(Canada and the United States both claim sovereignty over the island but so far each have agreed to disagree about its ownership).

At Machias Seal Island, only three tour operators are licensed to take passengers out to the island, and tourists are limited to 30 a day. Visitors must stay on walkways and view birds from prescribed blinds. Because the tour operators must undergo a strict licensing process, and carry costly liability insurance, Davidson says, the system becomes self-policing. "If one of the tourists, or one of the other captains does something wrong, we hear about it pretty quickly. They're very protective and monitor each other and other people that land there."

If CWS establishes a National Wildlife Area on Isle Haute, the first thing he will do, Davidson says, is "talk to the community, find out who has a real interest in preserving the island and who has an interest in taking people out.

Camping would be highly restricted, if allowed at all."

Perhaps more than anyone, Dan Conlin, who speaks with Davidson on a regular basis, wants to see the island retain its integrity. He's been coming here since he was a Boy Scout and returns whenever the opportunity arises.

At the top of the island near the rubble of the old lighthouse, Conlin recites tales of treasure hunters to the island; of the Maliseet and Micmac natives who met here 350 years ago, over a meal of dog flesh, to plan their attack on the British in Annapolis Royal; and of those who succumbed to Isle Haute, like the fellow who met his death reaching too far over a cliff for bird eggs.

As Conlin speaks about the island's unpredictable weather, a roll of fog enshrouds him, then lifts. We wend our way back to the boat, past a field of fireweed and down a primitive trail along a steep-sided ravine that leads to a section

called the Gully, the only forested area on the island. It is composed mostly of hardwoods that have never been cleared or disturbed. Along the way, the field naturalists spot wild columbine, striped maples and several varieties of ferns. Back on the beach they take away some of the debris—including the plastic pig—and douse out the smoldering driftwood with water from the salt pond.

Mary Desroches pitches in. She and her two sons own the tidy boat that will carry us the 12 miles back to Harbourville. It is a no-frills venture and the family has had to jump through plenty of regulatory loops just to make this one trip. Like many families in this area of the Bay, the DesRoches have been rocked by the collapse and privatization of the fisheries. Shuttling tourists back and forth to the island a few times during the summer is just one of the ways they can earn money to keep afloat. They are generous with their knowledge of the

region, and display a genuine love for the island. When I ask if she considers herself an ecotourism operator, DesRoches flashes a grin. "Not really," she answers. "We're just people trying to make a living." More than anything, she adds, they just want to see the island receive the protection it deserves.

Those are words that would make Kevin Davidson very happy.

Keep in mind a new Fundy Issues Fact Sheet, "Putting the Fun in Fundy: Possibilities and Pitfalls of Ecotourism." You can find it online at www.auracom.com/-bofep/publications.htm. It considers 'balancing the costs and benefits' of ecotourism and the increasing potential for conflict between an expanding ecotourism industry and some of the natural features that sustain it, including shorebirds, whales and cruise ships.

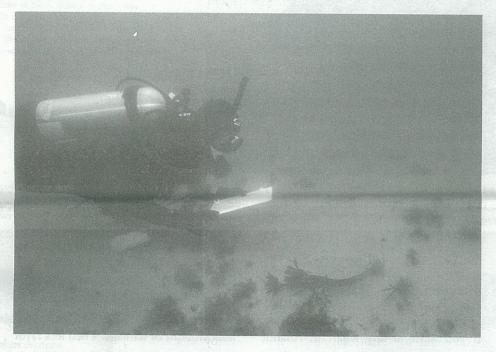
## **Gulf Voices**

## Diving into the glorious Gulf of Maine

By Bob Michelson

he Gulf of Maine is an extraordinary place to go scuba diving. Many types of underwater habitat you can be found here, ranging from a sand and mud habitat in Cape Cod Bay to a bouldery ledge habitat off the Nova Scotia, Maine and New Hampshire coastlines. The marine life is as diverse as the habitats in which they live. Incredible shapes, sizes and colors of creatures are everywhere. With such extreme tidal ranges, the Gulf of Maine can be as challenging a place to dive as it is fascinating.

I had the opportunity to dive Eastport, Maine several years ago and was astounded at the marine life found in only 28 feet [8.5 meters] of water at low tide (add 28 feet for high tide; diving can only be done at slack tide in the Bay of Fundy, it is too dangerous to attempt a dive at any other time). Stalked tunicates, red branching soft coral, several species of sea stars, as well as northern red anemones were everywhere. I found all these creatures at all depths of my dives. The normal stratification of marine life



A Gulf of Maine fish surveyor with flounder

clines—significant drops in temperature—from forming, allowing deep, cold-water species to survive in comparatively shallow water.

The coasts of Nova Scotia and Maine have primarily a rock, ledge habitat near shore. The harder rock substrate tends to yield much better horizontal underwater



Cunner fish

Photos: Bob Michelson

found in the southern half of the Gulf was nowhere to be seen. The incredible tides and currents prevent thermovisibility. Forty to 60 foot [12 to 18 meter] visibility is not uncommon. This ledge habitat provides a home to forag-

ing striped bass, sea ravens, sculpin, lumpfish and schooling pollock. Invertebrates such as sea stars, urchins and sea cucumbers are all around. New Hampshire's diving is limited to offshore locations such as The Isles of Shoals, which has islands located in both Maine and New Hampshire waters. It is a great place for both newly certified and more experienced divers. The Shoals are home to sheer wall-like diving and offer deep ravines that rival winter diving vacation destinations.

Massachusetts is the dividing line where marine life habitats change within the Gulf. The Cape Ann communities of Gloucester and Rockport have a mix of rocky shore line and sand beaches—the convergence zone where rock and sand bottom dwellers meet. Here you can see winter and windowpane flounder, winter and little skate in the center of a sandy bottom cove, then move off to one side of the cove and explore the rock habitat of sites such as Folly Cove and Old Garden Beach. Boulders covered with frilled sea anemone are everywhere on the rocky sides of the coves, while rock gunnels dart in and among smaller rocks and cobble near the rock/sand convergence zone. Bottom dwelling sand dollars, moon snails and northern starfish

(different species from the sea stars) cover the bottom of the sand habitat. Underwater visibility is better over the rock and ledge and will average ten to 20 feet over sand habitat.

The area from Plymouth, Massachusetts and points south have primarily sand habitat. The main structures above the sea floor are usually shipwrecks. Shipwrecks are unintentional artificial reefs that are host to massive schools of cunner and tautog, several species of hake, Atlantic cod and wolf fish. There are hundreds of wrecks in and around Cape Cod Bay at all diving depths for every skill level.

There is a new program in place that teaches divers how to identify 56 different species of fish found throughout the Gulf of Maine. The Northeast REEF Fish Identification Program, with support from the Stellwagen Bank National Marine Sanctuary (SBNMS) was launched July 2001. Divers receive free training through sanctuary sponsored training seminars, then conduct fish surveys at any dive site they wish within the Gulf of Maine and southern New England. The data are then uploaded onto the Internet at www.reef.org. To date, 250 divers, snorkelers, students and educators have received training and have conducted over 300 fish surveys in the first year of the program. For more information on the program, or to schedule a training seminar for your dive club, school or organization, you can contact me, Bob Michelson, SBNMS Fish ID Coordinator at (781) 848-8870, or by e-mail pbm.inc@verizon.net.

Bob Michelson is an underwater photographer and videographer who has been diving for 23 years. He recently formed the Stellwagen Bank National Marine Sanctuary Dive Team and is currently working with the National Oceanic and Atmospheric Administration (NOAA) on various projects including The Great Annual Fish Count. In 2001, Bob was named an Environmental Hero by NOAA. He was one of 27 recipients nationwide to receive this honor.