiable animals to improve information about individual animal activities.



We are also in the early stages of planning another workshop and meeting for the fall of this year and would welcome suggestions and input on how we can better accomplish our goals.

On behalf of the steering committee, "Thank you".

