

September 2004

Collaborations

A monthly report on collaborative research projects in the northwest Atlantic



Hook fishermen accounted for releasing some 40,000 tagged cod as part of the Northeast Regional Tagging Program, the most of any participants.

Sustaining Communities Through Collaborative Research

Photos courtesy C.C.C.H.F.A.

The folks at the Cape Cod Commercial Hook Fishermen's Association (known affectionately as "The Hookers") refer to their office in Chatham, Mass. as the shanty. The nickname—lingua franca for the rough shacks fishermen use to store lines, nets, buoys, traps, outboard motors, bottom paint, and whatever else they can fit inside—is a good one because the office, which is a bit rough around the edges, serves a multitude of functions.

Fishermen drop by to check on weather forecasts and fish prices; marine safety courses on topics such as coldwater survival are held regularly; and discussions on the economic and social implications of new fishing regulations are frequent and passionate.

"It's a meeting place for the fishing community. In fact, some guys spend so much time here their wives call it 'The Clubhouse,'" said Mel Sanderson who coordinates activities at the shanty.

In the past few years the Hooker's headquarters has taken the lead in another activity that has wide-

spread implications for fishing communities as well: you guessed it, collaborative research.

Currently the Hookers are involved in at least six research projects that team scores of fishermen from Cape Cod to Maine with some of the region's leading fisheries scientists.

Whether it's testing an electronic logbook that atalogues fishermen's observations of the marine environment in one study or tagging tens of thousands of cod in another, the research is aimed at protecting the fishing way-of-life through a better understanding of fish science and conservation.



“Collaborative research has become part of this community. In the short-term, it provides fishermen with important ancillary income to make car and mortgage payments, in the long-term it conserves fish for future generations,” said Sanderson.

One of the organization's latest projects, which will begin tracking the reproduction cycle of cod on the western edge of Georges Bank using DNA analysis, illustrates how sophisticated the science used in some of the projects has become, as well as its significant economic impact on fishing communities.

The \$257,000 research project is funded by NOAA Fisheries Cooperative Research Partners Initiative—48 percent of which goes directly to the industry—teams scientists from the Marine Biologic Laboratory in Woods Hole, Mass. and the University of Massachusetts at Boston with crews on five Cape Cod hook vessels.

The first phase involves capturing samples of spawning fish to take biopsies for genetic analysis.

In winter, crews will return to measure winds, tides, and currents in order to approximate where the fertilized eggs from the spawn will settle.

Finally, when the eggs hatch in spring, crews will be on hand to capture the young, known as fingerlings, and take more biopsies to determine if they are the progeny of the cod sampled the previous fall.

Only by monitoring these phases of the reproductive cycle can researchers correlate relationships between spawning populations of cod and the specific habitat utilized by these bottom dwelling fish, according to Tom Rudolph, a project director with the Hookers.

“The purpose is to determine whether or not we are protecting the right piece of bottom,” he added.

Identifying essential fish habitat is critical for effective management because regulatory closures of the wrong areas don’t protect cod before they’ve had an opportunity to reproduce.

“We hope to give managers information that will eventually lead to dramatic increases in cod populations on Georges Bank,” Rudolph said.

The decision to target spawning fish for biopsy in the fall indicates a high level of cooperation with fishermen from the earliest stages of the project’s design, said Sanderson.



“Conventional wisdom says that cod begin to spawn here in the spring or late winter at the earliest. However, local fishermen have long reported catching spawning fish in the fall. Thus, the research will not only record phases of the fish’s reproductive cycle, but test some old hypotheses as well.”

To find out more about other research projects hook fishermen are involved in or to get a schedule of events at the shanty please visit www.cchfa.org.



Cod-tagging, a small numbered tag is attached below the fish’s dorsal fin to help track its movements.

Attention: NFWF Requests Proposals To Develop Whale-Friendly Gear As Part of A \$50,000 Team Contest.

The National Fish and Wildlife Foundation and NOAA Fisheries, in cooperation with the Northeast Consortium and the Gulf of Maine Lobster Foundation, are now accepting proposals for The Large Whale Gear Competition, a new project supported by NFWF's National Whale Conservation Fund.

The goal of this team contest is to inspire innovative fishing gear (or gear modifications) that help reduce the number of large whale entanglements with fishing gear in the North Atlantic, according to NFWF Program Director Leslie Ricketts.



Selected teams will receive grants of up to \$10,000 to build and then test prototypes in real world conditions with New England fishermen.

An \$50,000 grant will be awarded to the team with gear that shows the most promise in becoming a commercially-viable solution to the problem of large whale entanglements.

The National Whale Conservation Fund was established to support research, management, conservation and education/outreach activities related to the conservation and recovery of whales.

Applicants must follow the following guidelines to be eligible for participation:

- Form a team and secure an advisor from an a college, university, company, or association or qualified to advise on potential solutions to gear and whale interactions.
- Competing teams must have at least three members (including the advisor), one member must be designated as the team spokesperson.
- Advisors can provide teams with guidance and technical expertise, but cannot be actively involved in the construction and operation of the prototype.
- Applicants can design and build a prototype as a class project or school group activity (if submitted from an educational establishment).
- Multiple teams from the same institution are permitted.
- Application and presentation materials must be submitted in English.

The online application guidelines and form are available at the National Whale Conservation Fund website: http://www.nfwf.org/programs/large_whale_gear.htm.

A letter of mandatory letter of intent is due via email or post mail to the National Fish and Wildlife Foundation (attn: Leslie Ricketts, Program Director Marine Conservation Funds) by December 1, 2004. Full proposals, accepted by invitation only, will be due to NFWF by March 15, 2005.



Don't Forget!
The 2004 Gulf of Maine Summit
is October 26-29
in St. Andrews,
New Brunswick.

For program and registration details please visit: www.gulfofmainesummit.org

Gulf of Maine
Watershed
with major river basins

SCALE
0 50 100
km

Depth contour in meters

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