

MENH Inshore Trawl Survey

- Maine Department of Marine Resources
 - New Hampshire Fish and Game
 - F/V Robert Michael

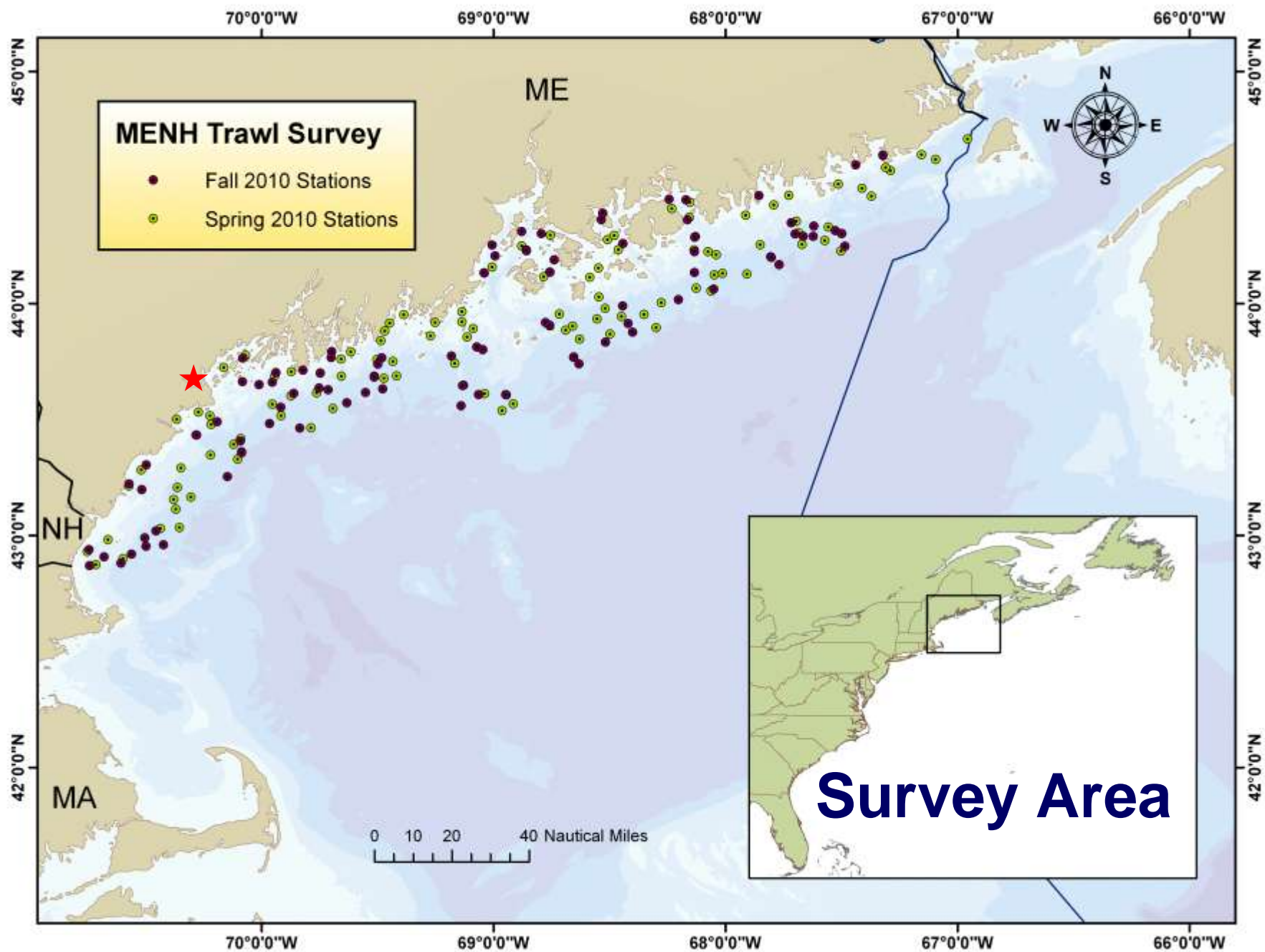


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Maine Department of Marine Resources
Supported by NOAA NMFS NCRP



Survey Goals

- **To fill in an information gap in near shore Maine and New Hampshire waters for fisheries-independent data**
- **To gather biological information (age at length, sexual maturity, food habits, and habitat use).**
- **To consistently provide data that is valued by both industry members and scientists**
- **To foster collaborative research between scientists and the fishing industry**



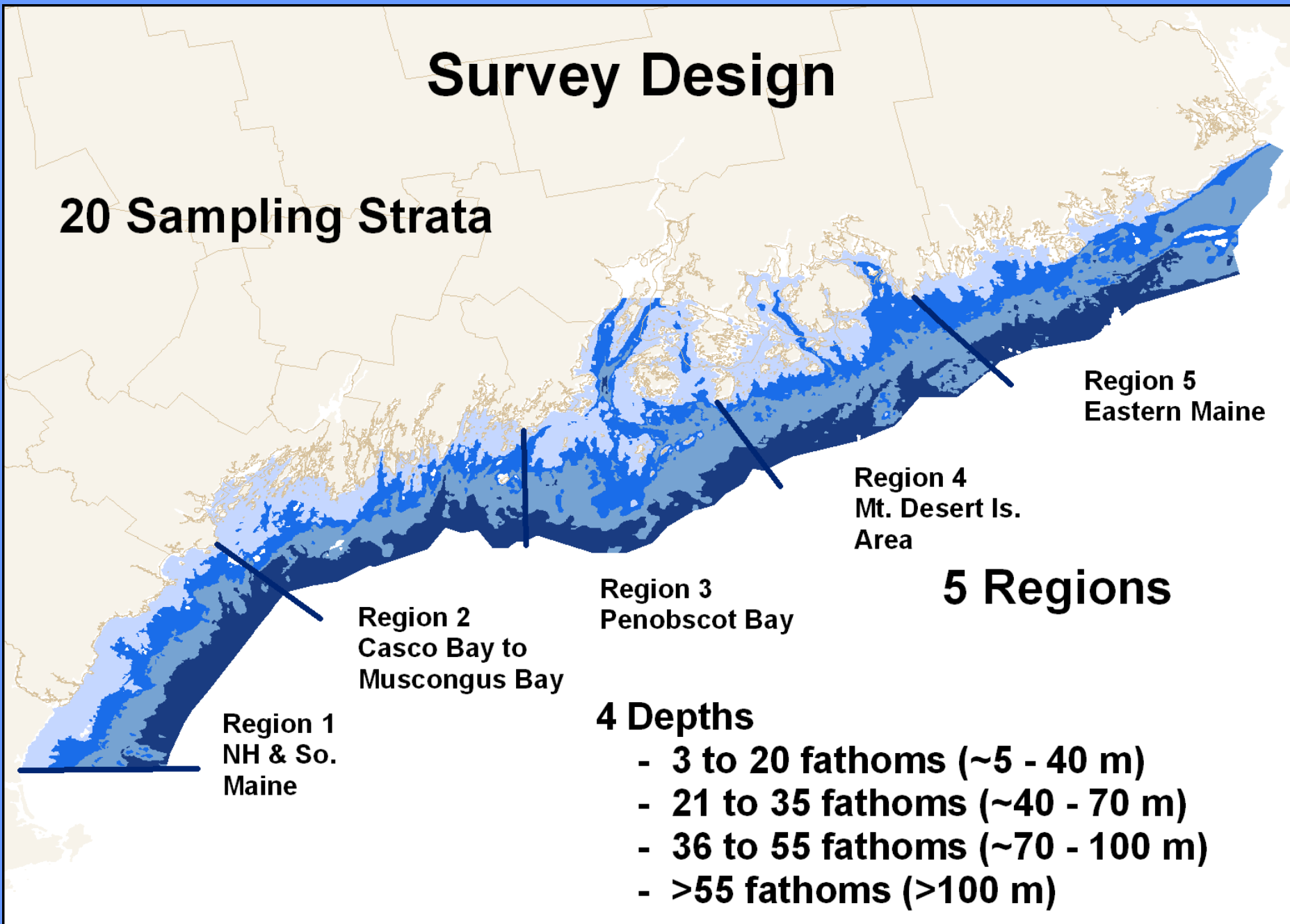
Timeline

- **Began in October 2000**
- **Semiannual, spring and fall**
- **Protocols Manual 2005**
- **Peer Review 2005**
- **Gear Manual 2008**
- **In our 11th year**



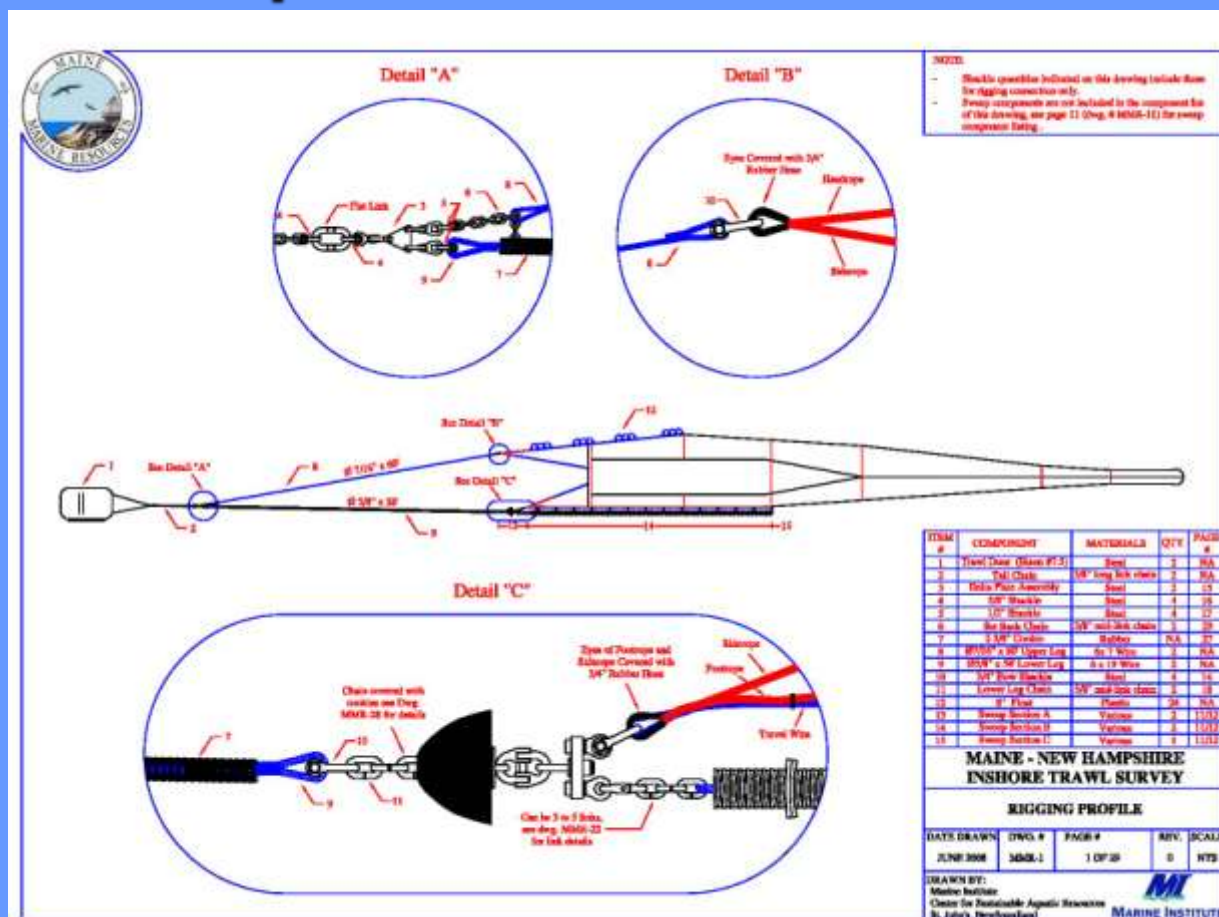
Survey Design

20 Sampling Strata



Net Design

- Modified shrimp net: 2-inch stretched measure polyethylene mesh
- Headrope is 57' and footrope is 70'
- Cod end:
- 2-inch s.m.
- with 1-inch s.m.
- liner
- Roller Frame:
- 6" rubber disks,
- 10' bosom section
- with 8" disks



Survey Operations

- Commercial Fishing Vessel – F/V Robert Michael
- Five weeks – 1 region per week
- Goal is 120 tows per season, 20 stations are 'fixed'
- 20 minute tows at 2.5 knots; ~ 0.8 NM
- Survey for suitable bottom and fixed gear
- Tows are straight, aligned with dominant currents whenever possible
- 4-6 tows a day, daylight hours only



Catch Handling

- Cod-end emptied onto sorting table, on deck if too large.
- Lobsters immediately processed, sorted by sex, weighed and released.
- Rest of catch sorted by species, weighed, retained for length measurements.



Biological Sampling

- **Maturity for selected species, carried out on board**
- **Otoliths collected for selected species**
- **~25 individuals, one fish per centimeter**
- **Stages determined according to Burnett, et. al. (1989)**



Burnett, J., L. O'Brien, R.K. Mayo, J.A. Darde, M. Bohan. 1989. Finfish Maturity Sampling and Classification Schemes Used During Northeast Fisheries Center Bottom Trawl Surveys, 1963-89. NOAA Tech. Memo. NMFS-F/NEC-76

Oracle Developer Forms Runtime - Web

Action Edit Query Block Record Field Reports Administration Window Help

MARVIN 1.55 - Groundfish Trawl Survey

Trip Effort Catch Sample CTD

Trip ID Trip Date

Effort

DMR Effort Identifier	Start Date	Start Time	End Date	End Time	Gear	Gear Quantity	Gear Comments	Length Tow Time	Location ID
1	10/11/04	08:42	11/19/04	09:02	Trawl, Otter, Bottom, Fish	1		20:00	
2	10/11/04	10:35	10/11/04	10:55	Trawl, Otter, Bottom, Fish	1		20:00	
3	10/11/04	13:15	10/11/04	13:35	Trawl, Otter, Bottom, Fish	1		20:00	
4	10/11/04	14:40	10/11/04	15:00	Trawl, Otter, Bottom, Fish	1		20:00	
5	10/13/04	07:58	10/13/04	08:17	Trawl, Otter, Bottom, Fish	1		19:00	

Comments

Location Lat Long Loran1 Loran2 N Code

Effort Observations

Observation	Value
Grid ID	472
Location Name	Hampton Shoal
Region	1
Stratum	1
Start Latitude (D)	

Environmental Conditions

Weather Type

Water Temperature (C)

Air Temperature (C)

Dissolved Oxygen (PPM)

Tide Stage

Flow

Refresh Views New Effort Save Apply Cancel

MARVIN – Marine Resource and Environmental Information System

Data Products

- Seasonal abundance indices for approximately 25 species of finfish and invertebrates
- Catch at length data and plots
- Distribution maps
- Cruise summaries and highlights
- Specific analyses and data provided on request
- www.maine.gov/dmr/rm/trawl/reports.htm