

Ocean Tracking Network (Lancaster Sound)

Receiver arrays comprised of both 69 and 180 KHz receivers, >100 acoustic transmitters in fish and 5-10 tags on ringed seals were deployed in the Resolute Bay area of Lancaster Sound. Two receiver arrays were deployed perpendicular to the shore. High-frequency boat-based hydroacoustic survey data are collected to relate school size and fish density to feeding activity. Marine mammal listening devices (C-PODS) were also deployed. This infrastructure is accompanied by CTD profiling throughout the bay.



Tagging Arctic Halibut. Photo credit: Steve Fields/U Windsor

	Name	Email	Phone Number
Primary Contact	Fred Whoriskey	oceantrackingnetwork@dal.ca	(902) 494-4101

Owner

[Ocean Tracking Network \(Dalhousie University\)](#)

Membership

Regular Member

Website

www.oceantrackingnetwork.org

Latitude

Range: 74 to 75. CSV files can be retrieved from members.oceantrack.org/data/discovery/ALS.htm

Longitude

Range: -96 to -88. CSV files can be retrieved from members.oceantrack.org/data/discovery/ALS.htm

Location

Lancaster Sound and Allen Bay, located between Devon Island and Baffin Island

Nearest Community

Resolute Bay

Territory/ Province

Nunavut

Aboriginal Government/ Homeland

Government of Nunavut www.gov.nu.ca

Facility Type

Site for Observing/Monitoring

Research Hinterland

Coastal, Freshwater, Large River, Marine, Streams

Main Research Disciplines

Isotopic Chemistry, Marine Biology, Oceanography, Sociology, Traditional/Aboriginal Knowledge

Research History

OTN deployments in Canadian waters began in 2008 off Halifax. The first Arctic deployments were Frobisher Bay (2008; Arctic char) followed by Cumberland Sound (2010; Arctic skate, Greenland halibut, Greenland shark, ringed seal) and Lancaster Sound (Arctic cod, fourhorn sculpin, Greenland shark, sculpin, shorthorn sculpin), Scott Inlet (2012; Greenland halibut, Greenland shark) and Cambridge Bay (2013; Arctic char, lake trout) members.oceantrack.org/data/discovery/ARCTIC.htm

Current Projects

Fish and marine mammal interactions in the high Arctic

Power

OTN equipment is self-powered (on-board batteries)

Communications

Internet, Computer, Videoconferencing, Satellite

Local Transportation

Periodic missions using chartered assets to maintain OTN infrastructure in different parts of the Arctic.

Equipment Storage

N/A

Dormitory/Sleeping Facilities

N/A

Dining/Kitchen Facilities

N/A

Laboratory Facilities

N/A

Fuel Availability

N/A

Research Requirements

Appropriate permits and animal care certifications must be obtained at the home institution of investigators using the OTN infrastructure.

Special Rules and Regulations

Data gathered by the OTN infrastructure will be made available to the broader scientific community after investigators have published their work, as per the terms of the OTN data policy.

members.oceantrack.org/data/data-collection/otn-data-policy

Local External Resources

Resolute Bay HTA, DFO Yellowknife

Nearest Medical Service

N/A

Safety Considerations

Marine Emergency Duties, First Aid, Firearms training

Cost

Use of the data recorded on the infrastructure is free of cost, following registration with the OTN (contact Susan Dufault: susan.dufault@dal.ca). Investigators typically pay the costs of tagging their target animals.

Other Information

OTN provides electronic telemetry (acoustic and satellite) infrastructure, and associated monitoring of oceanographic conditions, to track the movements and survival of marine animals and enable both to be linked to environmental conditions. Results from telemetry studies are used to guide fishery policy and management decisions (e.g., determination of fishery boundary lines), to identify critical habitat for marine species at risk, to assist in the planning of marine protected areas, and to provide fundamental information on the structure and function of Arctic aquatic systems.

Last Updated

2015-05-30