Appendix A. Summary of 2002 cruise operations

### **Ecosystems Monitoring Survey**

Cruise: ALB0202

**Vessel:** R/V Albatross IV **Dates:** 22 – 30 January

Sea Days: 7

**Instrument(s):** 2879, 2277

**Total # of stations:** 47

# of vertical CTD/Profiler casts: 17 # of double oblique Profiler casts: 47

**# Salinity samples:** 11

**Salt correction:** 1495=+0.001; 2277=+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.

### Winter Bottom Trawl Survey

Cruise: ALB0203

**Vessel:** R/V Albatross IV **Dates:** 6 February – 2 March

Sea Days: 20

Instrument(s): 2277

**Total # of stations:** 159

# of vertical CTD/Profiler casts: 85 # of double oblique Profiler casts: 71

**# Salinity samples:** 25 **Salt correction:** +0.003

**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.

# **HydroAcoustic Survey**

Cruise: DEL0201

**Vessel:** R/V Delaware II

**Dates:** 22 February – 7 March

Sea Days: 10

**Instrument(s):** 1447 Total # of stations: 43

# of vertical CTD/Profiler casts: 42

# of double oblique Profiler casts: N/A

# Salinity samples: 2

**Salt correction:** +0.016

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.

# **Spring Bottom Trawl Survey**

Cruise: ALB0204

**Vessel:** R/V Albatross IV **Dates:** 6 March – 26 April

Sea Days: 40

**Instrument(s):** 2277

Total # of stations: 331

# of vertical CTD/Profiler casts: 222 # of double oblique Profiler casts: 117

38

**# Salinity samples:** Salt correction: +0.002

**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: ALB0206

Vessel: R/V Albatross IV Dates: 23 May – 2 June

Sea Days: 16 Instrument(s): 2879

Total # of stations: 126

# of vertical CTD/Profiler casts: 26 # of double oblique Profiler casts: 150 # Salinity samples: 23

Salt correction: -0.001

**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.

# **Ecosystems Monitoring Survey**

Cruise: NOB0201 Vessel: F/V Nobska Dates: 14 – 29 August

Sea Days: 15

**Instrument(s):** 2879, 0851

**Total # of stations:** 122

# of vertical CTD/Profiler casts: 25 # of double oblique Profiler casts: 129

# Salinity samples: 24
Salt correction: +0.009

**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.

### **Scallop Survey**

Cruise: ALB0208

**Vessel:** R/V Albatross IV **Dates:** 17 July – 15 August

Sea Days: 27

Instrument(s): 1495

**Total # of stations:** 524

# of vertical CTD/Profiler casts: 144 # of double oblique Profiler casts: N/A

# Salinity samples: 40 Salt correction: +0.008

**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.

#### **Benthic Habitat**

Cruise: ALB0209

**Vessel:** R/V Albatross IV **Dates:** 20 – 29 August

Sea Days: 10

Instrument(s): 1495

**Total # of stations:** 26 (Hydrographic stations)

# of vertical CTD/Profiler casts: 26 # of double oblique Profiler casts: N/A

#Salinity samples: 15
Salt correction: +0.010

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

# **HydroAcoustic Survey**

Cruise: DEL0208

**Vessel:** R/V Delaware II

**Dates:** 5 September – 10 October

Sea Days: 24

**Instrument(s):** 0851, 1496, 0853

**Total # of stations:** 112 (Hydrographic stations)

# of vertical CTD/Profiler casts: 112 # of double oblique Profiler casts: N/A # Salinity samples: 0

**Salt correction:** N/A

**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: ALB0210

**Vessel:** R/V Albatross IV

**Dates:** 4 September – 25 October

Sea Days: 41

Instrument(s): 1495 Total # of stations: 334

# of vertical CTD/Profiler casts: 217

# of double oblique Profiler casts: 120

**# Salinity samples:** 60

Salt correction: -0.004

**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, an food habits; (3) collect hydrographic and meteorological data; (4) make collections of data and samples for cooperative researchers and programs.

#### **Benthic Habitat**

Cruise: OC384

**Vessel:** R/V Oceanus

**Dates:** 24 October – 2 November

Sea Days: 10 Instrument(s): 1447

**Total # of stations:** 17 (hydrographic stations)

# of vertical CTD/Profiler casts: 17 # of double oblique Profiler casts: N/A # Salinity samples: 0

Salt correction: N/A

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

# **Ecosystem Monitoring**

Cruise: DEL0210

Vessel: R/V Delaware II

**Dates:** 29 October – 14 November

Sea Days: 16 Instrument(s): 0853

Total # of stations: 1109

# of vertical CTD/Profiler casts: 21 # of double oblique Profiler casts: 112

**# Salinity samples:** 19

**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.