

# Fisheries Research in Atlantic Canada

While Canada has a world-class fisheries science research program and outstanding fisheries scientists, there is a need to increase our collective knowledge of fisheries resources, their habitats and ecosystem processes. To meet this need, a growing number of fleet sectors are committed to supporting and supplementing the federal government's fisheries research activities.

## Research surveys

One area in which the fishing industry actively supports the federal government is in joint-research surveys undertaken with the Department of Fisheries and Oceans (DFO). Designed by DFO Science Branch and funded by the fishing industry, these research studies consist of stratified random and grid surveys using designated industry vessels. The research surveys represent a long-term commitment by both the industry and DFO to augment the scientific information available from government surveys and to establish and maintain complementary abundance indices.



*Supporting research on fish biology*



The following are examples of recently completed and ongoing surveys in Nova Scotia, New Brunswick and Newfoundland:

- an annual gulf snow crab survey to determine the abundance and age composition of the stock;
- an annual stratified random survey of cod, American plaice and witch flounder off the south coast of Newfoundland commenced in 1997 to establish absolute biomass estimates;
- an annual grid survey of redfish in the Gulf of St. Lawrence and off the south coast of Newfoundland started in 1998 to monitor redfish distribution and the presence of juvenile redfish. It also establishes a fishable biomass estimate and the relative geographic distribution of the stock;
- an annual stratified random survey of redfish off the south coast of Newfoundland started in 1997

to establish absolute commercial biomass estimates;

- a stratified random survey of American plaice conducted on the Grand Banks of Newfoundland in 1998 to establish absolute commercial biomass estimates;
- annual grid surveys of yellowtail started in 1998 in a designated portion of the Grand Banks of Newfoundland to establish a relative commercial biomass index; and
- annual research surveys of offshore scallops off the southwest coast of Nova Scotia and an annual offshore surf clam assessment program.



above: Electro fishing

left: The Hudson, stationed at the Bedford Institute of Oceanography

## Other contributions

Members of the fishing industry have also contributed, both individually and collectively, to research activities in other ways. They have endowed a Chair in Fishery Conservation and another in Fishery Oceanography at Memorial University of Newfoundland and Labrador. They have donated a crew for the DFO spring groundfish survey off Eastern Nova Scotia.



Another industry contribution to research is the conducting and funding of a fish sampling program for offshore groundfish and scallop landings in Nova Scotia and Newfoundland.

Other industry research projects include:

- conducting acoustic monitoring of pollock schools in eastern and southwestern waters off Nova Scotia;
- participating in a three-year study into the effects of offshore clam fishing gear on the ocean bottom habitat; and
- funding an at-sea scientific monitoring and biological sampling program for offshore lobster.

By working cooperatively, the fishing industry and the federal government are helping to ensure that the Atlantic's ocean riches can meet our needs today and still be there tomorrow.