

## Ecosystems Monitoring Survey

**Cruise:** DEL0301  
**Vessel:** R/V Delaware II  
**Dates:** 23 – 31 January  
**Sea Days:** 9  
**Instrument(s):** 1495, 2277  
**Total # of stations:** 67  
**# of vertical CTD/Profiler casts:** 0  
**# of double oblique Profiler casts:** 59  
**# Salinity samples:** 7  
**Salt correction:** N/A

**Cruise Objectives:** To assess the impact of changing biological and physical properties of the Northeast Continental Shelf ecosystem which influence the sustainable productivity of the living marine resources.

## Winter Bottom Trawl Survey

**Cruise:** DEL0302  
**Vessel:** R/V Delaware II  
**Dates:** 6 February – 1 March  
**Sea Days:** 17  
**Instrument(s):** 2277, 1447  
**Total # of stations:** 103  
**# of vertical CTD/Profiler casts:** 34  
**# of double oblique Profiler casts:** 39  
**# Salinity samples:** 27  
**Salt correction:** -0.002

**Cruise Objectives:** To (1) determine the winter distribution and relative abundance of fish and invertebrate species; (2) collect biological samples for studies of age and growth relationships, fecundity, maturity, and food habits; (3) collect hydrographic and meteorological data; (4) make collections of data and samples for cooperative researchers and programs.

## Spring Bottom Trawl Survey

**Cruise:** DEL0303  
**Vessel:** R/V Delaware II  
**Dates:** 3 March – 27 April  
**Sea Days:** 43  
**Instrument(s):** 1447, 1496, 0851, 2277  
**Total # of stations:** 341  
**# of vertical CTD/Profiler casts:** 168  
**# of double oblique Profiler casts:** 123  
**# Salinity samples:** 50  
**Salt correction:** 2277=+0.000; 0851=+0.001; 1496=+0.010

**Cruise Objectives:** To (1) determine the spring distribution and relative abundance of fish and invertebrate species; (2) collect biological samples for studies of age and growth relationships, fecundity, maturity, and food habits; (3) collect hydrographic and meteorological data; (4) make collections of data and samples for cooperative researchers and programs.

## Ecosystems Monitoring Survey

**Cruise:** DEL0305  
**Vessel:** R/V Delaware II  
**Dates:** 24 – 29 May  
**Sea Days:** 6  
**Instrument(s):** 2879  
**Total # of stations:** 44  
**# of vertical CTD/Profiler casts:** 1  
**# of double oblique Profiler casts:** 36  
**# Salinity samples:** 21  
**Salt correction:** -0.006

**Cruise Objectives:** To assess the impact of changing biological and physical properties of the Northeast Continental Shelf ecosystem which influence the sustainable productivity of the living marine resources.

## Cetacean Tagging

**Cruise:** DEL0306  
**Vessel:** R/V Delaware II  
**Dates:** 16 – 31 July  
**Sea Days:** 10  
**Instrument(s):** 2277  
**Total # of stations:** 11  
**# of vertical CTD/Profiler casts:** 2  
**# of double oblique Profiler casts:** 0  
**# Salinity samples:** 9  
**Salt correction:** -0.001

**Cruise Objectives:** (1) to deploy satellite-monitored radio tags on North Atlantic right whales, (2) to deploy VHF-linked time-depth recorders (TDRs) on right whales to examine diving behavior relative to prey abundance and availability and (3) to conduct systematic, broad-scale oceanographic and marine mammal surveys to characterize right whale habitat.

## Scallop Survey

**Cruise:** ALB0301  
**Vessel:** R/V Albatross IV  
**Dates:** 2 July – 5 September  
**Sea Days:** 27  
**Instrument(s):** 1496  
**Total # of stations:** 504  
**# of vertical CTD/Profiler casts:** 113  
**# of double oblique Profiler casts:** N/A  
**# Salinity samples:** 45  
**Salt correction:** +0.007

**Cruise Objectives:** To (1) determine the distribution and relative abundance of the sea scallop *Placopecten magellanicus* and Iceland scallop *Chlamys islandica*; (2) collect

biological samples and data relative to assessment needs; (3) monitor hydrographic and meteorological conditions; and (4) make collections for interested scientists at other institutions and laboratories.

## Ecosystem Monitoring

**Cruise:** ARM0301  
**Vessel:** R/V Argo Maine  
**Dates:** 20 – 28 August  
**Sea Days:** 9  
**Instrument(s):** 2879  
**Total # of stations:** 61  
**# of vertical CTD/Profiler casts:** 5  
**# of double oblique Profiler casts:** 65  
**# Salinity samples:** 16  
**Salt correction:** +0.002

**Cruise Objectives:** To assess the impact of changing biological and physical properties of the Northeast Continental Shelf ecosystem which influence the sustainable productivity of the living marine resources.

## HydroAcoustic Survey

**Cruise:** DEL0308  
**Vessel:** R/V Delaware II  
**Dates:** 4 September – 10 October  
**Sea Days:** 26  
**Instrument(s):** 2277  
**Total # of stations:** 198  
**# of vertical CTD/Profiler casts:** 135  
**# of double oblique Profiler casts:** N/A  
**# Salinity samples:** 12  
**Salt correction:** +0.022

**Cruise Objectives:** The primary goal is to provide fisheries independent abundance estimates of Atlantic herring in the Georges Bank and Gulf of Maine regions, and to calibrate the EK-500 echo-integrator and test the mid-water trawl performance.

## Fall Groundfish Survey

**Cruise:** ALB0305  
**Vessel:** R/V Albatross IV  
**Dates:** 7 September – 31 October  
**Sea Days:** 41  
**Instrument(s):** 1496, 1495  
**Total # of stations:** 336  
**# of vertical CTD/Profiler casts:** 75  
**# of double oblique Profiler casts:** 113  
**# Salinity samples:** 48  
**Salt correction:** 1496=+0.006; 1495=+0.002

**Cruise Objectives:** To (1) determine the autumn distribution and relative abundance of fish and invertebrate species; (2) collect biological samples for studies of age and growth relationships, fecundity, maturity, and food habits; (3) collect hydrographic and meteorological data; (4) make collections of data and samples for cooperative researchers and programs.

## Benthic Habitat

**Cruise:** DEL0310  
**Vessel:** R/V Delaware II  
**Dates:** 29 October – 6 November  
**Sea Days:** 8  
**Instrument(s):** 2277  
**Total # of stations:** 104  
**# of vertical CTD/Profiler casts:** 8  
**# of double oblique Profiler casts:** N/A  
**# Salinity samples:** 7  
**Salt correction:** +0.000

**Cruise Objectives:** To monitor the recovery of the benthic habitat in the closed areas.

## Ecosystem Monitoring

**Cruise:** ALB0306  
**Vessel:** R/V Albatross IV  
**Dates:** 3 – 12 November  
**Sea Days:** 10  
**Instrument(s):** 1496  
**Total # of stations:** 70  
**# of vertical CTD/Profiler casts:** 4  
**# of double oblique Profiler casts:** 71  
**# Salinity samples:** 13  
**Salt correction:** +0.007

**Cruise Objectives:** To assess the impact of changing biological and physical properties of the Northeast Continental Shelf ecosystem which influence the sustainable productivity of the living marine resources.