Appendix H

Industry-Based Survey
for
Gulf of Maine Cod
Pilot Study

Ancillary Data: Other species of interest distribution maps and length frequency by average number per tow

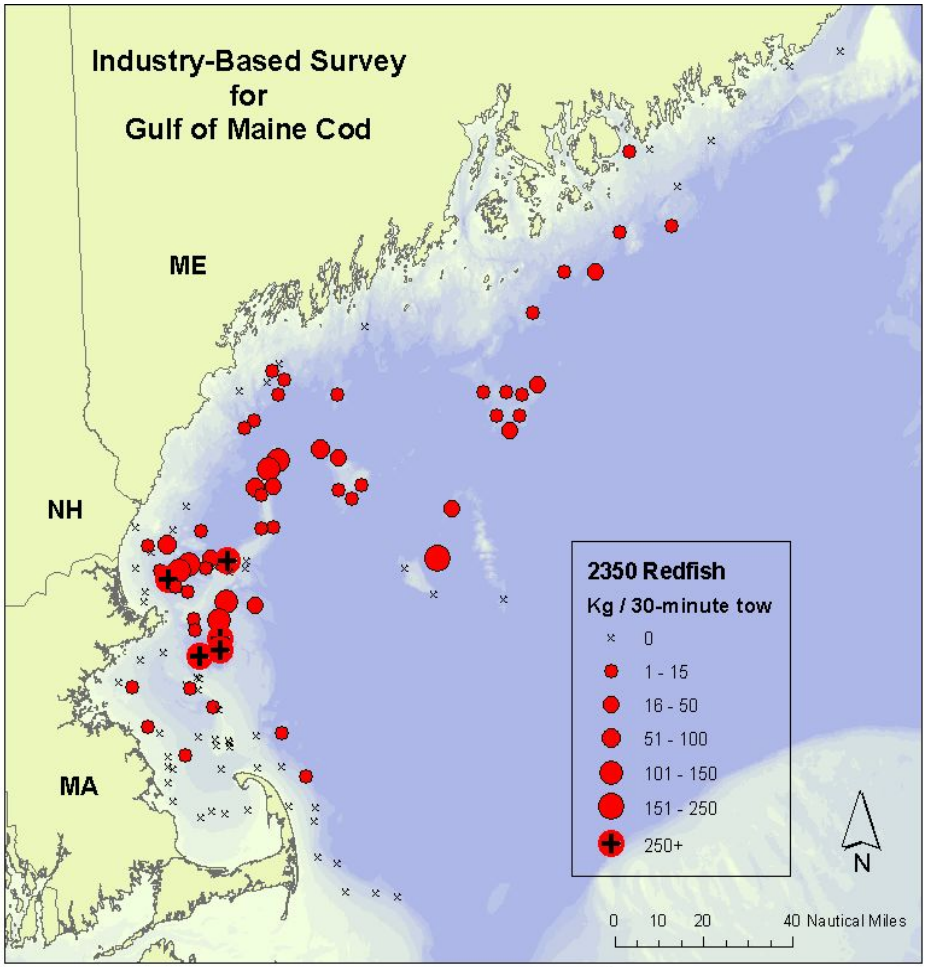
Industry-Based Survey for Gulf of Maine Cod

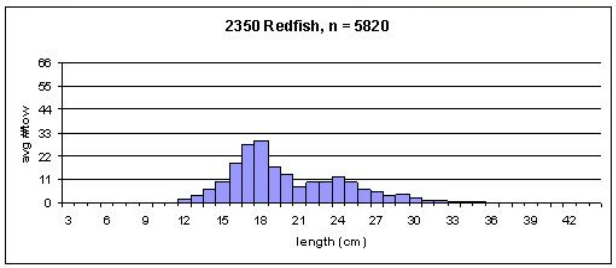
2003-2004 & 2004-2005 Survey Results

Acadian Redfish

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise

Appendix G. Acadian Redfish



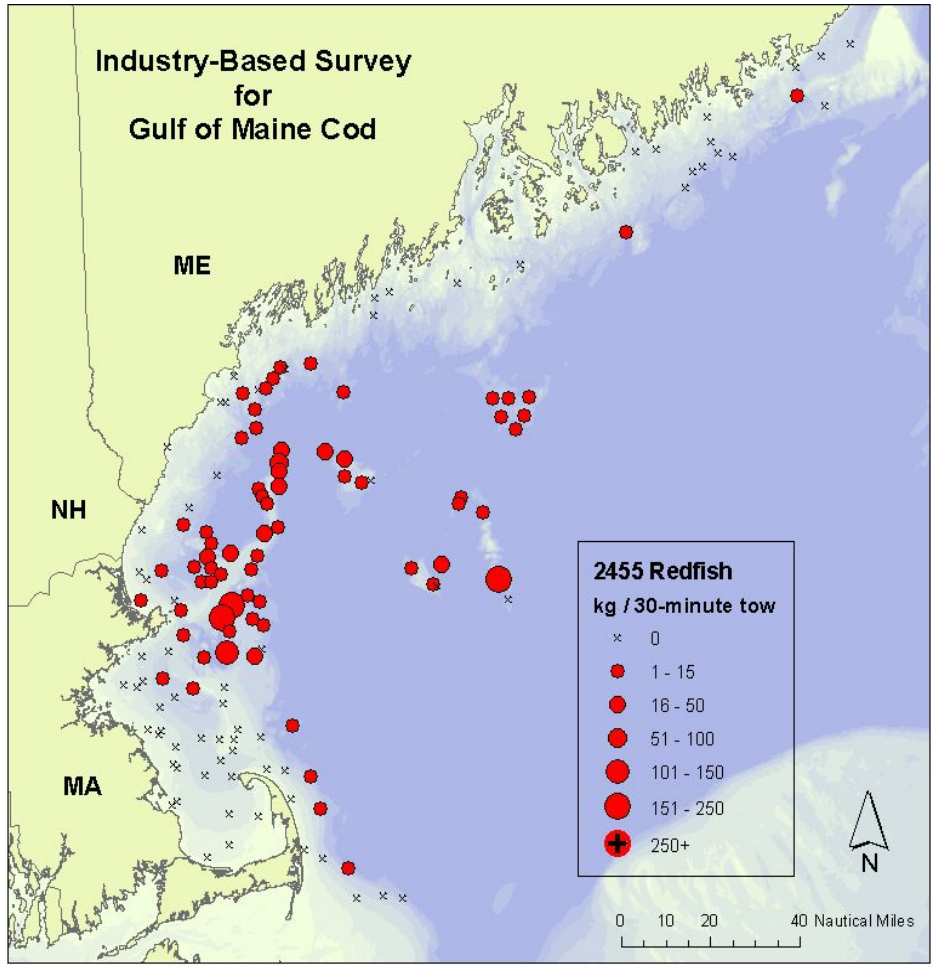


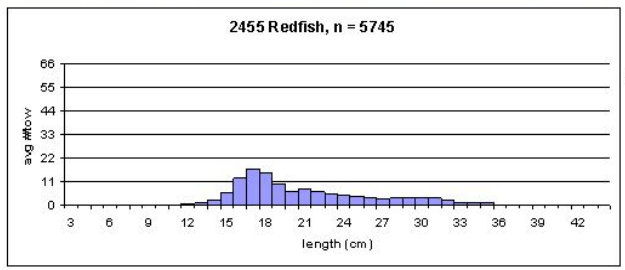
Acadian Redfish
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

**Average number of fish at length for all tows where species were caught



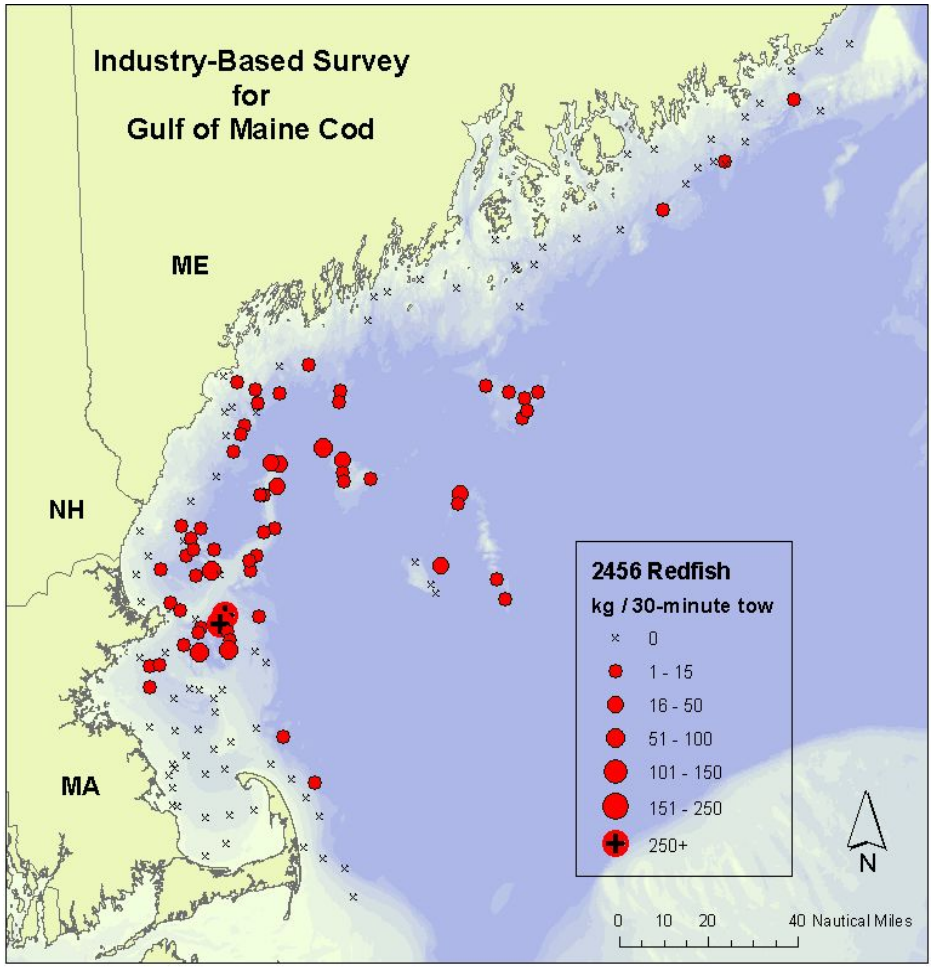


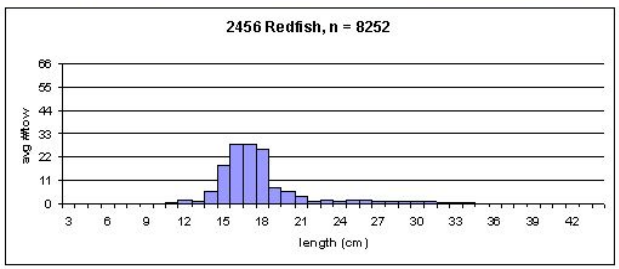
Acadian Redfish
caught during the IBS for GOM cod survey

January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

**Average number of fish at length for all tows where species were caught



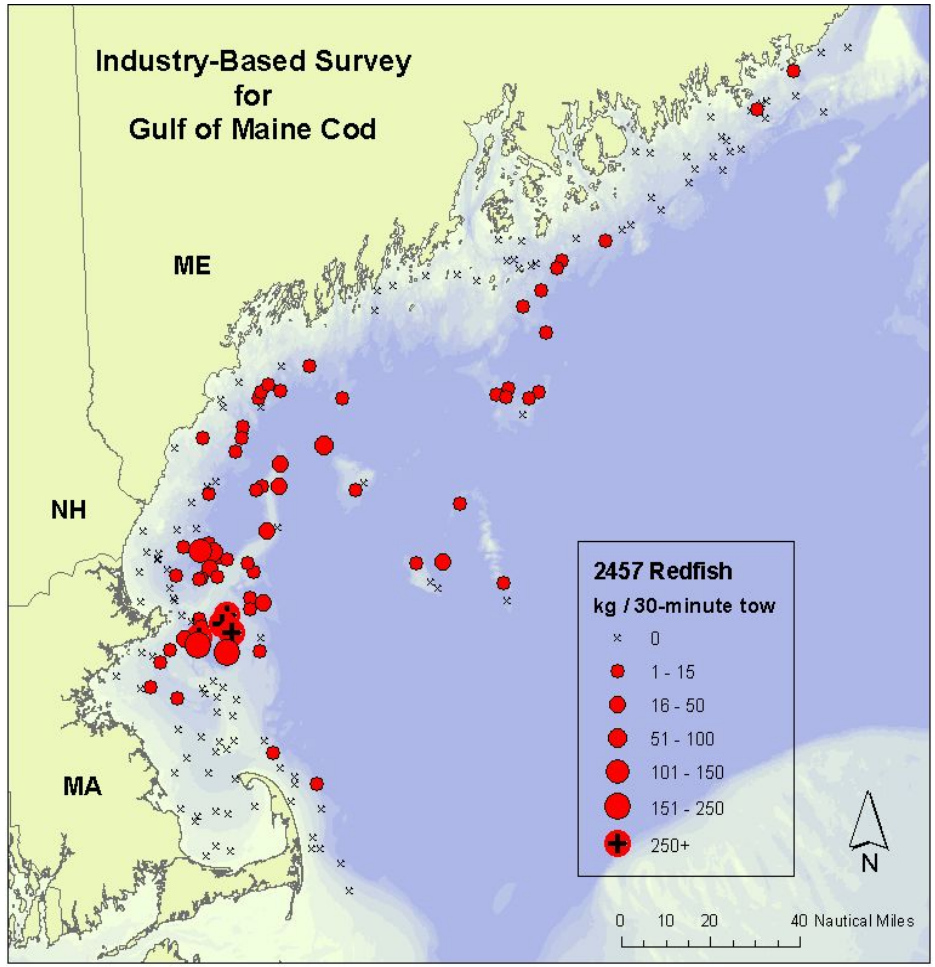


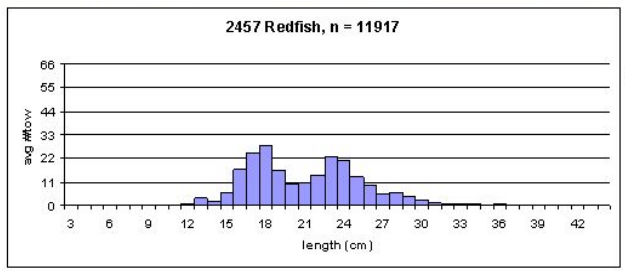
Acadian Redfish
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

**Average number of fish at length for all tows where species were caught



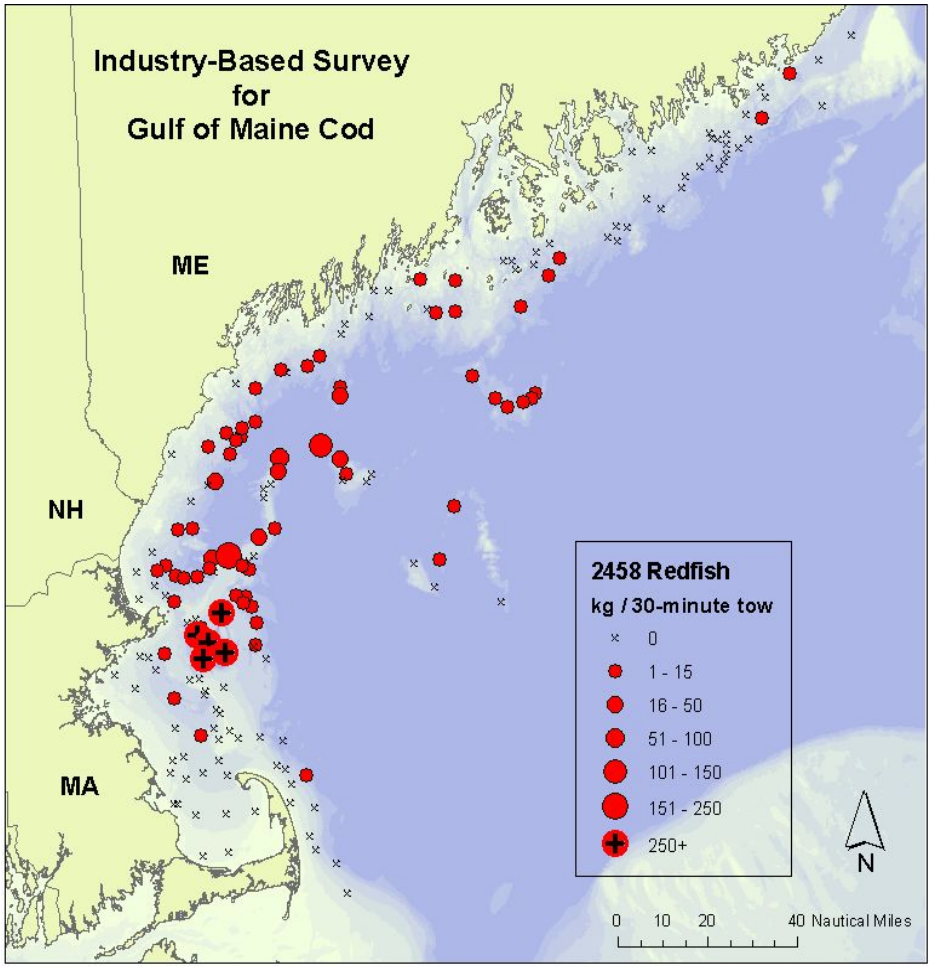


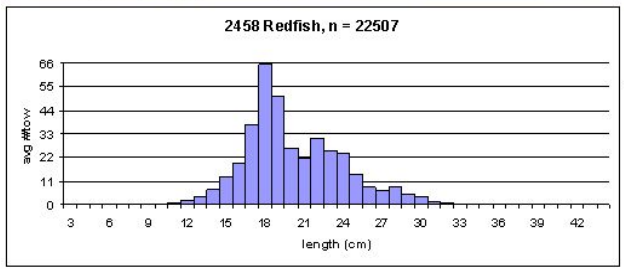
Acadian Redfish
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

**Average number of fish at length for all tows where species were caught



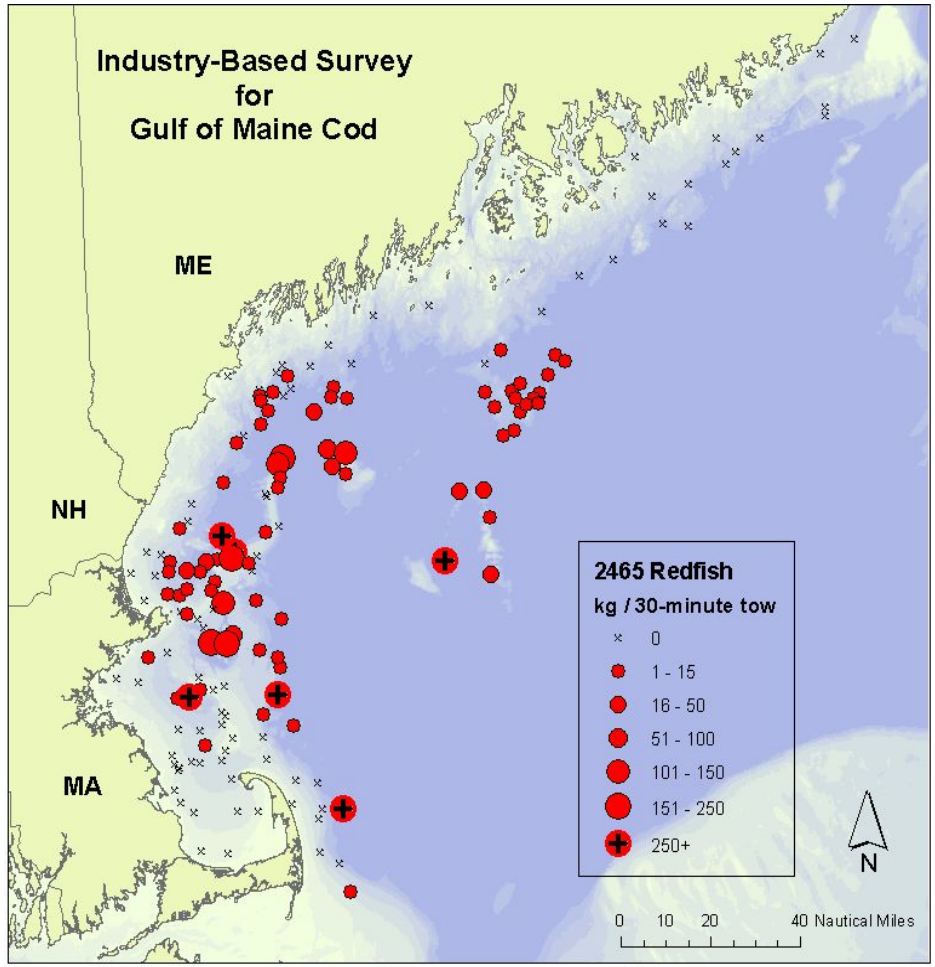


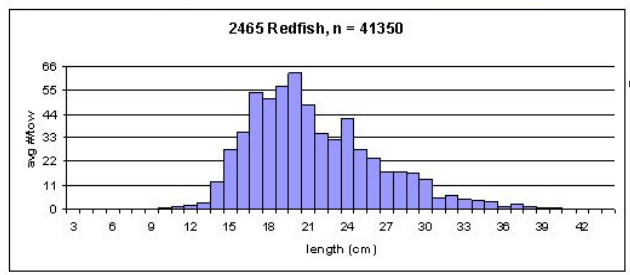
Acadian Redfish
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

MarineFisheries

**Average number of fish at length for all tows where species were caught



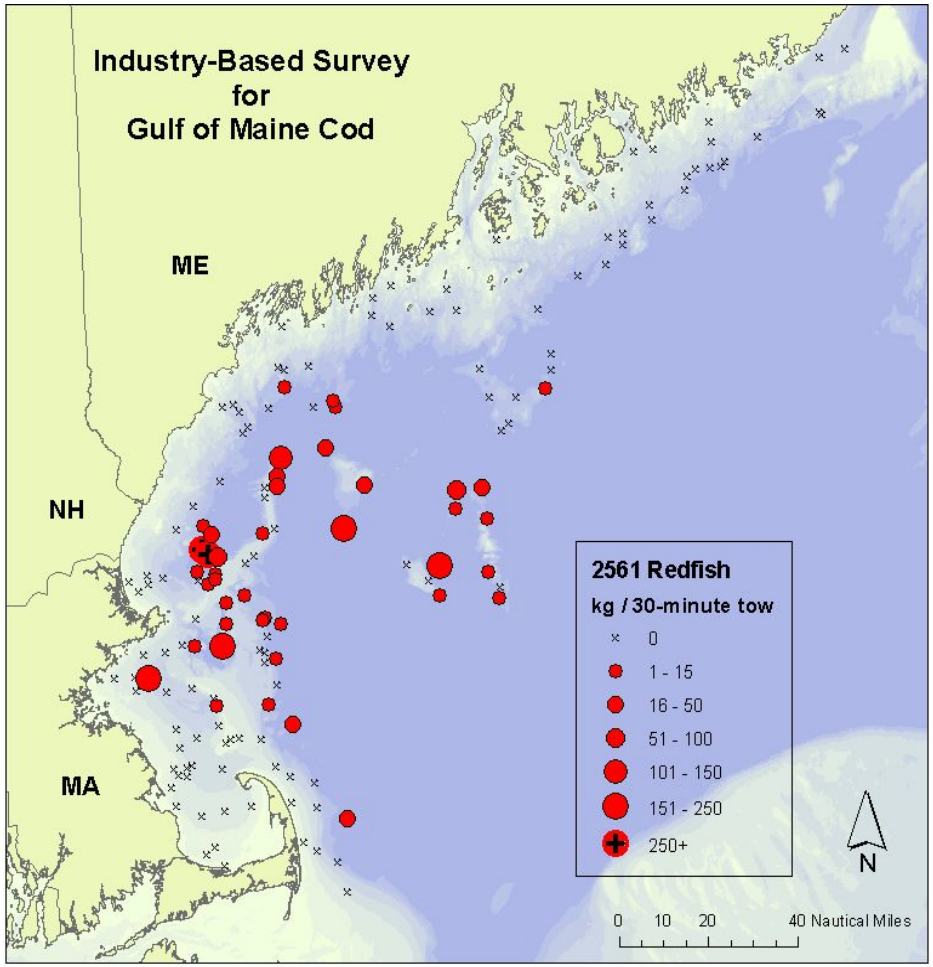


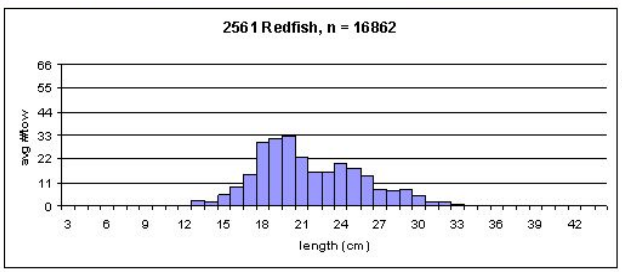
Acadian Redfish
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

MarineFisheries

**Average number of fish at length for all tows where species were caught



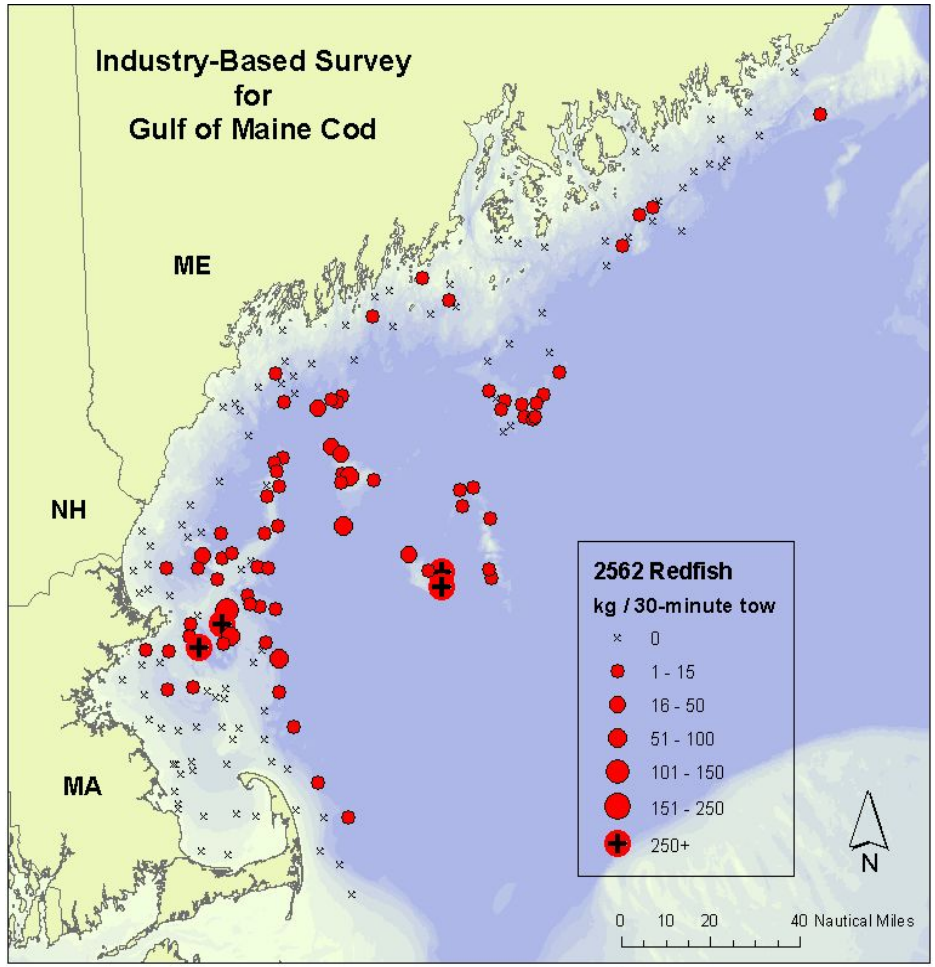


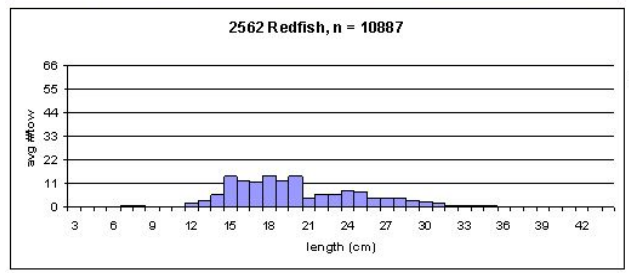
Acadian Redfish
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

**Average number of fish at length for all tows where species were caught



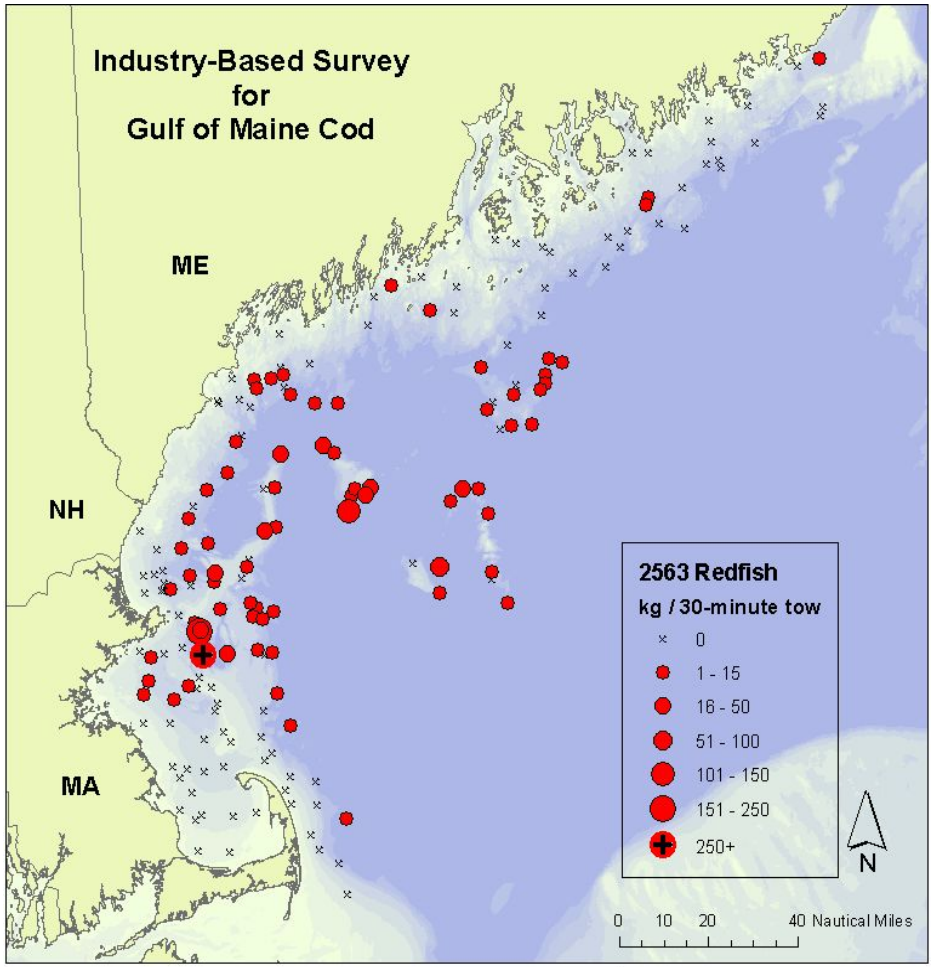


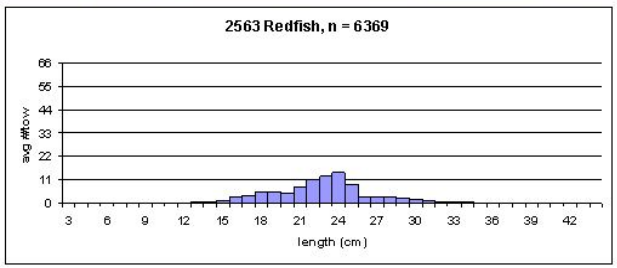
Acadian Redfish
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

**Average number of fish at length for all tows where species were caught



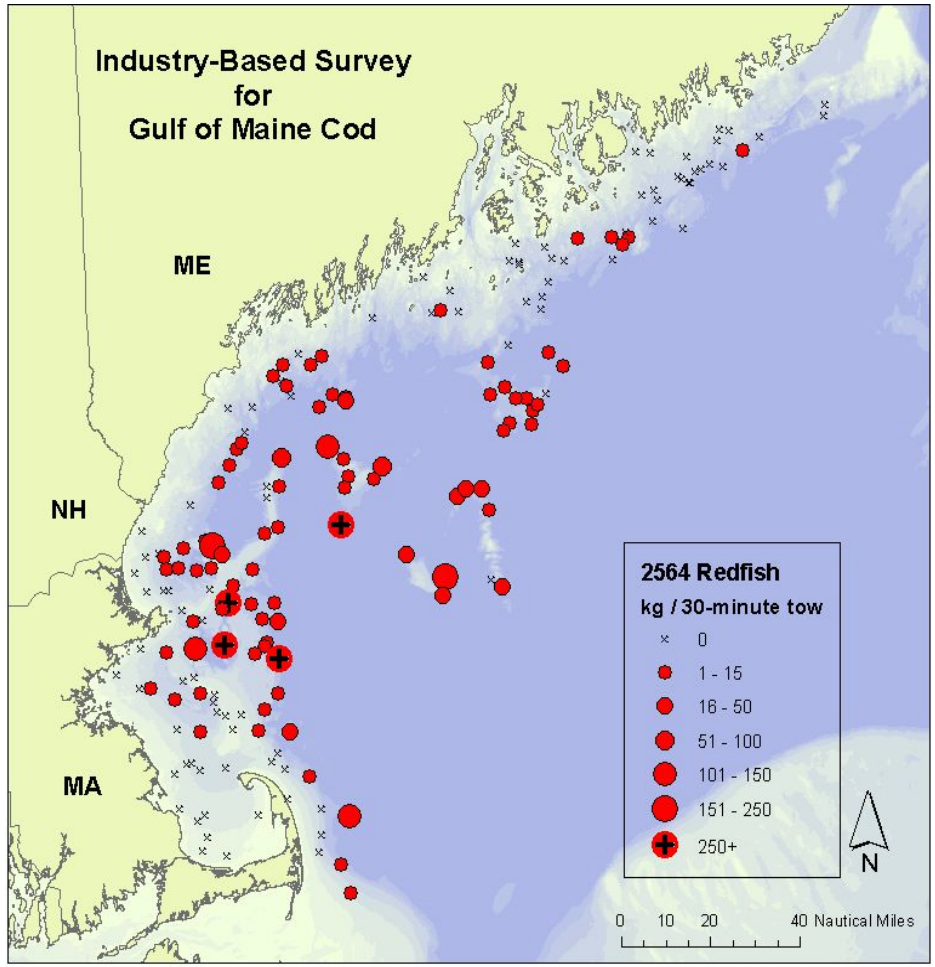


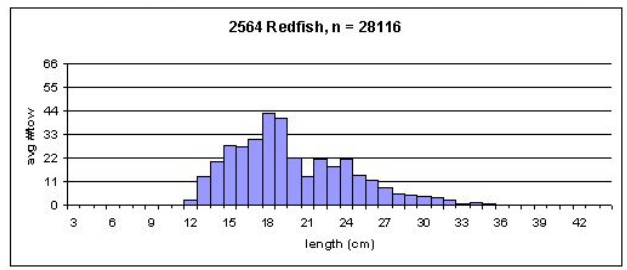
Acadian Redfish
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

**Average number of fish at length for all tows where species were caught





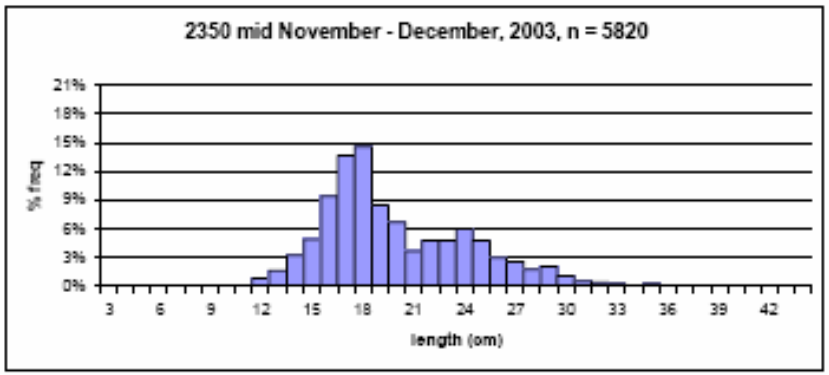
Acadian Redfish
caught during the IBS for GOM cod survey

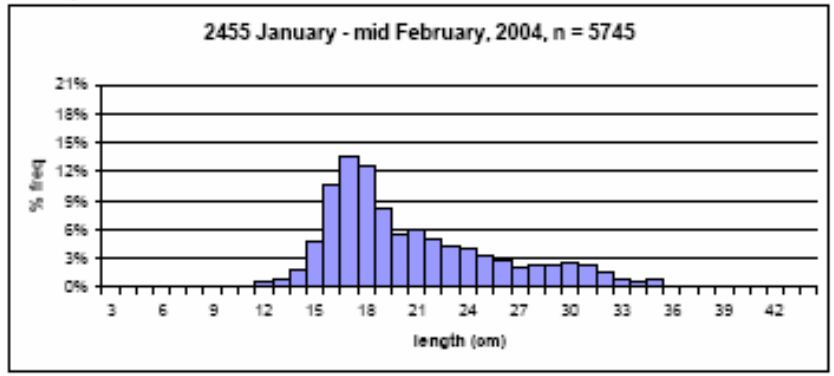
mid April - May
Year: 2005
Cruise: 2564

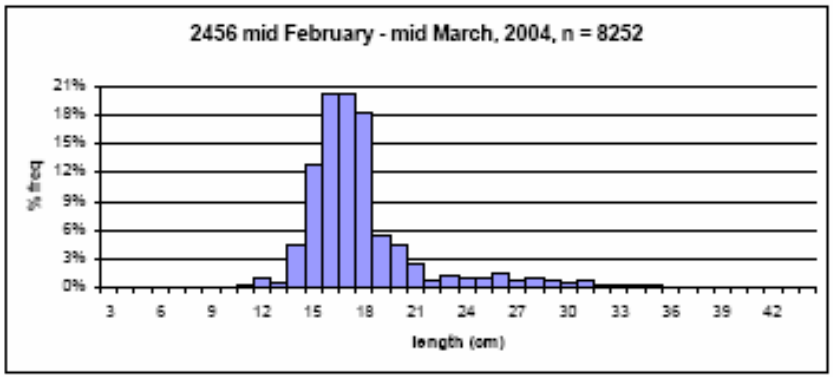
MarineFisheries

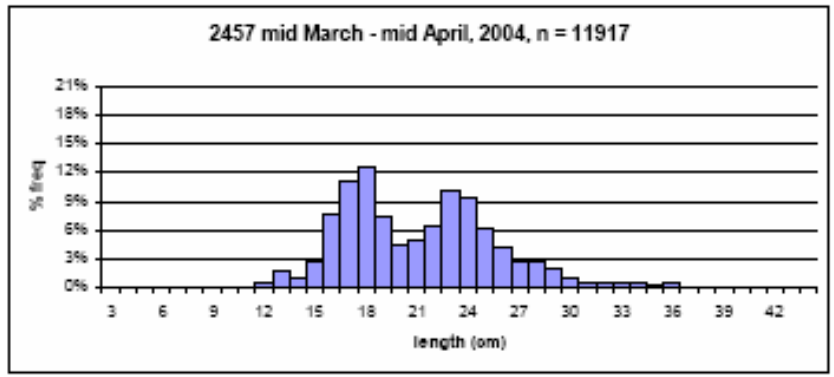
**Average number of fish at length for all tows where species were caught

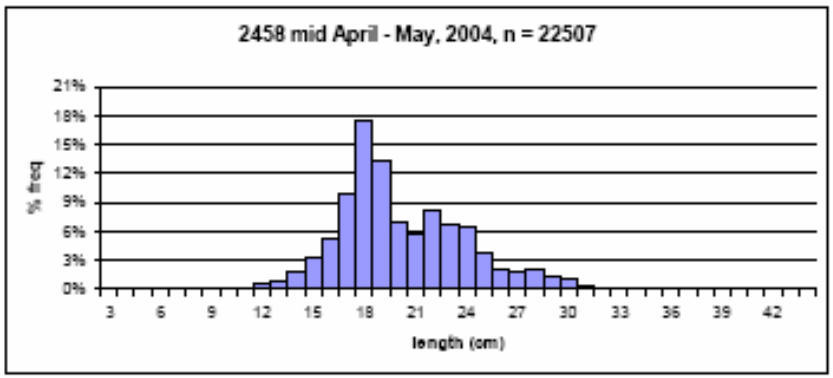
Redfish
(2003 – 2004)



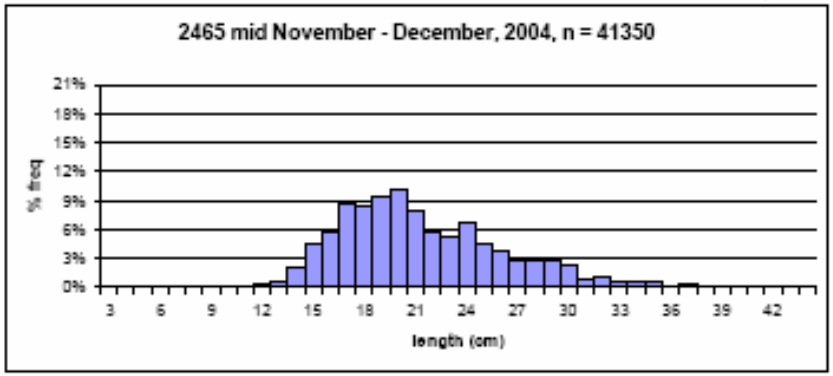


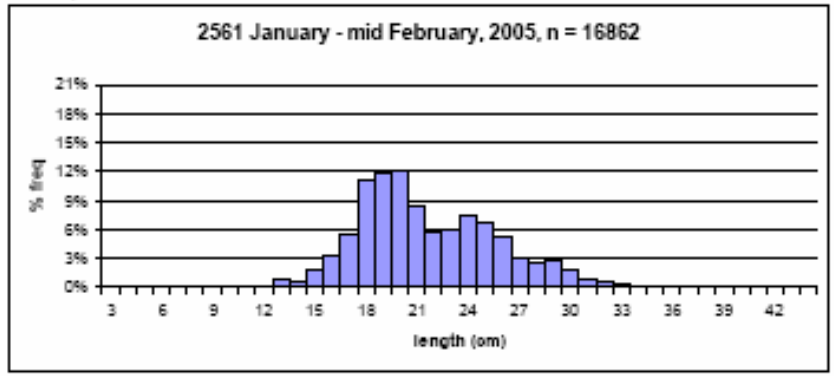


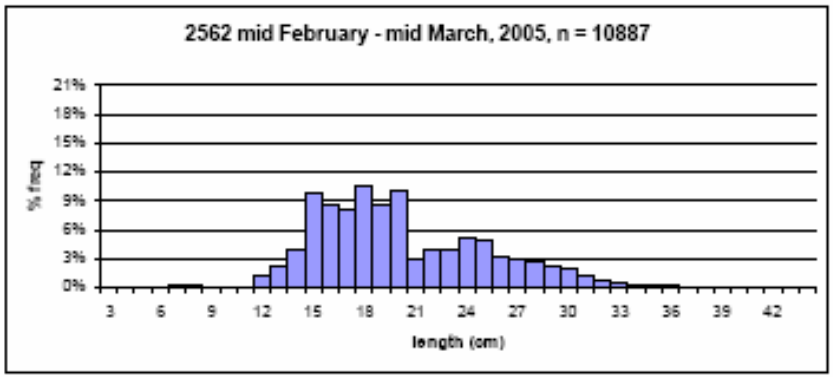


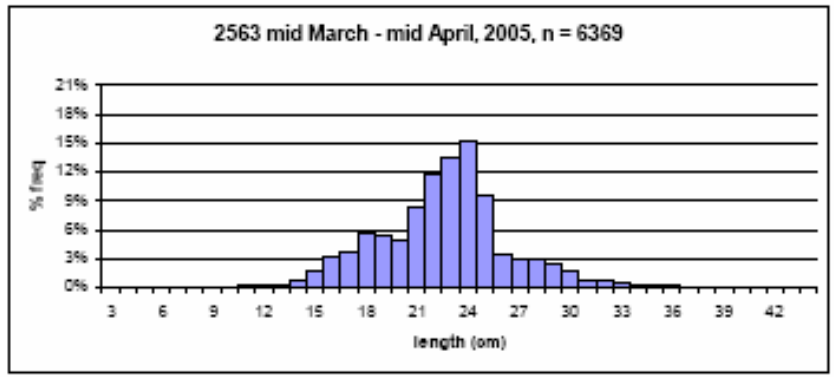


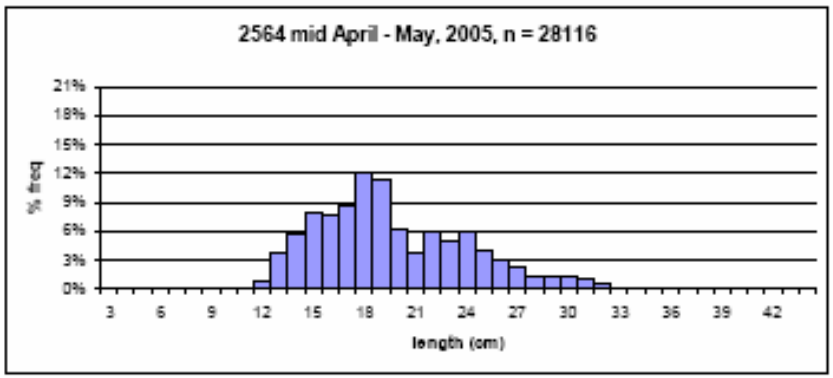
Redfish
(2004 – 2005)









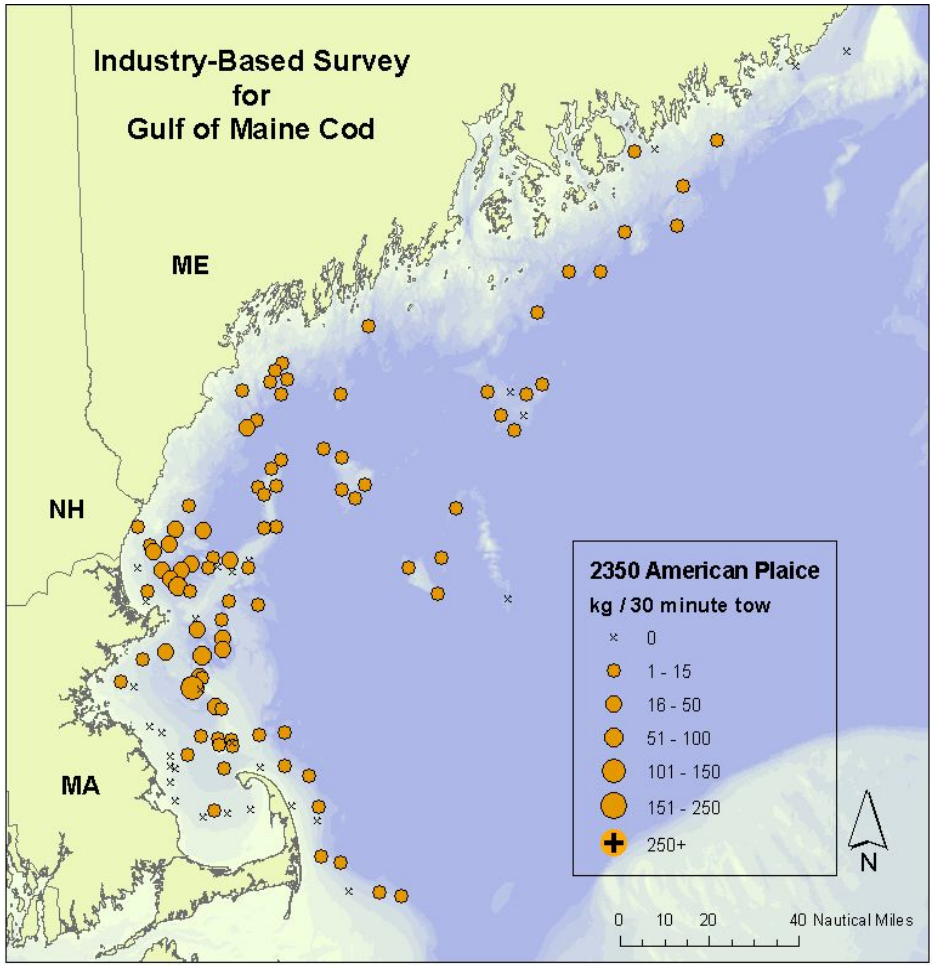


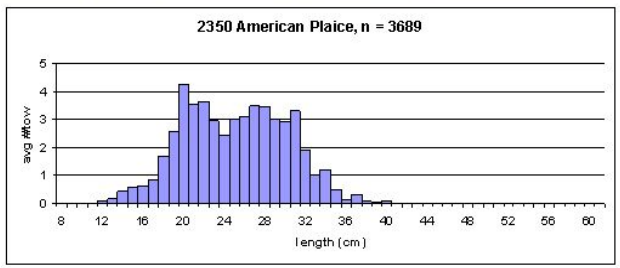
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

American Plaice

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise



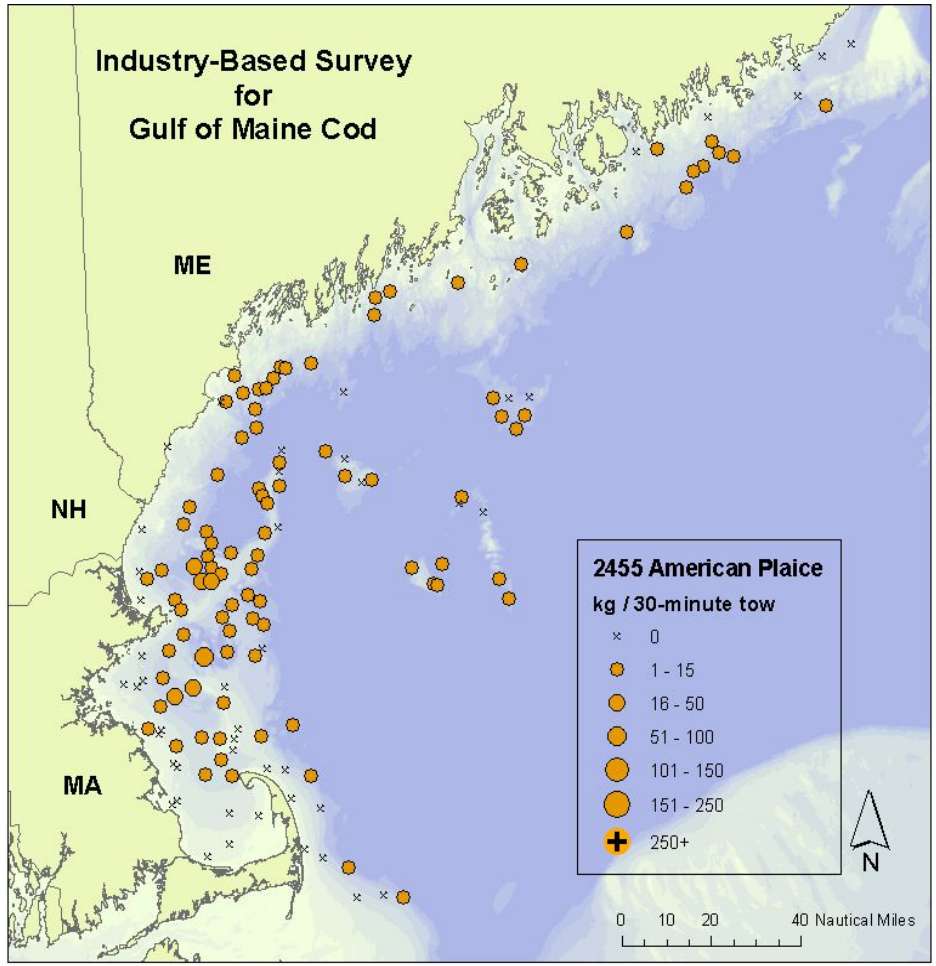


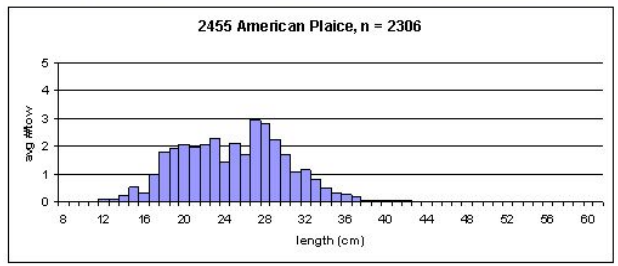
American Plaice
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

**Average number of fish at length for all tows where species were caught



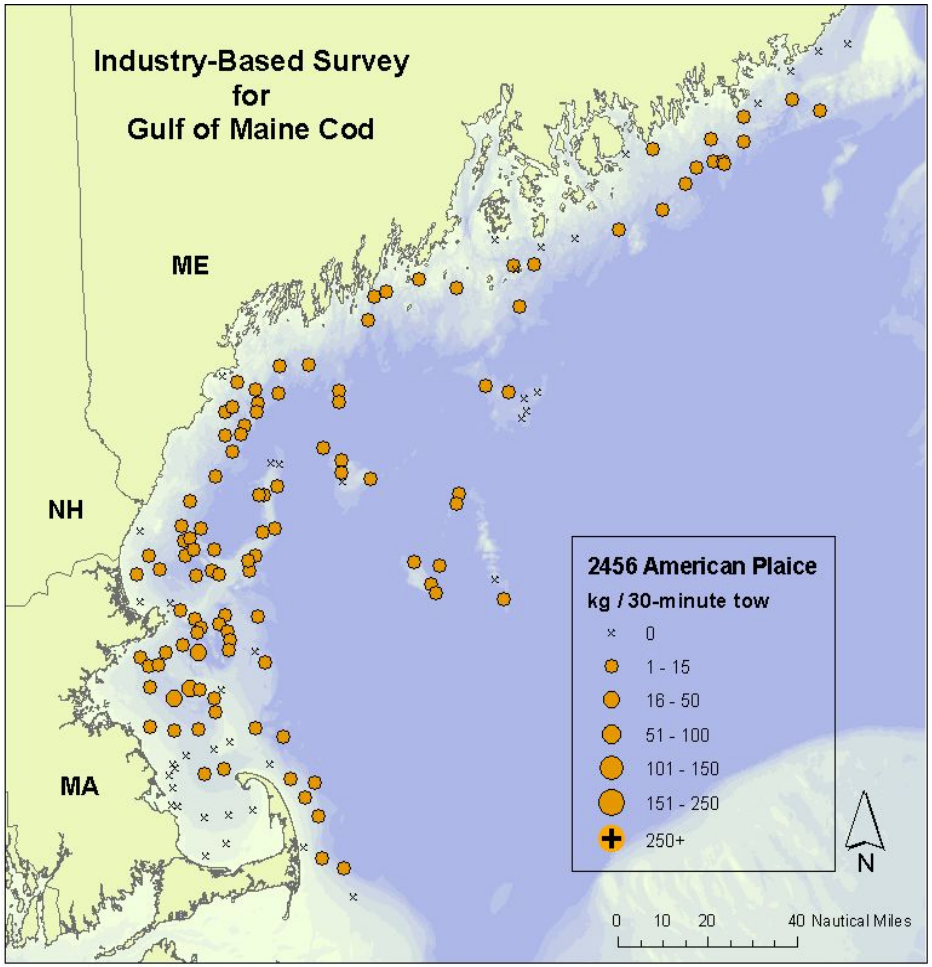


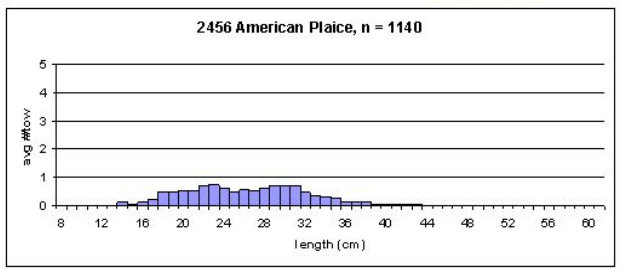
American Plaice
caught during the IBS for GOM cod survey

January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

**Average number of fish at length for all tows where species were caught



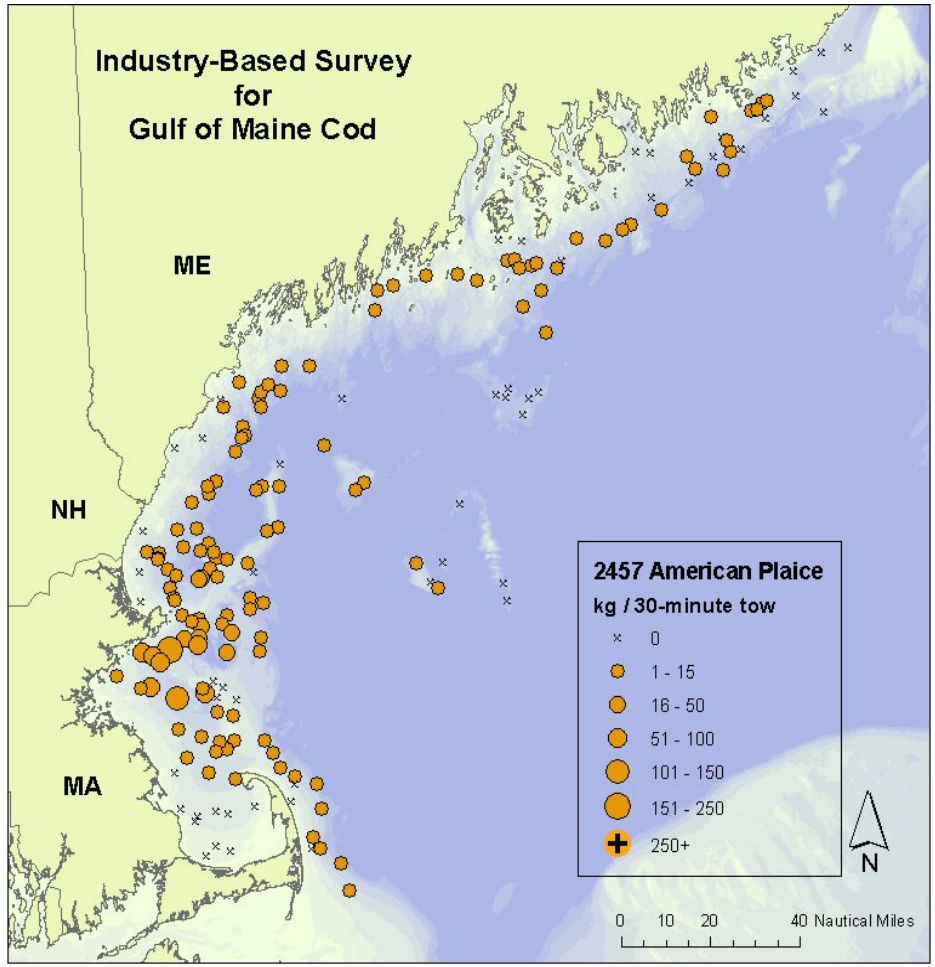


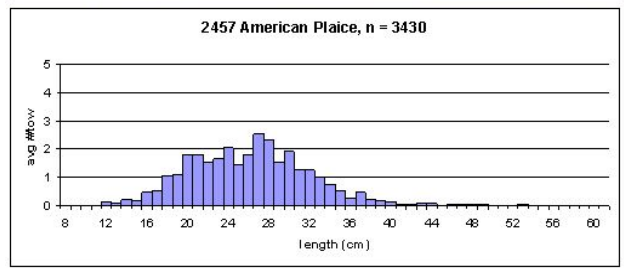
American Plaice
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

**Average number of fish at length for all tows where species were caught



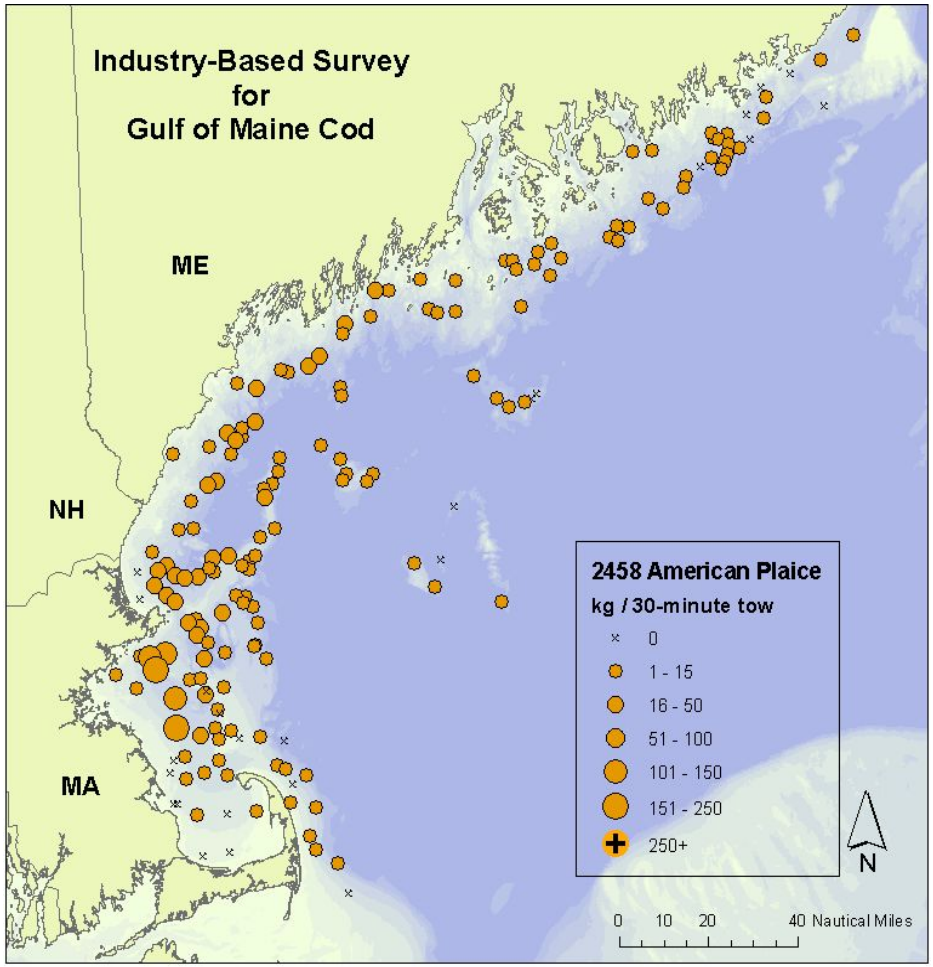


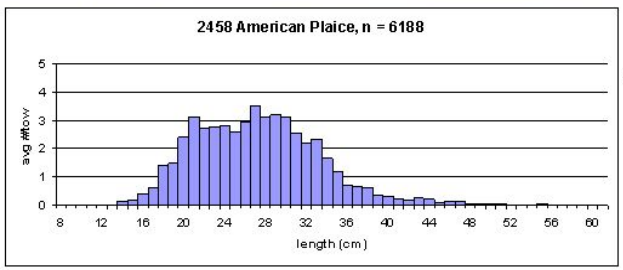
American Plaice
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

**Average number of fish at length for all tows where species were caught



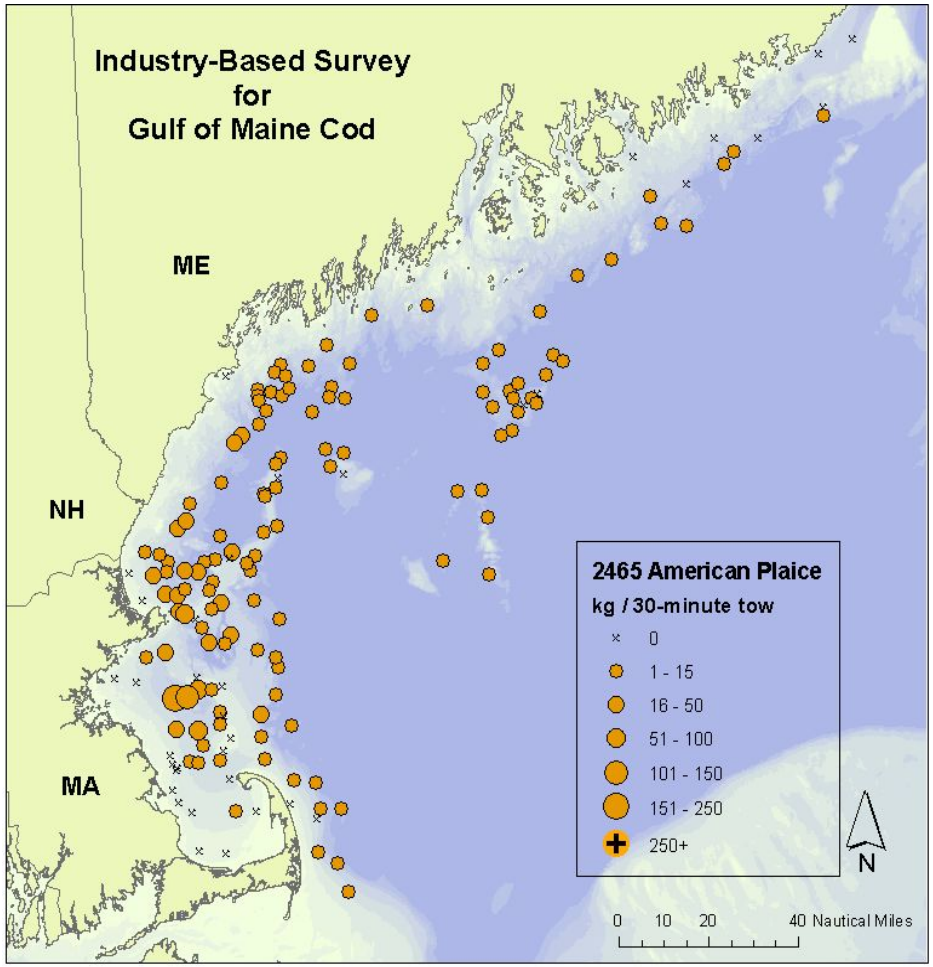


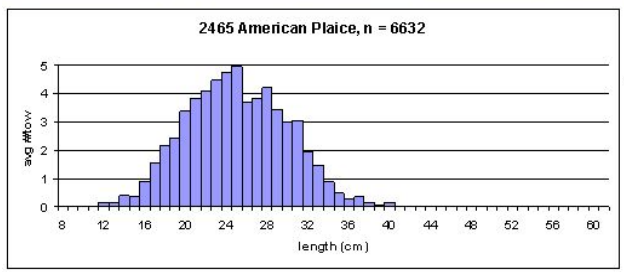
American Plaice
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

MarineFisheries

**Average number of fish at length for all tows where species were caught



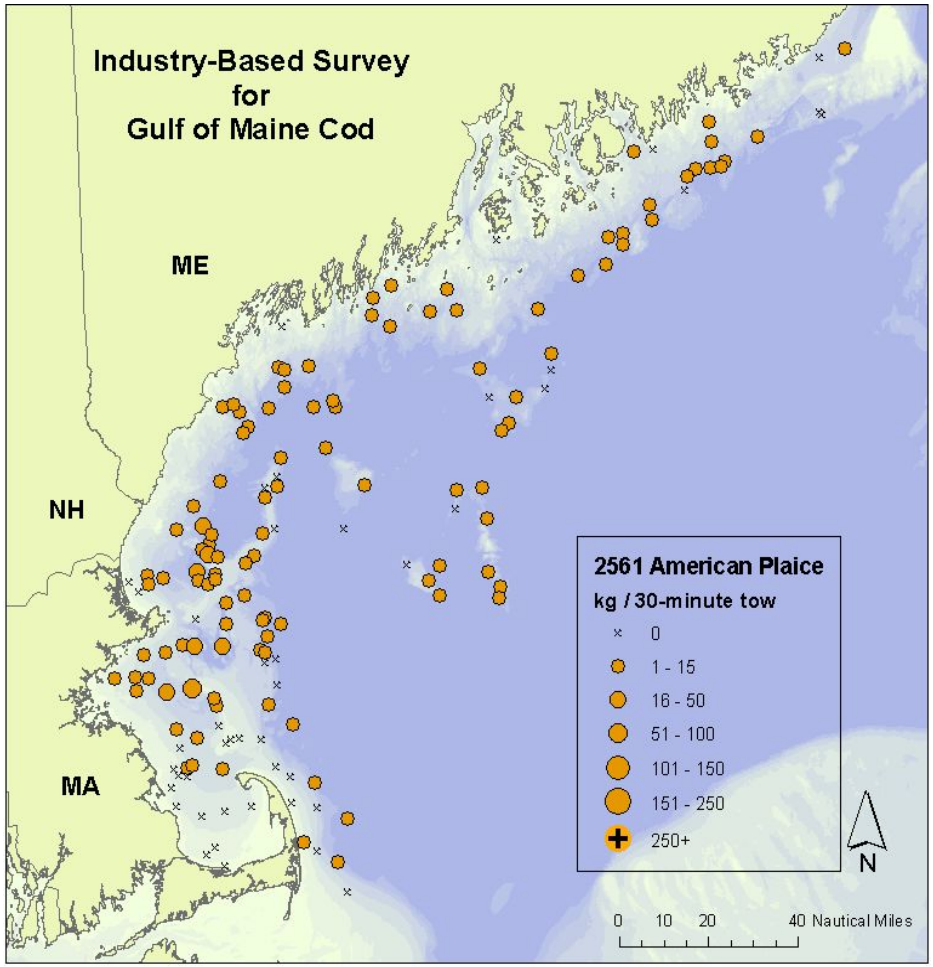


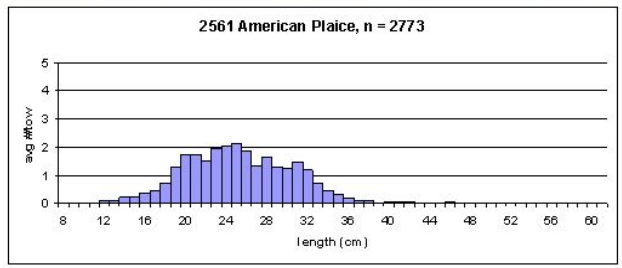
American Plaice
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

MarineFisheries

**Average number of fish at length for all tows where species were caught



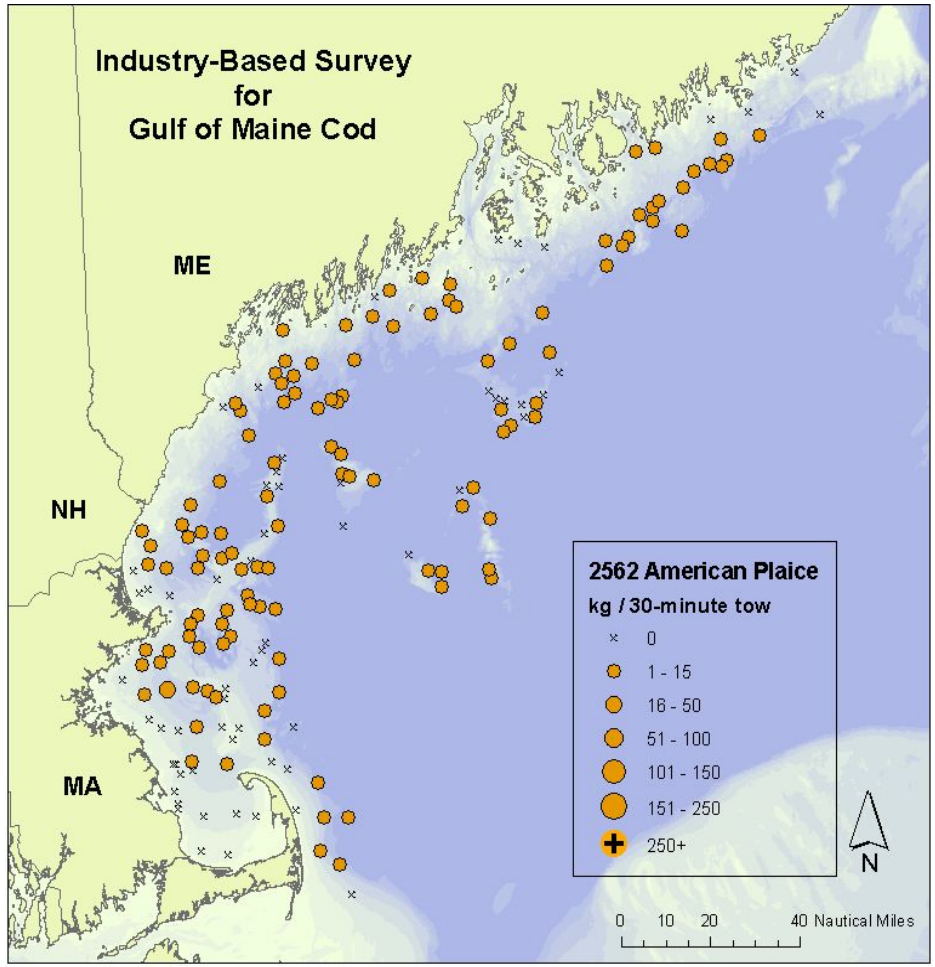


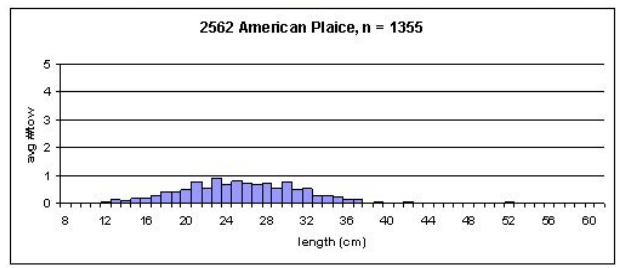
American Plaice
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

**Average number of fish at length for all tows where species were caught



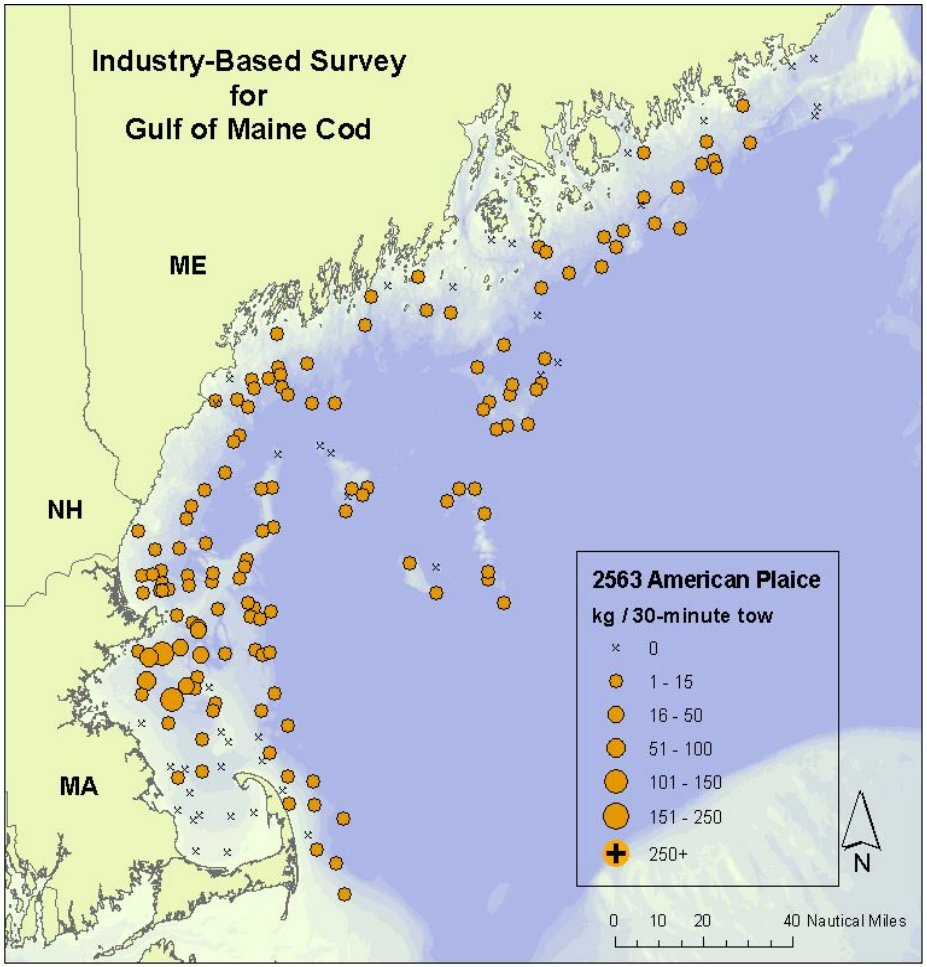


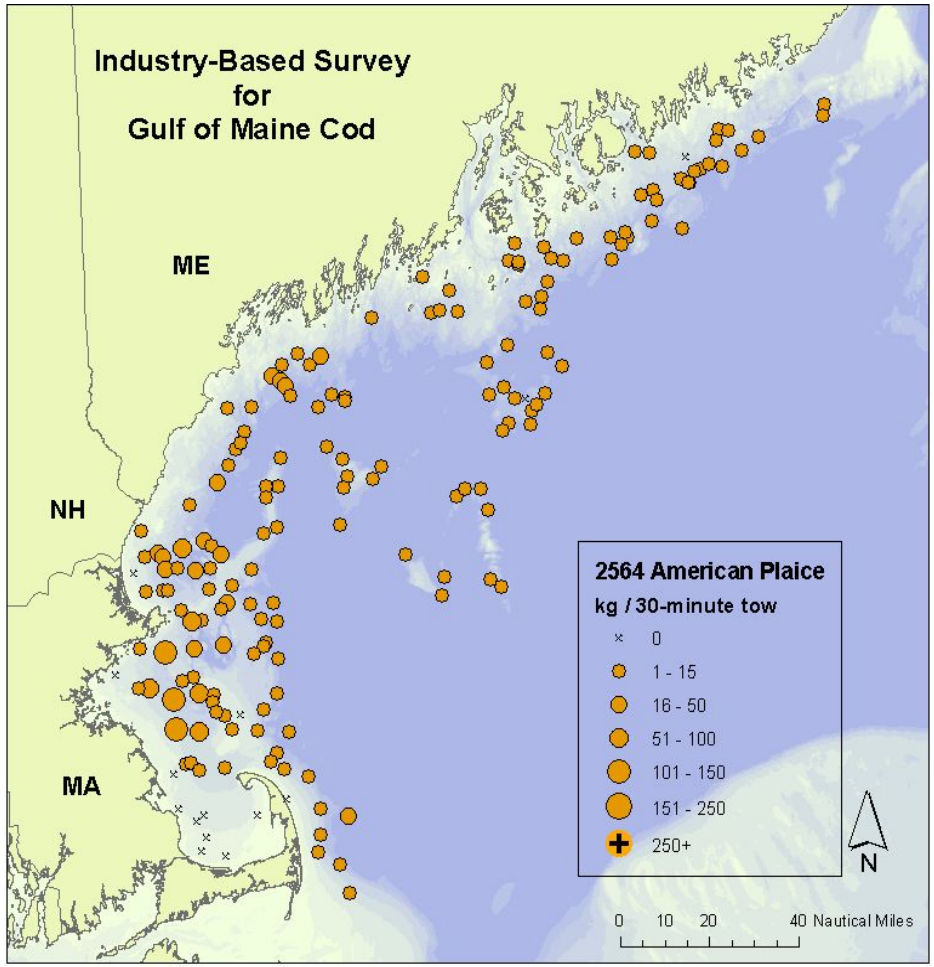
American Plaice
caught during the IBS for GOM cod survey

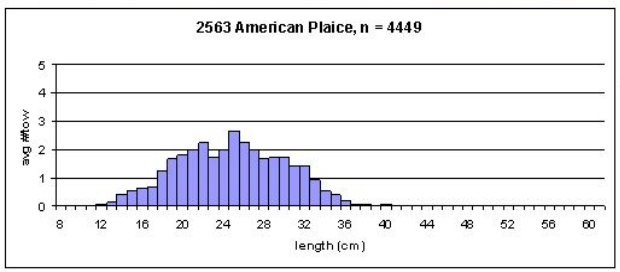
mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

**Average number of fish at length for all tows where species were caught





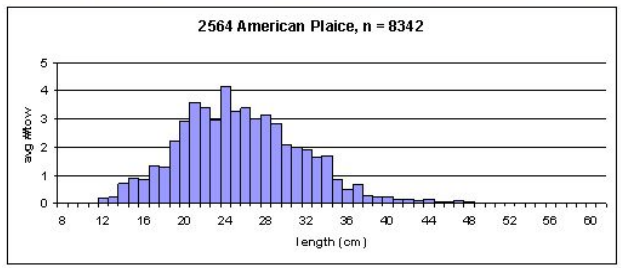


American Plaice
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

**Average number of fish at length for all tows where species were caught



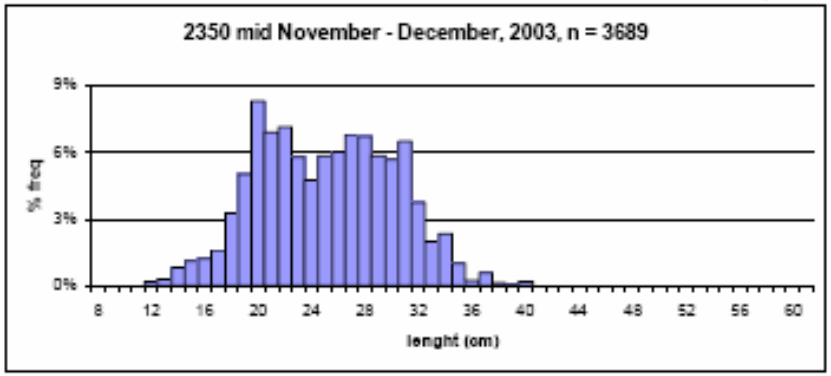
American Plaice
caught during the IBS for GOM cod survey

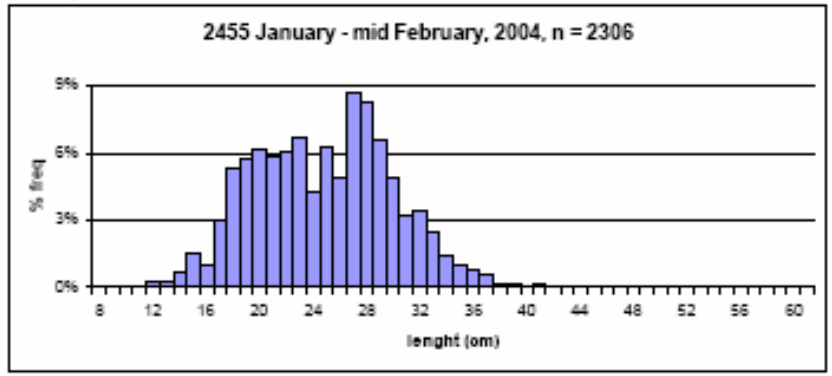
mid April - May
Year: 2005
Cruise: 2564

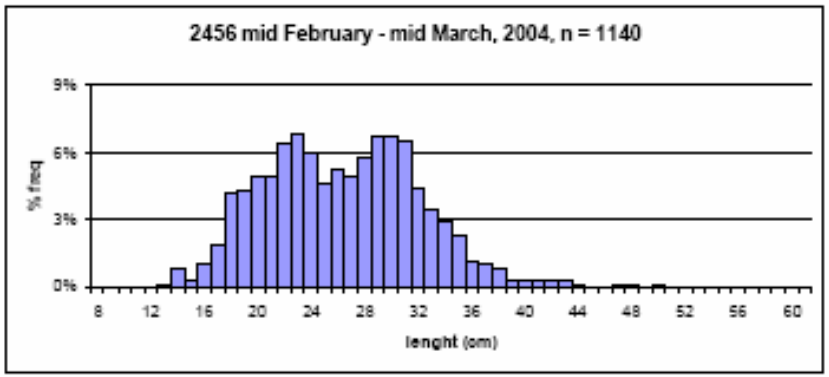
MarineFisheries

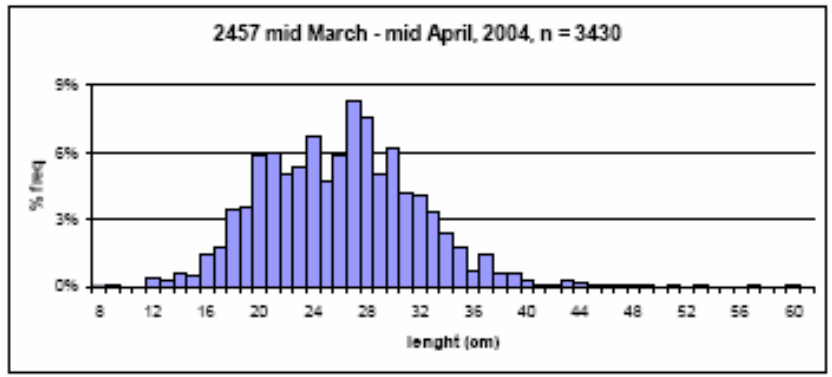
**Average number of fish at length for all tows where species were caught

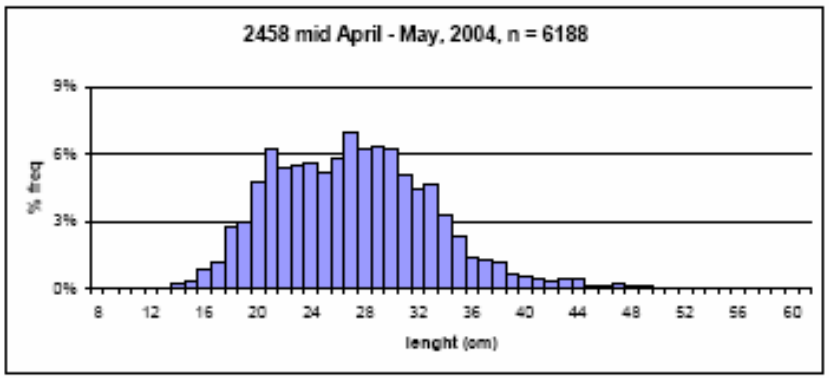
American Plaice
(2003 – 2004)



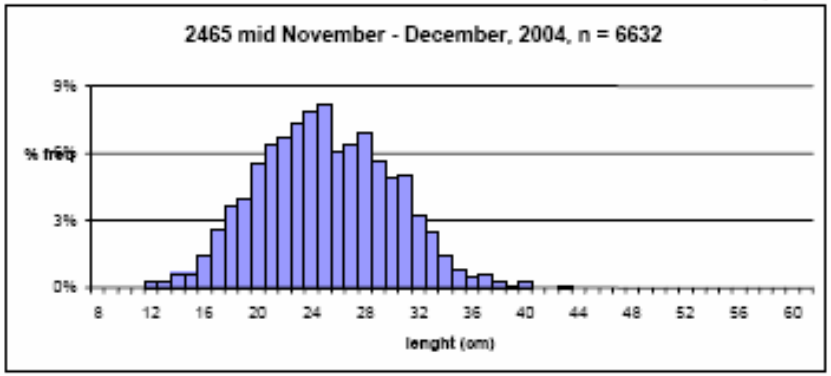


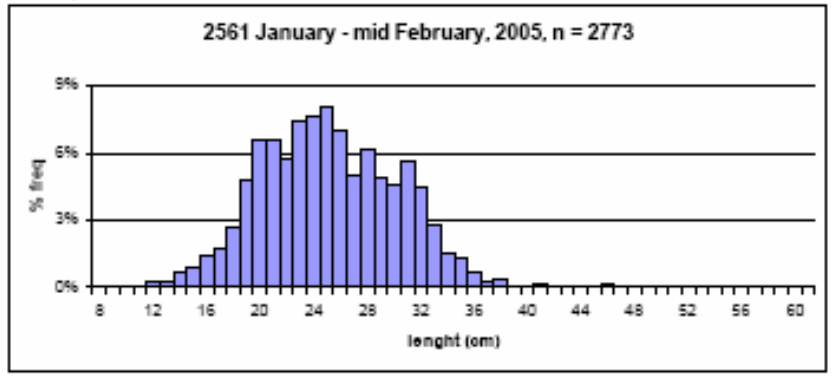


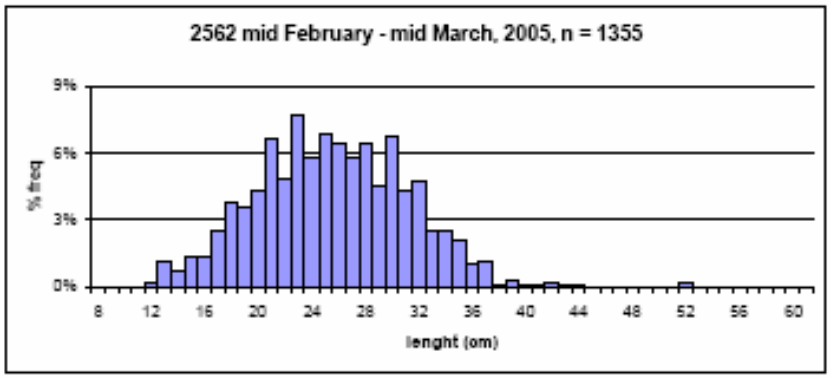


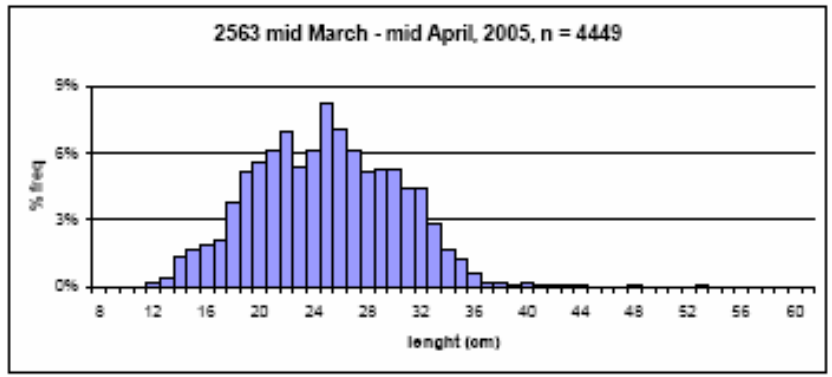


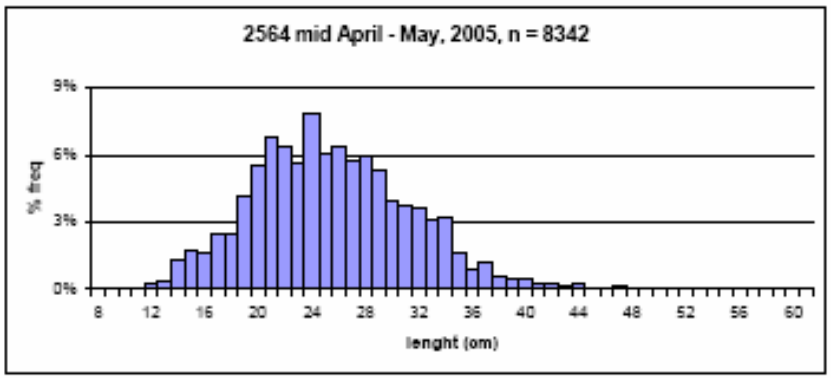
American Plaice
(2004 – 2005)









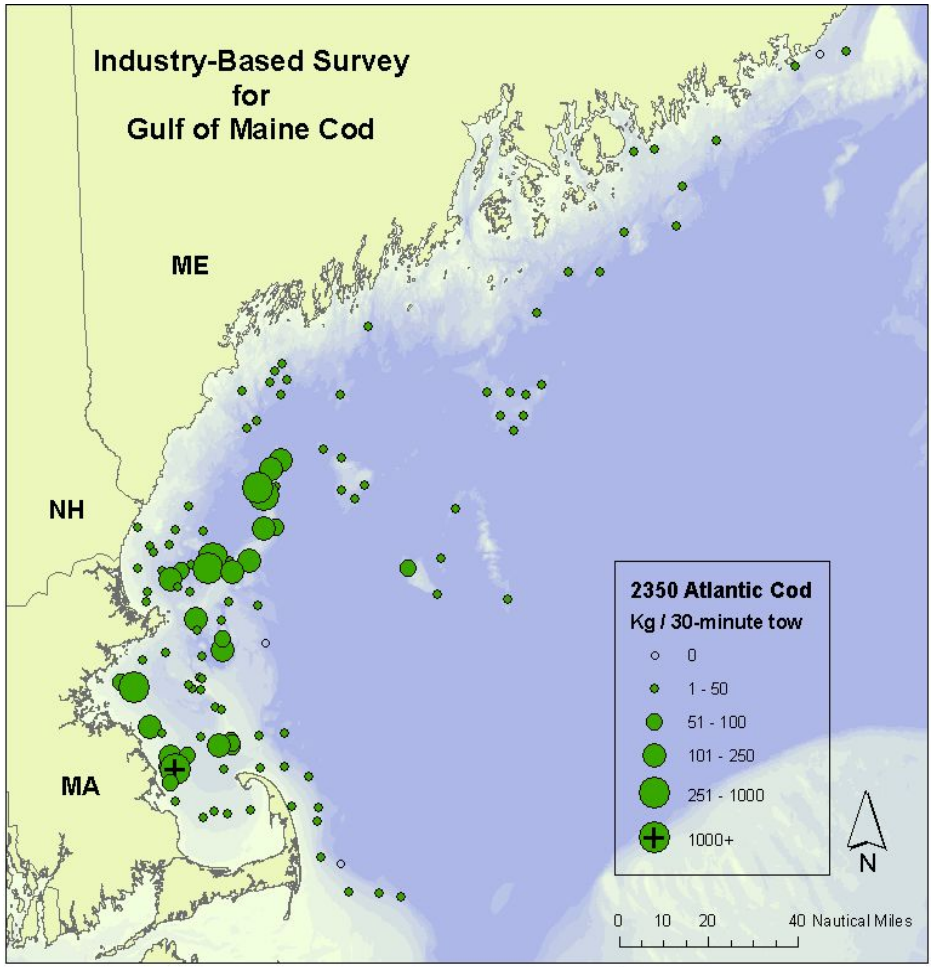


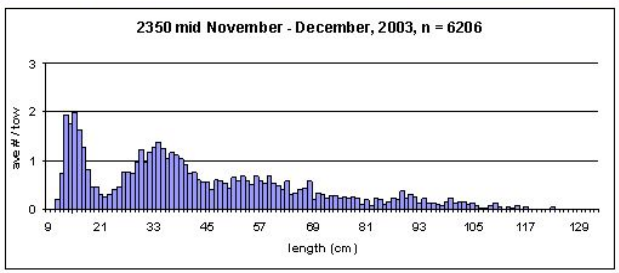
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

Atlantic Cod

Spatial and temporal distribution by cruise, average number of fish at length by cruise, and percent frequency at length by cruise



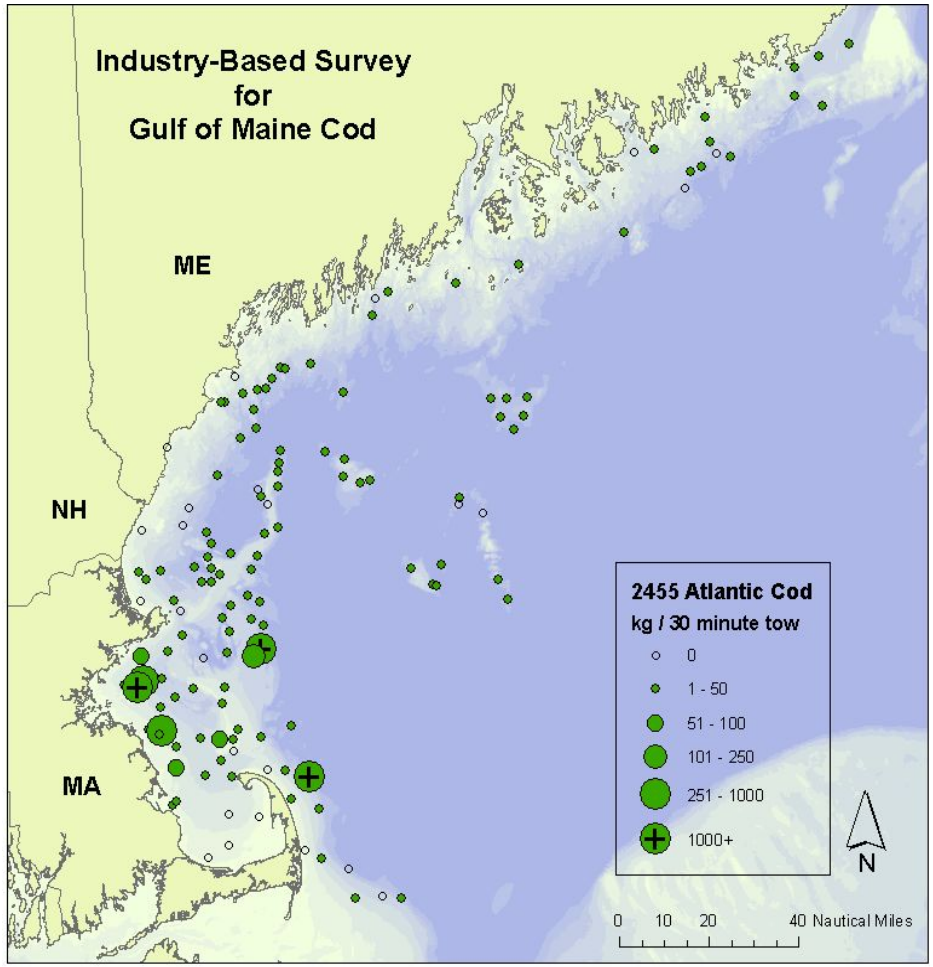


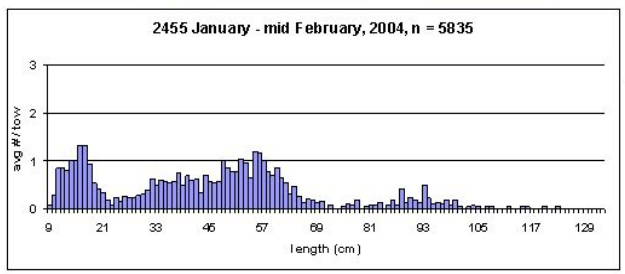
Atlantic Cod
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

**Average number of fish at length for all tows



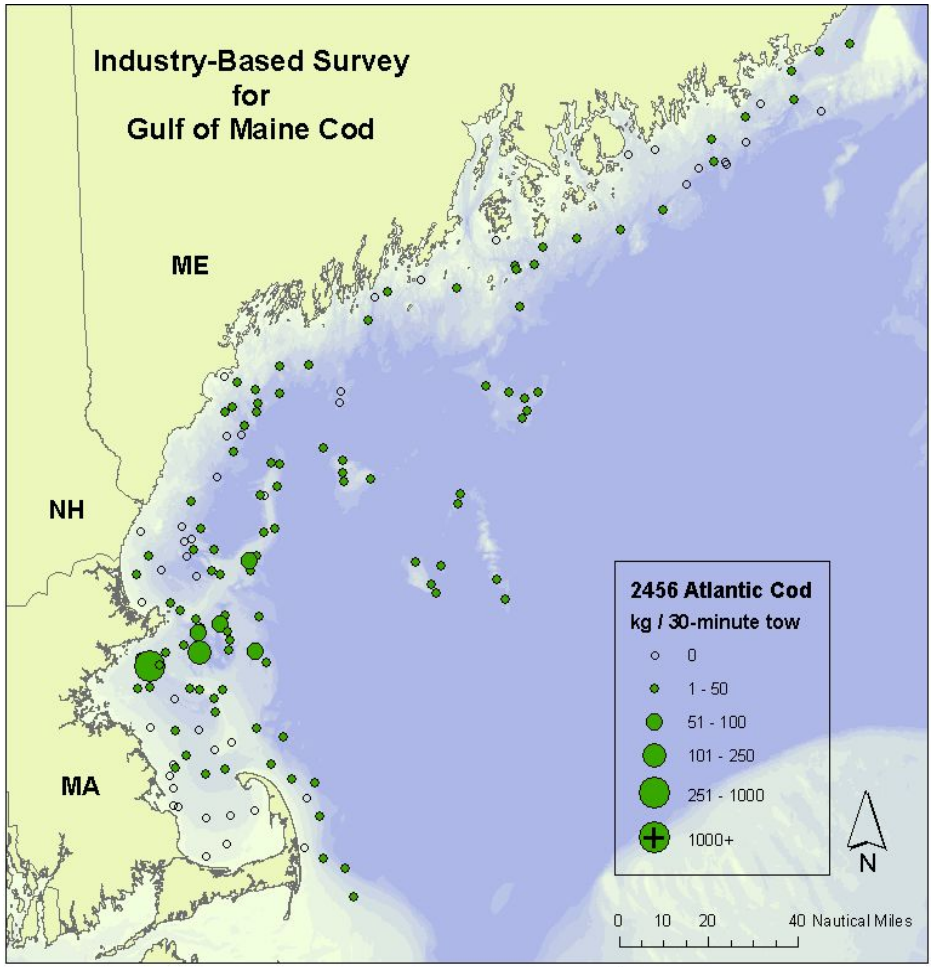


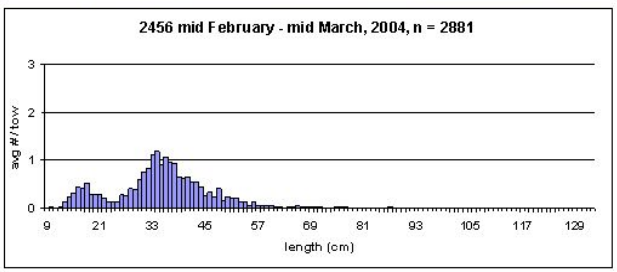
Atlantic Cod
caught during the IBS for GOM cod survey

January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

**Average number of fish at length for all tows



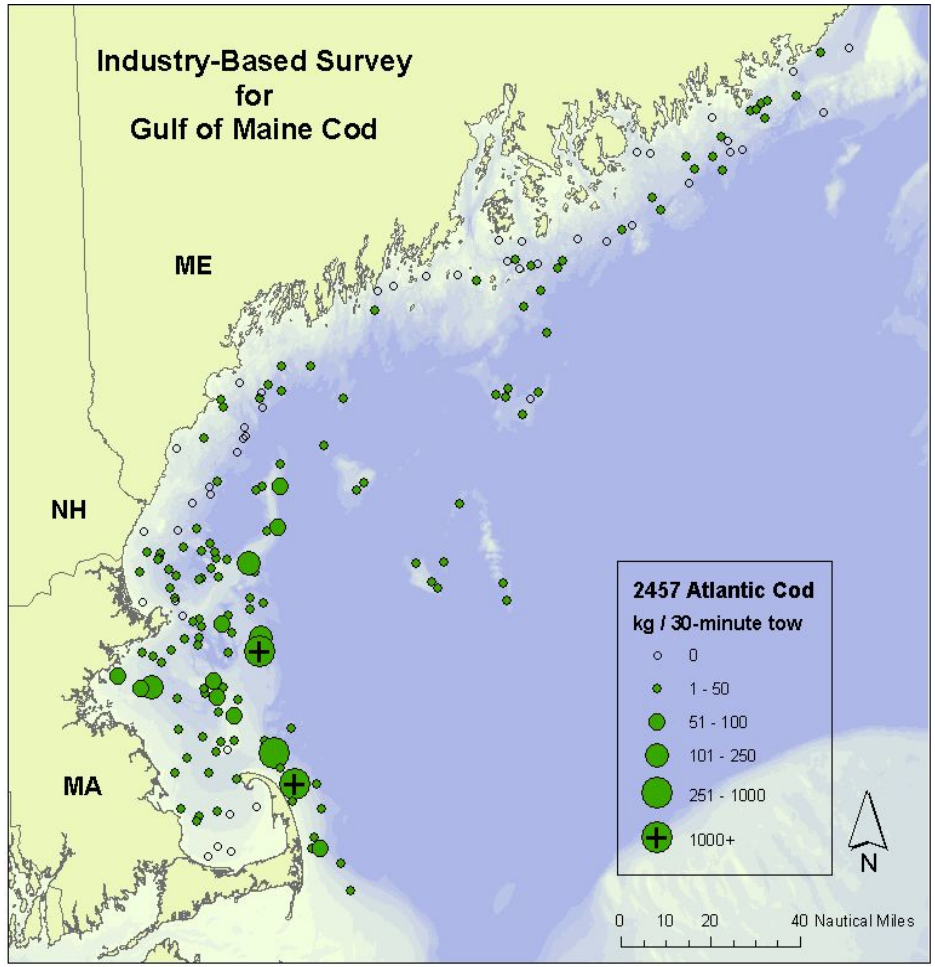


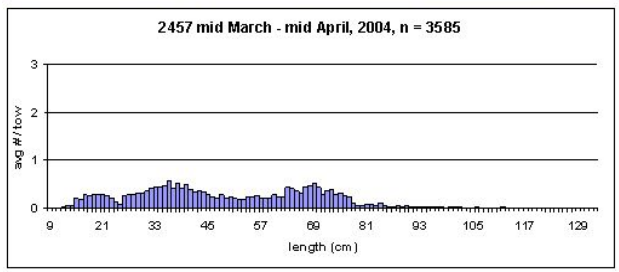
Atlantic Cod
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

**Average number of fish at length for all tows



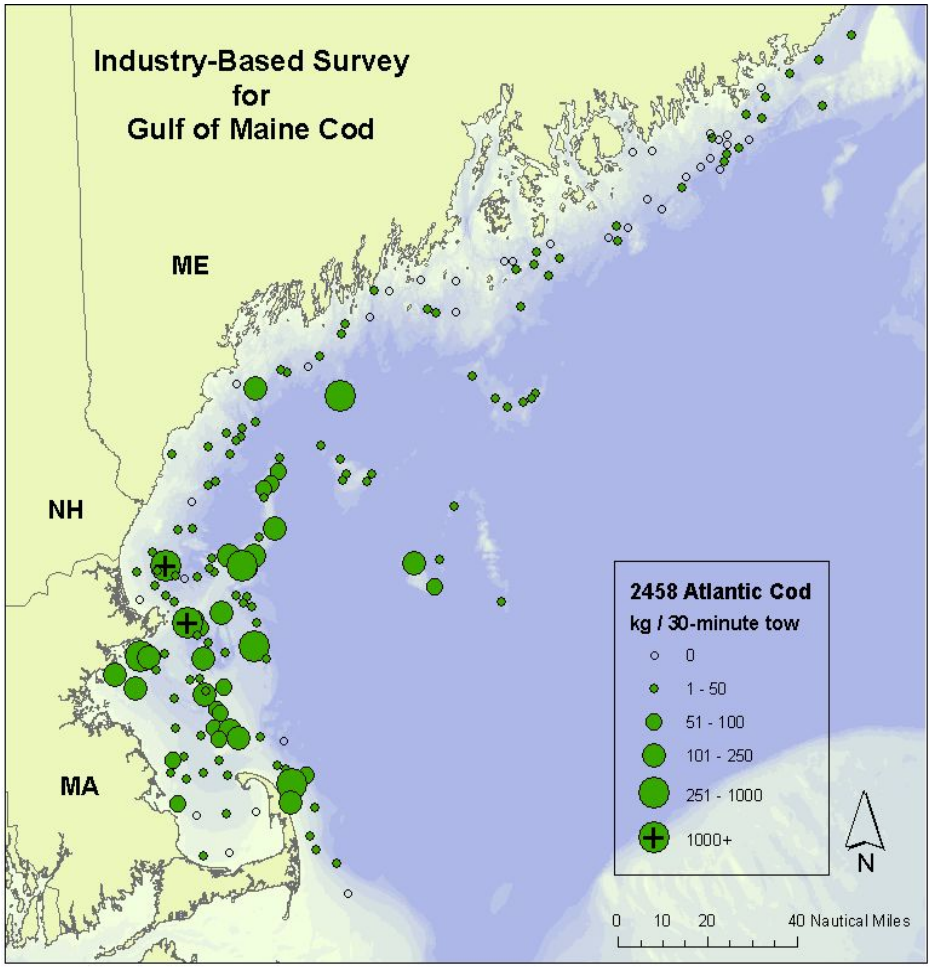


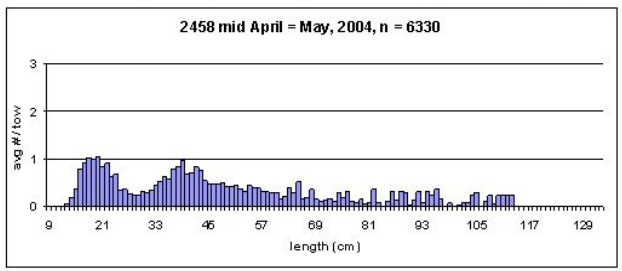
Atlantic Cod
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

**Average number of fish at length for all tows



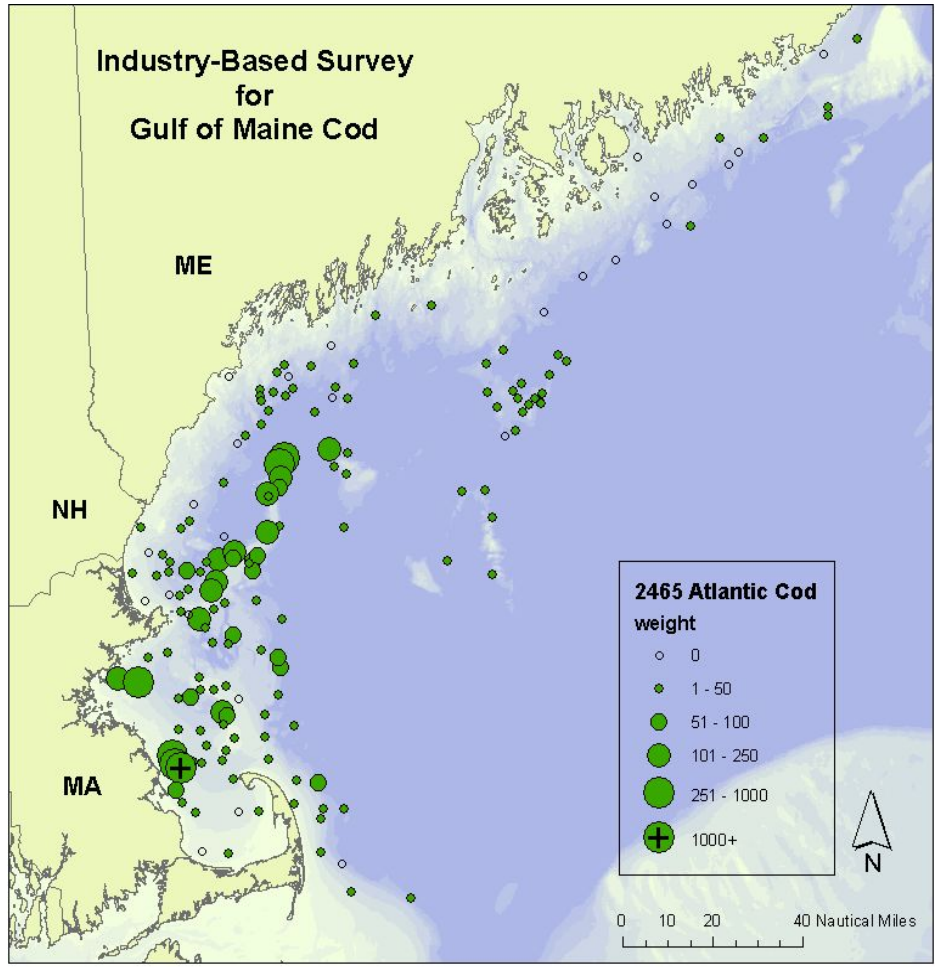


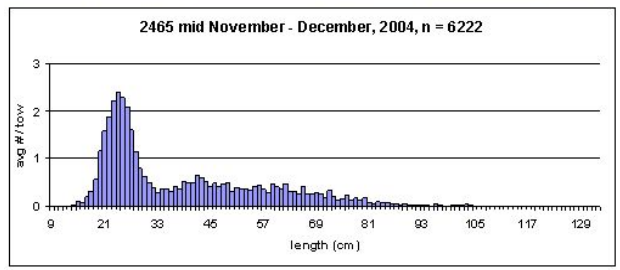
Atlantic Cod
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

MarineFisheries

**Average number of fish at length for all tows



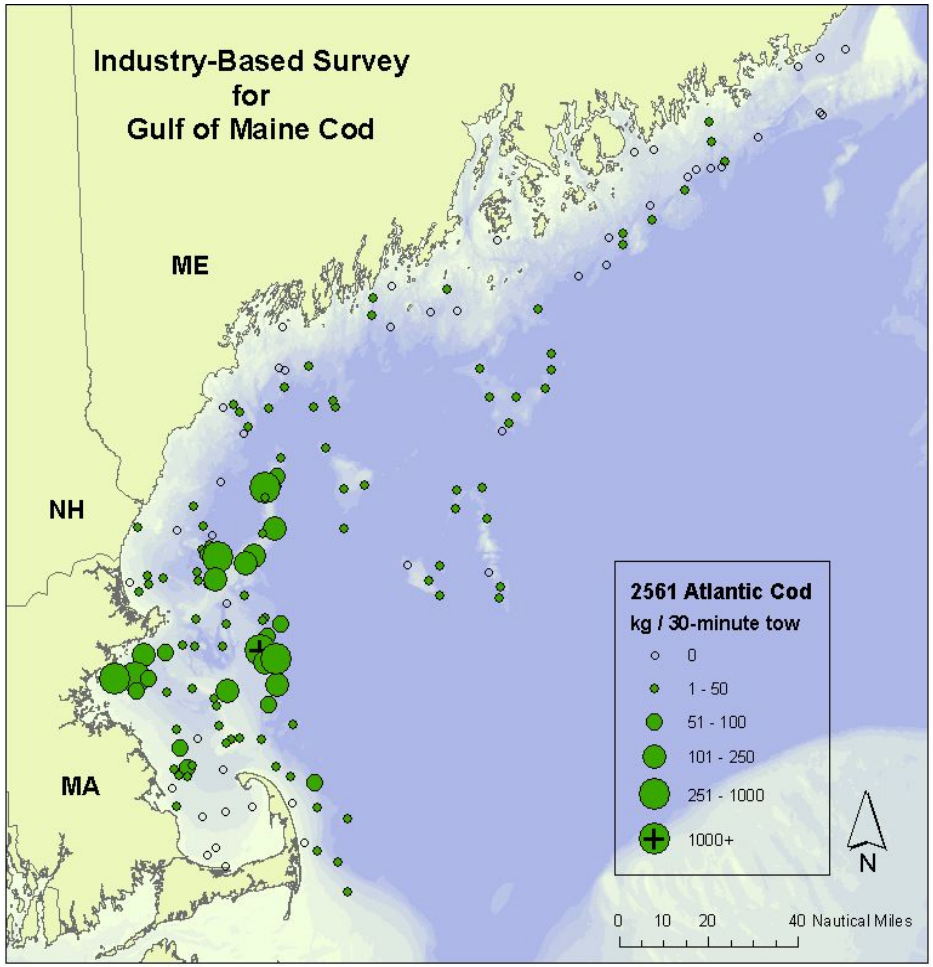


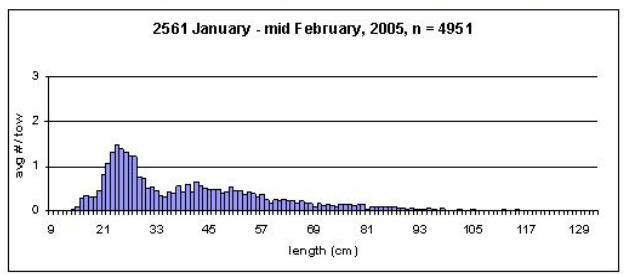
Atlantic Cod
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

MarineFisheries

**Average number of fish at length for all tows



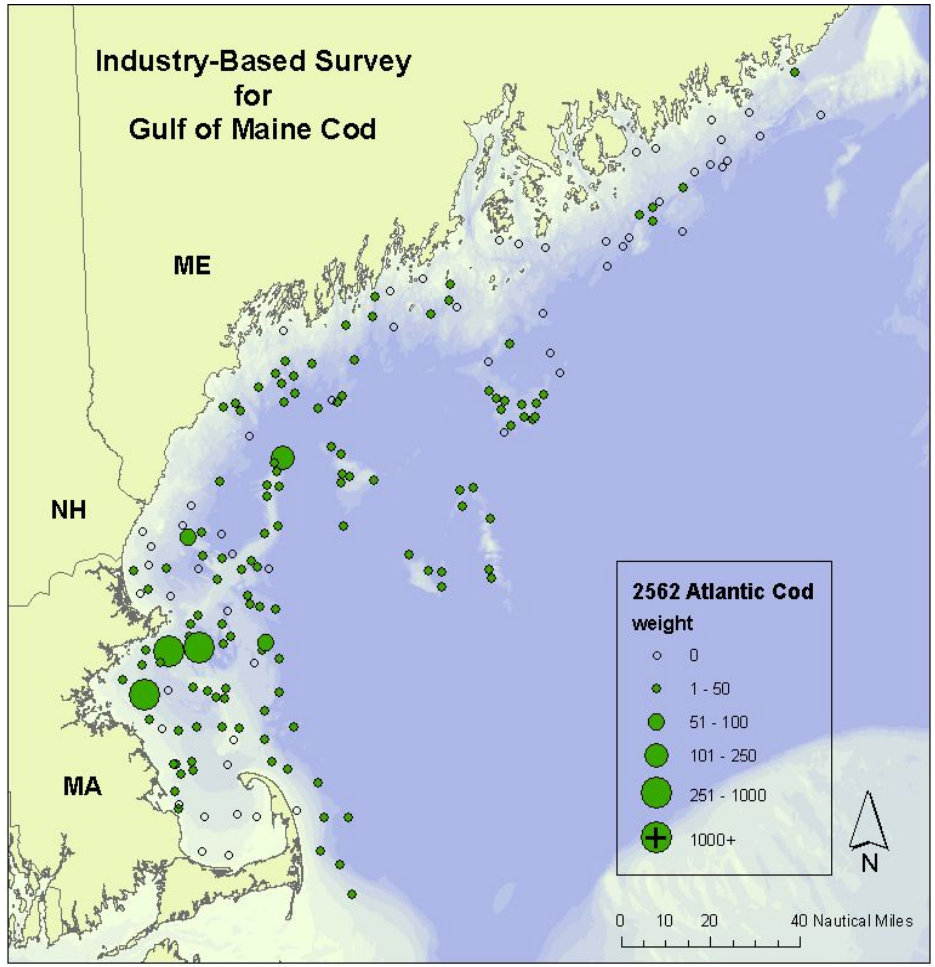


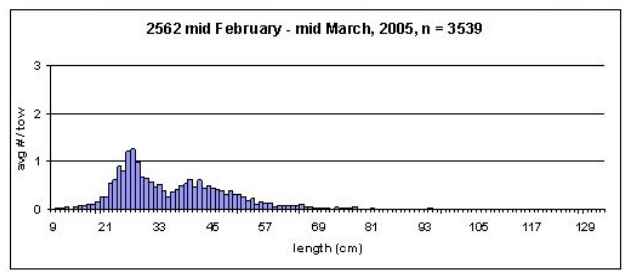
Atlantic Cod
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

**Average number of fish at length for all tows



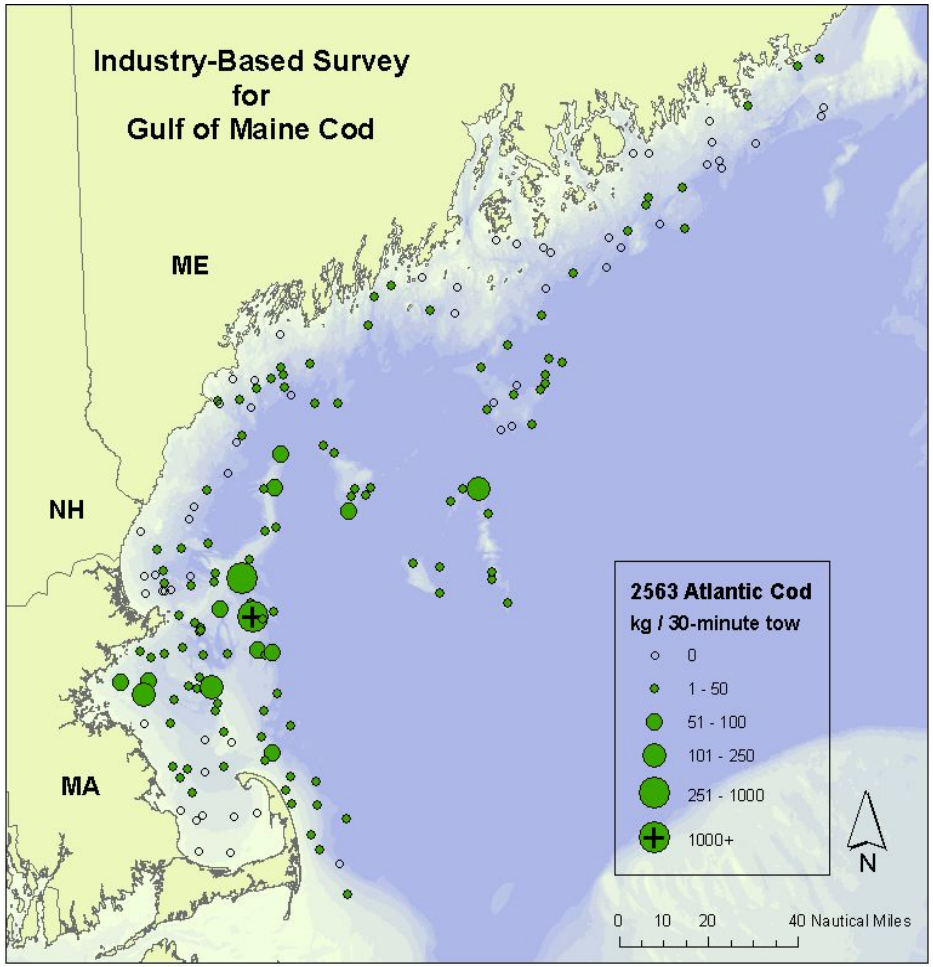


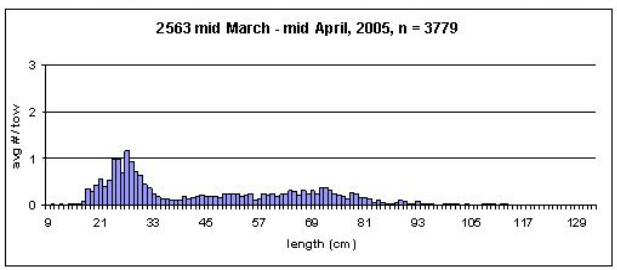
Atlantic Cod
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

**Average number of fish at length for all tows



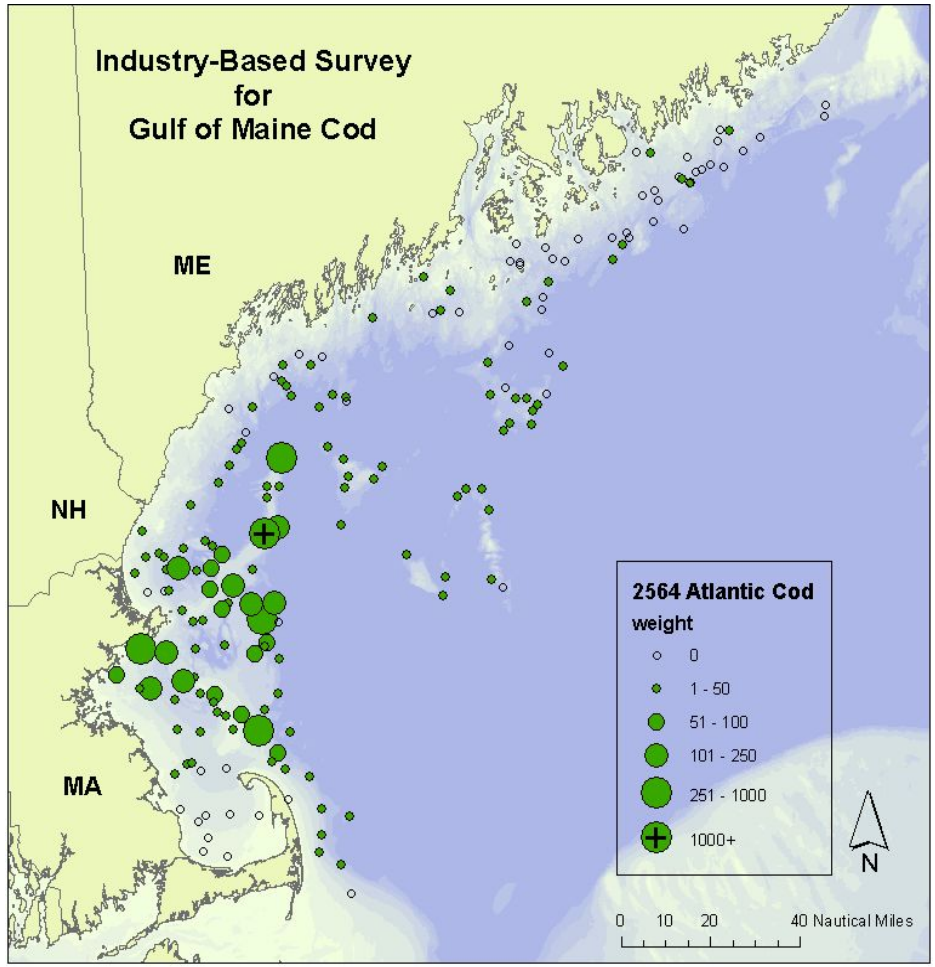


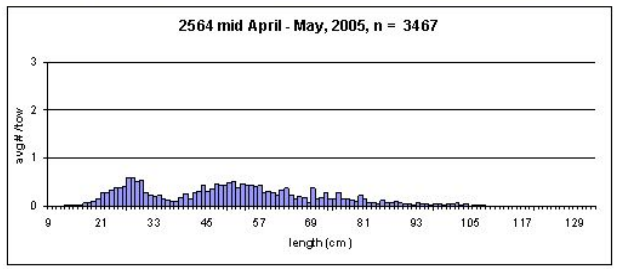
Atlantic Cod
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

**Average number of fish at length for all tows





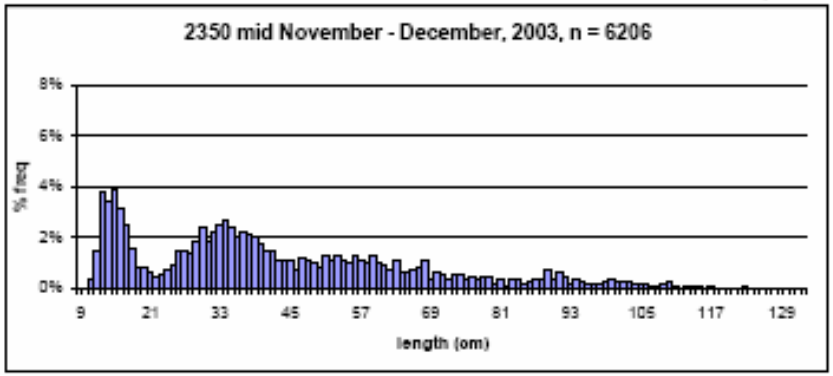
Atlantic Cod
caught during the IBS for GOM cod survey

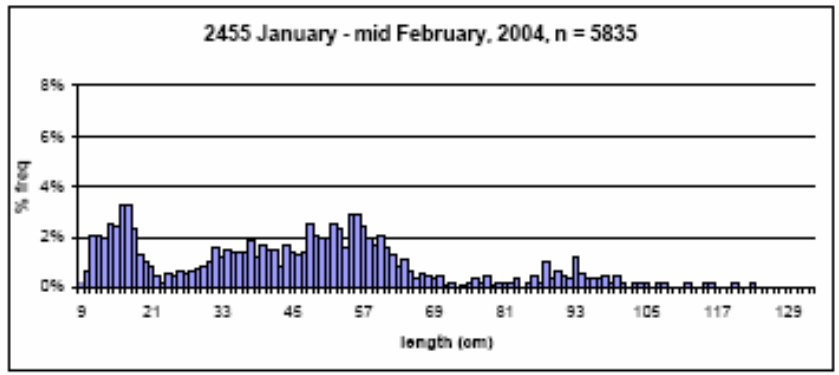
mid April - May
Year: 2005
Cruise: 2564

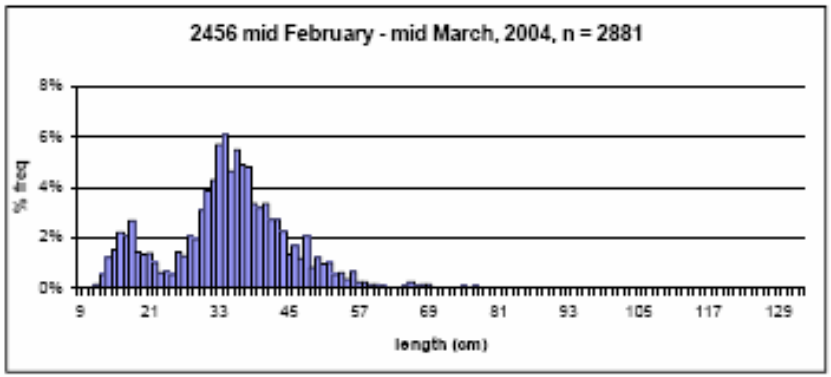
MarineFisheries

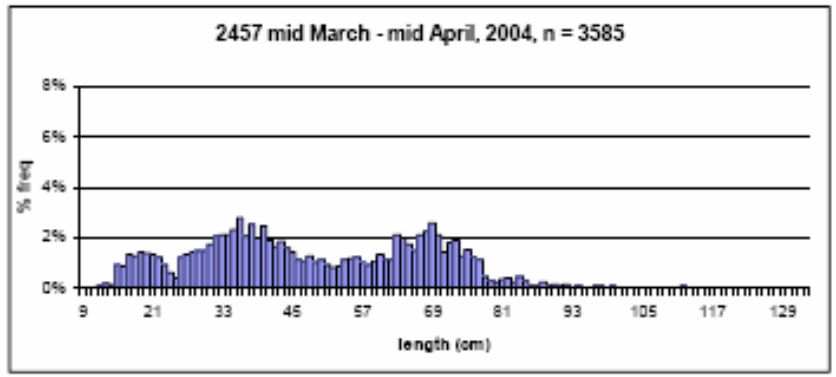
**Average number of fish at length for all tows

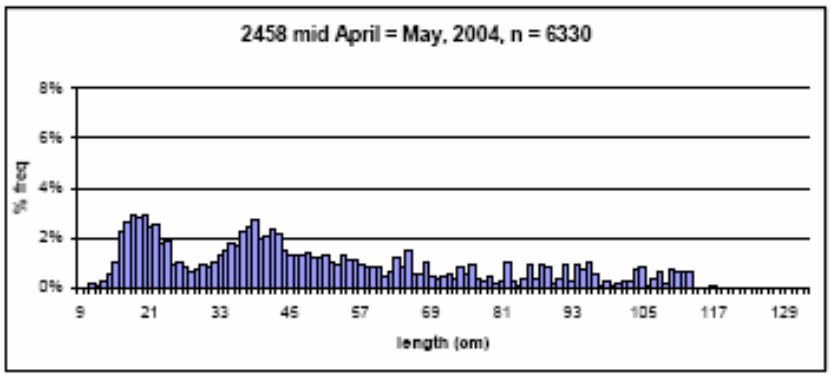
Atlantic Cod Percent Length Frequency
(2003 – 2004)



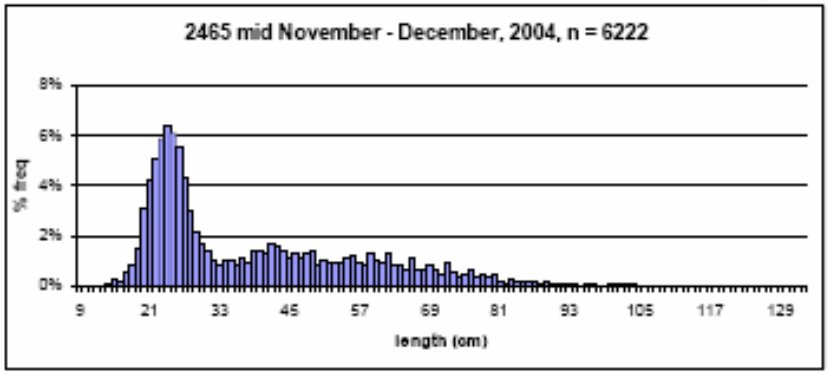


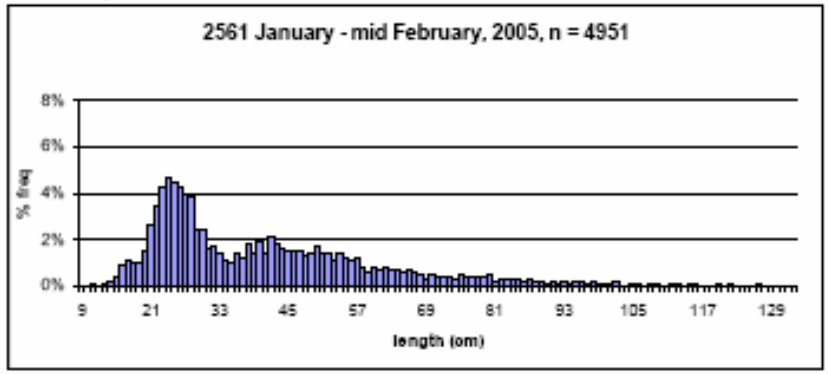


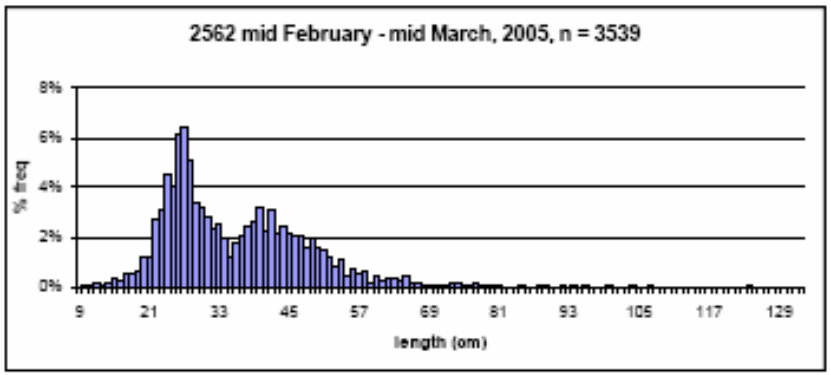


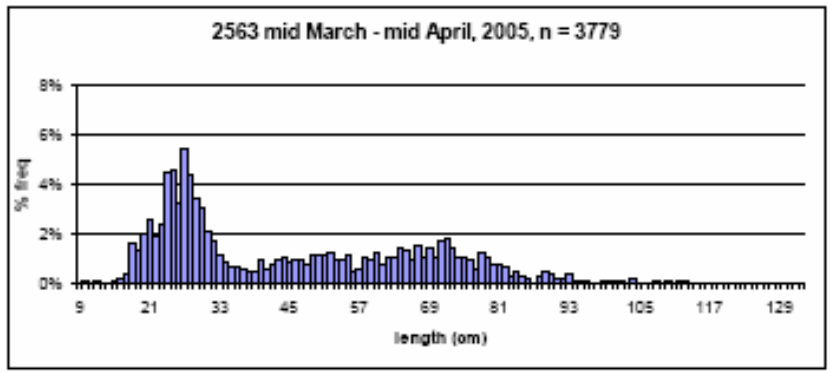


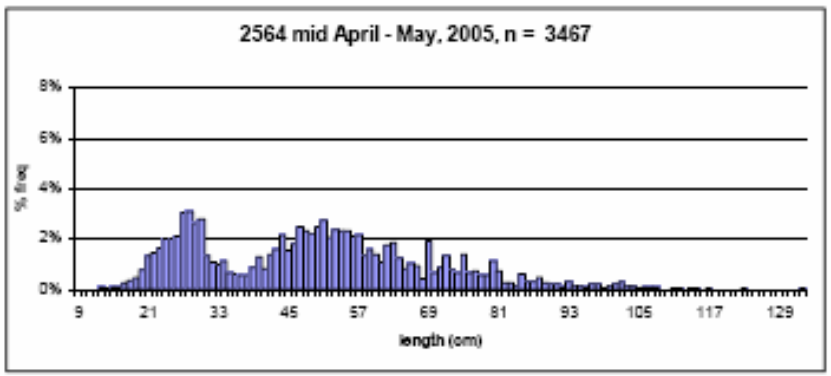
Atlantic Cod Percent Length Frequency
(2004 – 2005)









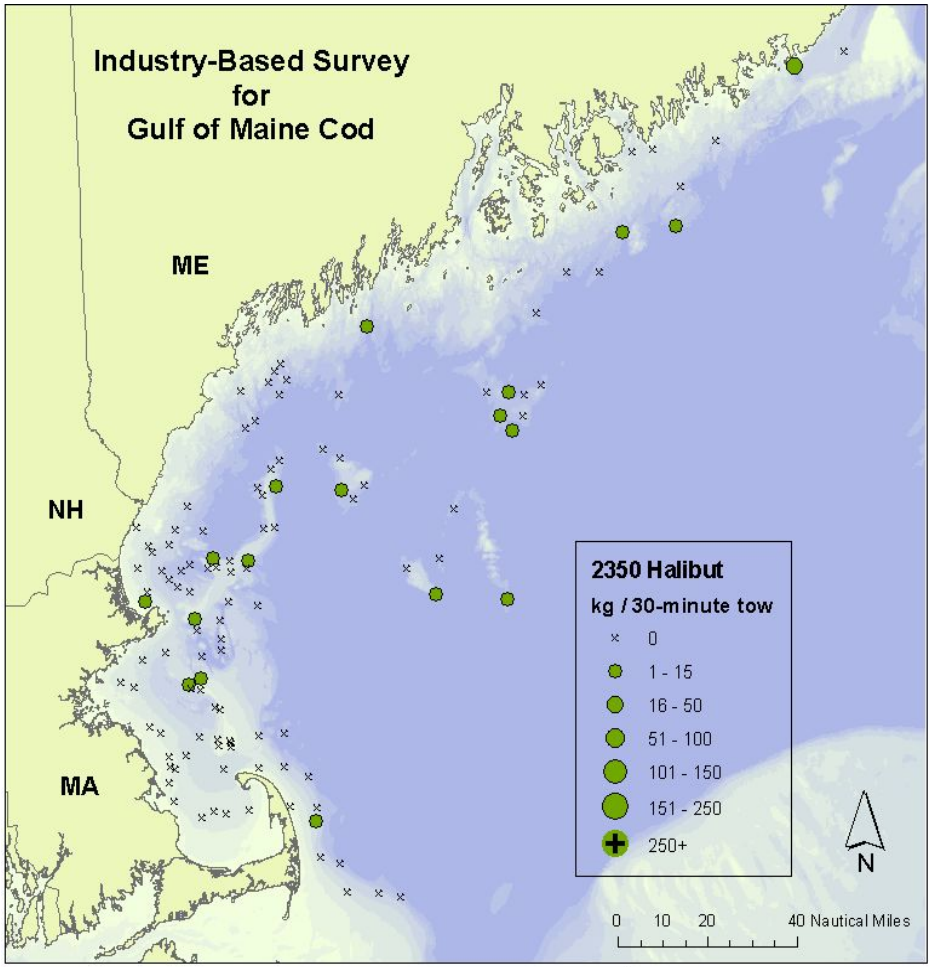


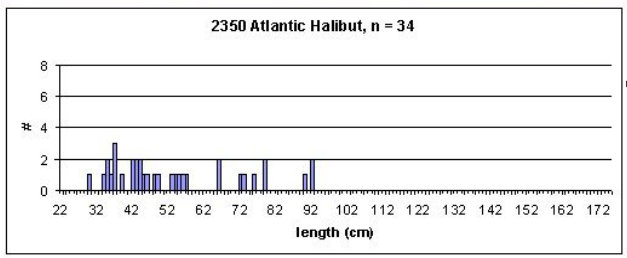
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

Atlantic Halibut

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise



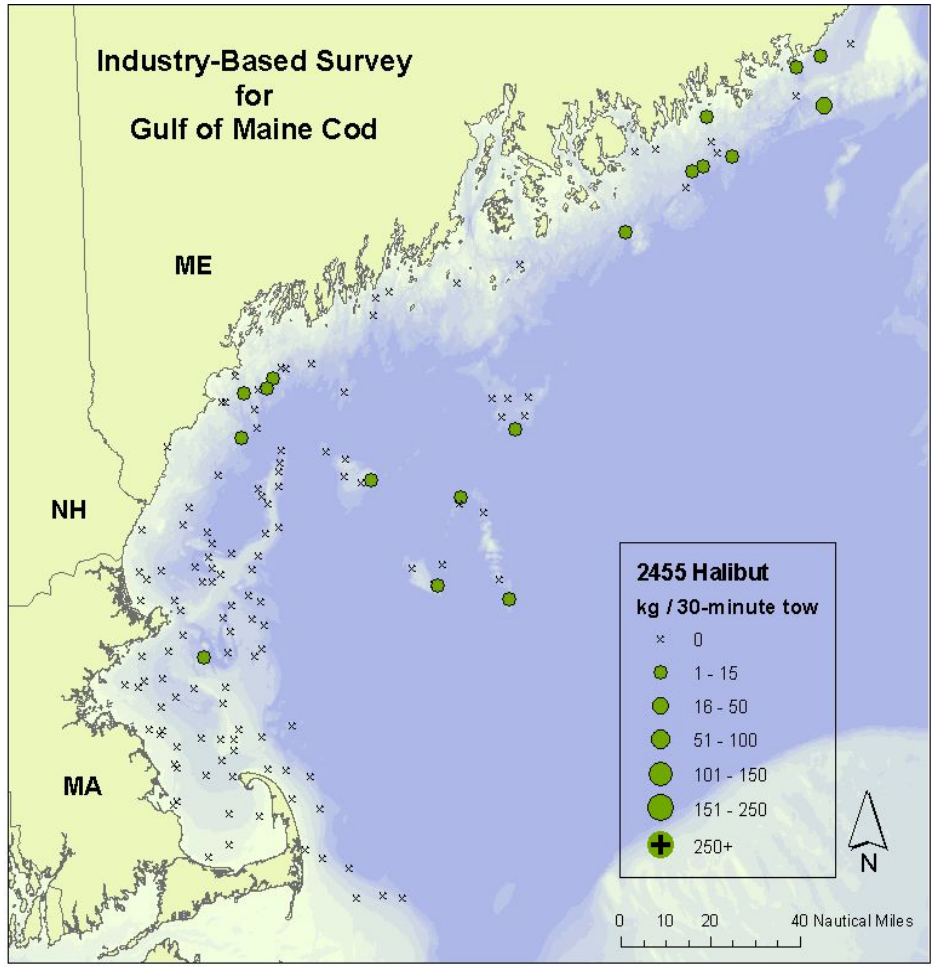


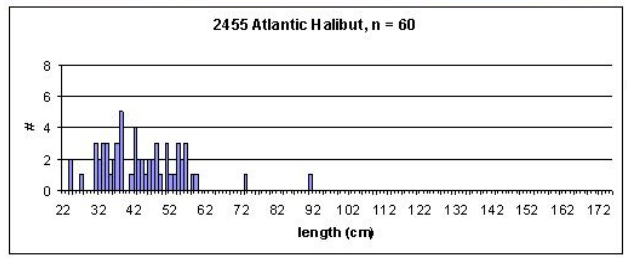
Atlantic Halibut
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

** Actual length frequency for all tows completed during cruise



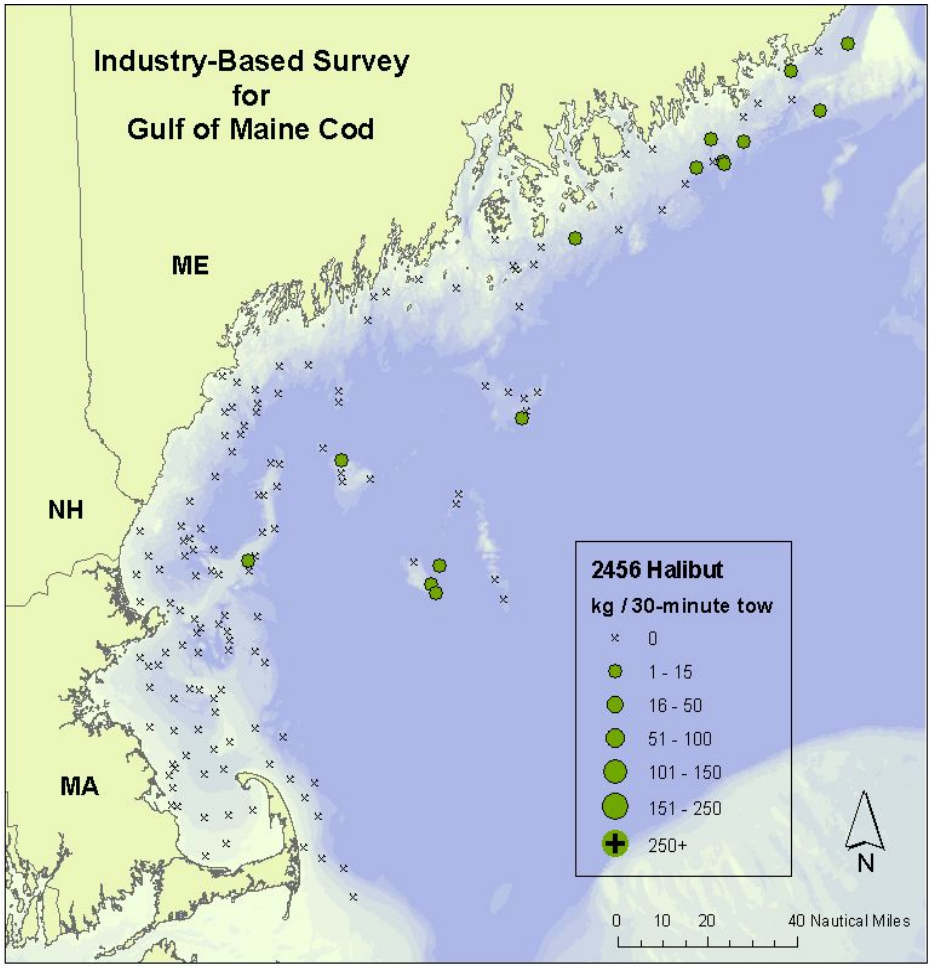


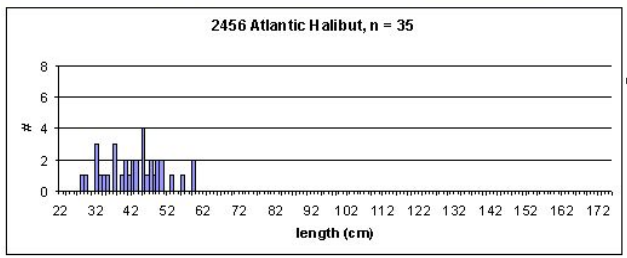
Atlantic Halibut
caught during the IBS for GOM cod survey

January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

** Actual length frequency for all tows completed during cruise

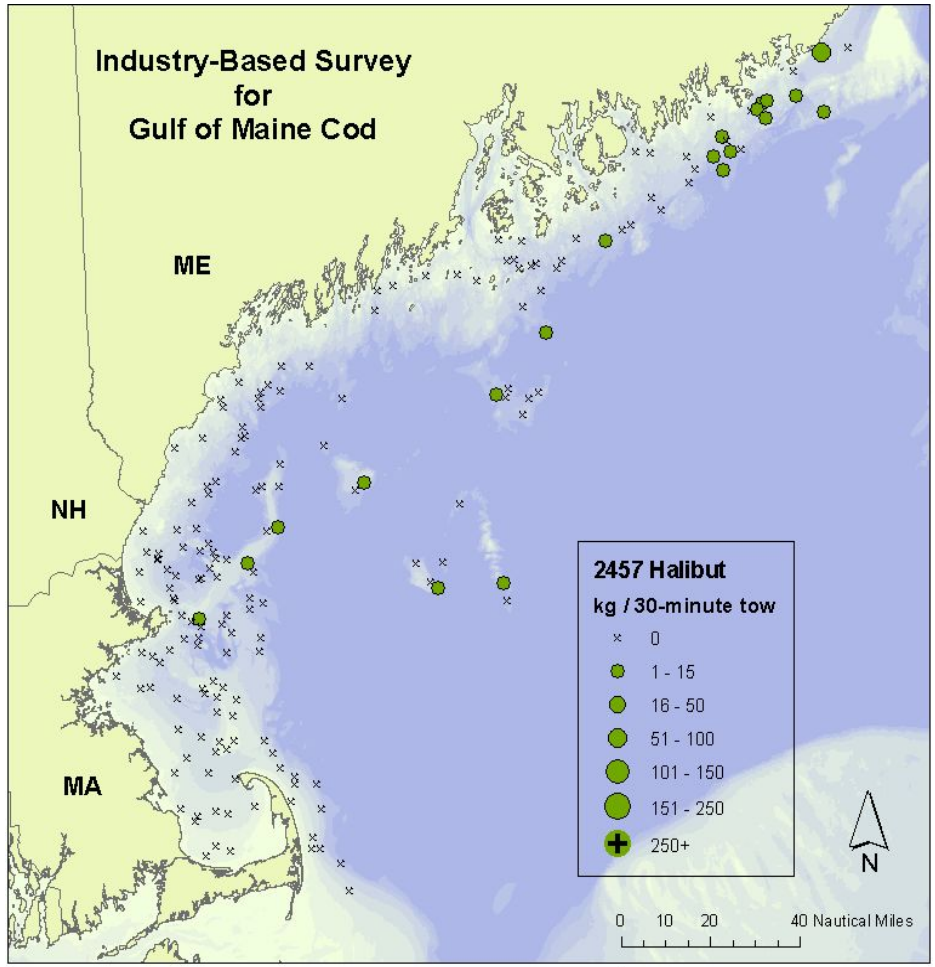


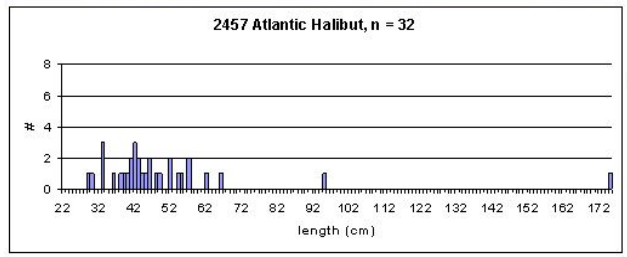


Atlantic Halibut
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

** Actual length frequency for all tows completed during cruise

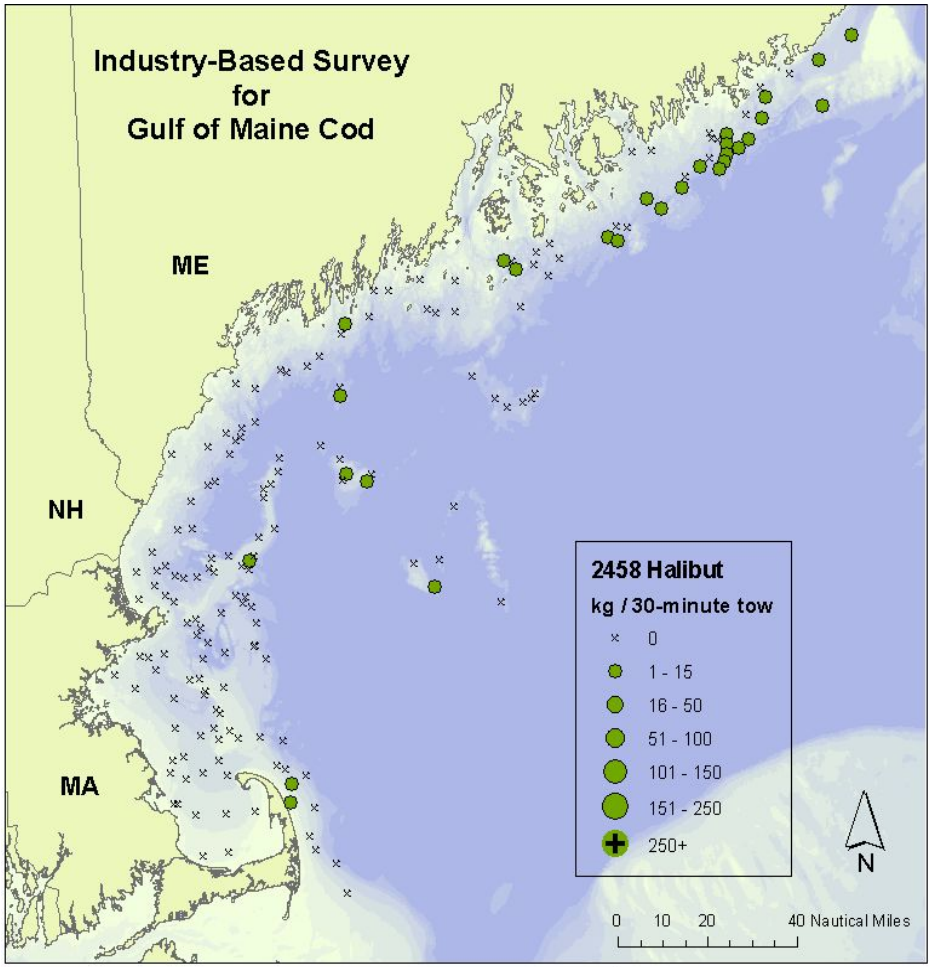


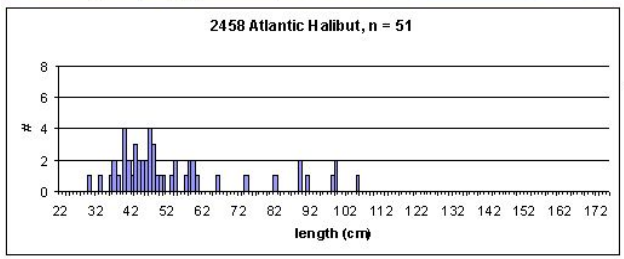


Atlantic Halibut
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

** Actual length frequency for all tows completed during cruise

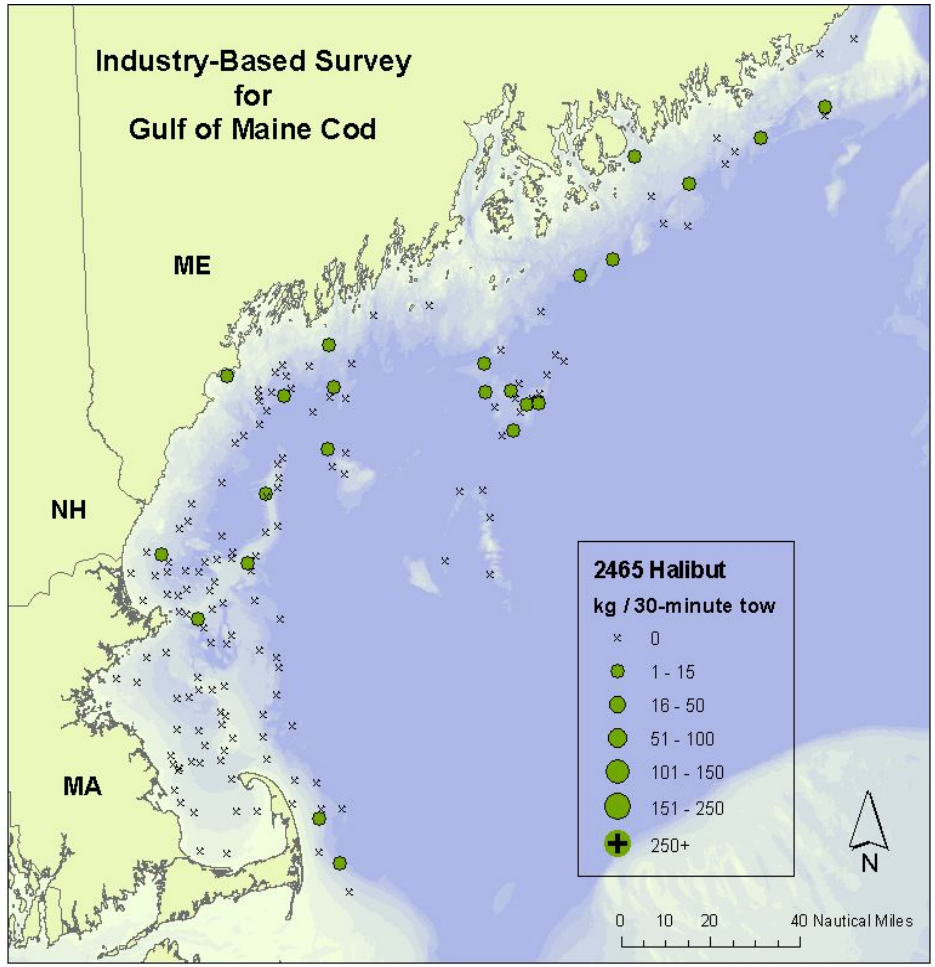


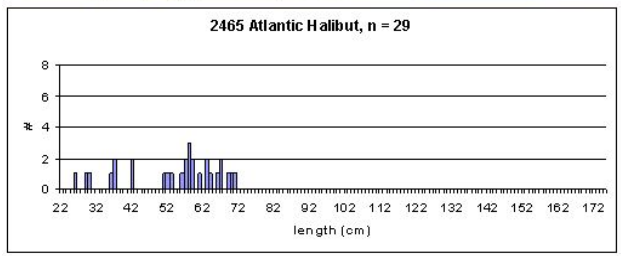


Atlantic Halibut
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

** Actual length frequency for all tows completed during cruise

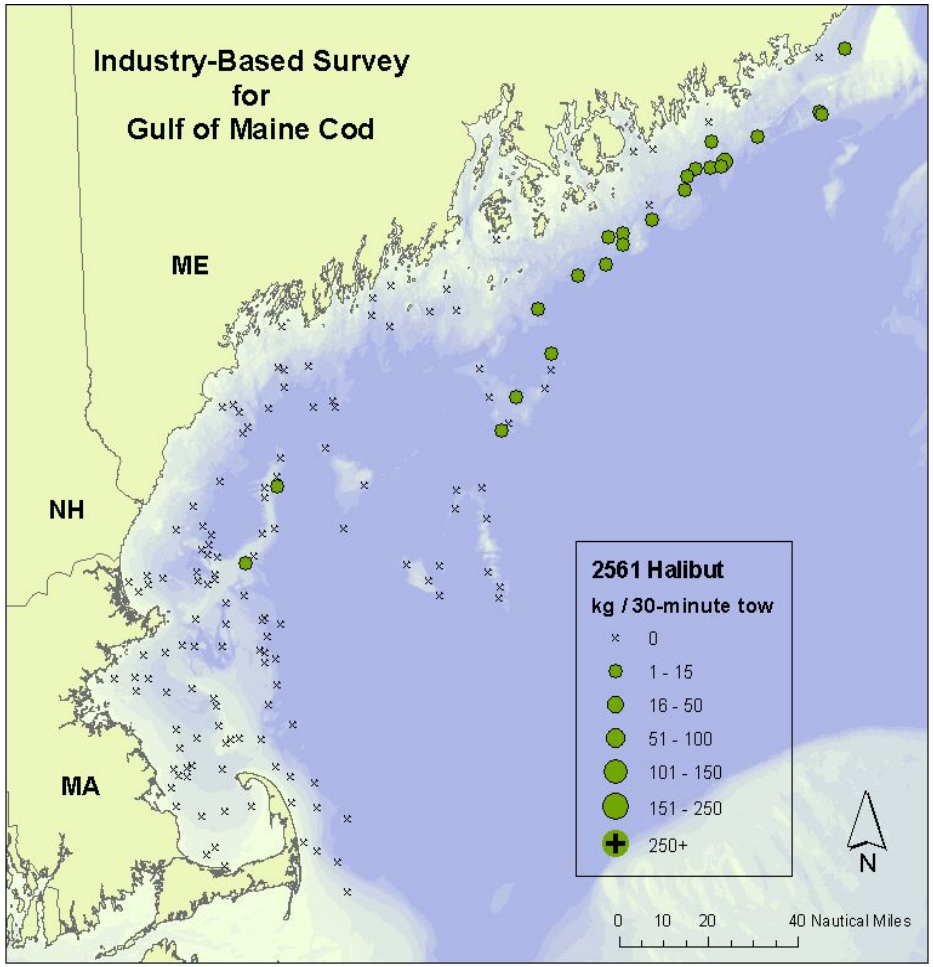


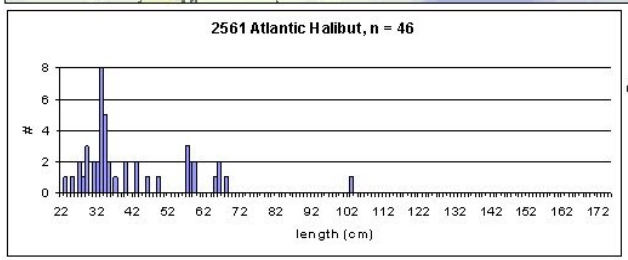


Atlantic Halibut
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

** Actual length frequency for all tows completed during cruise



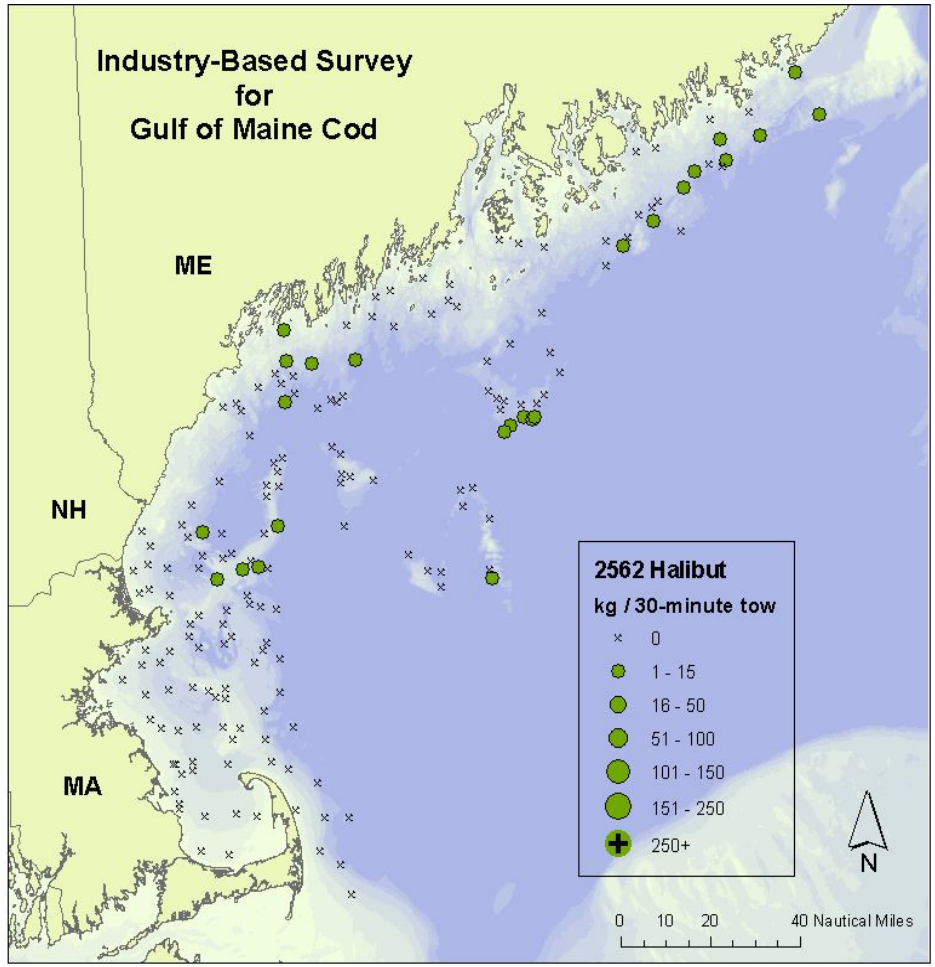


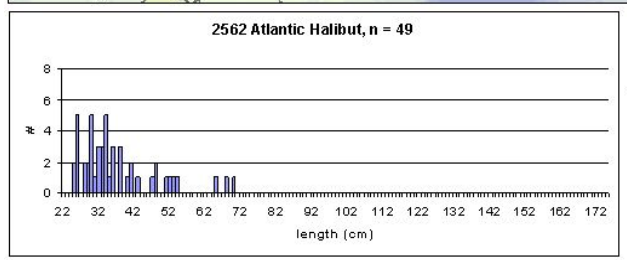
Atlantic Halibut
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

** Actual length frequency for all tows completed during cruise



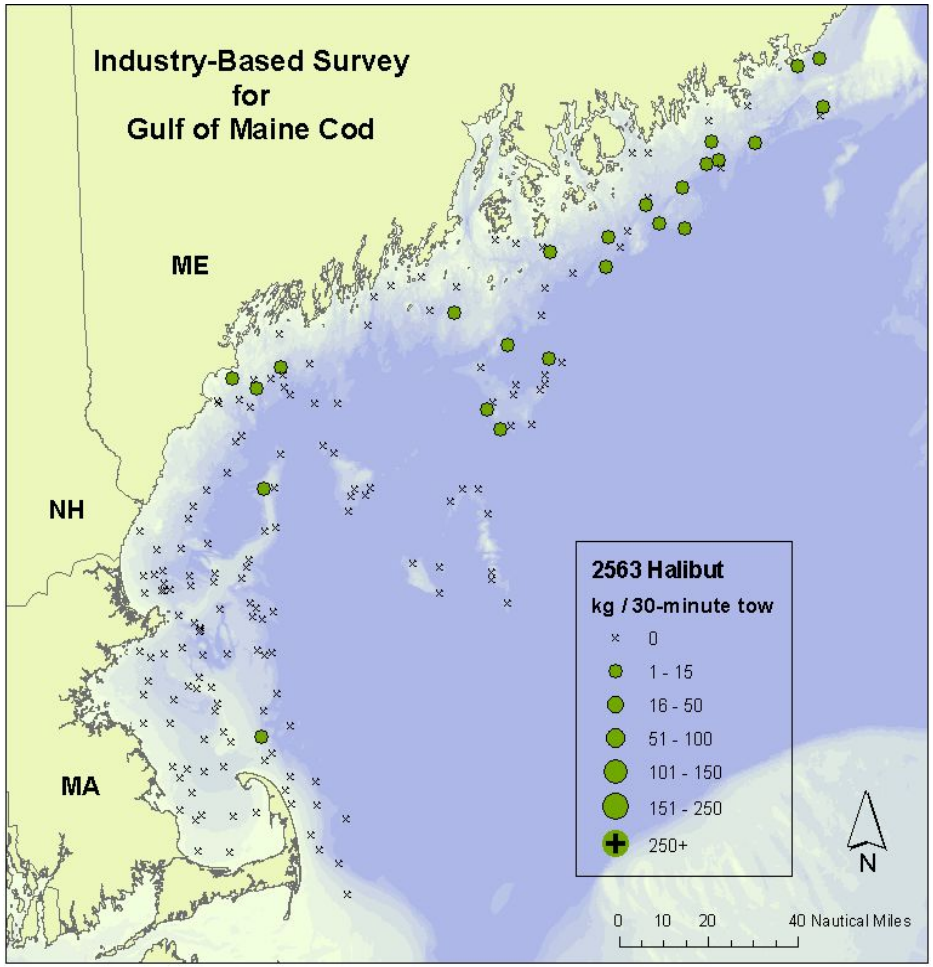


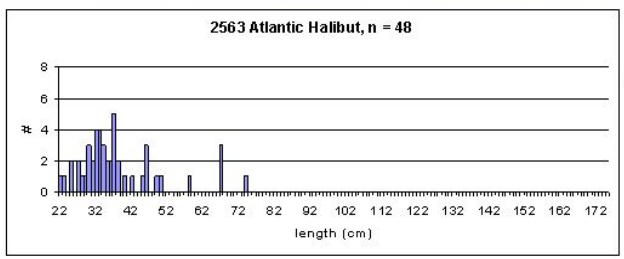
Atlantic Halibut
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

** Actual length frequency for all tows completed during cruise



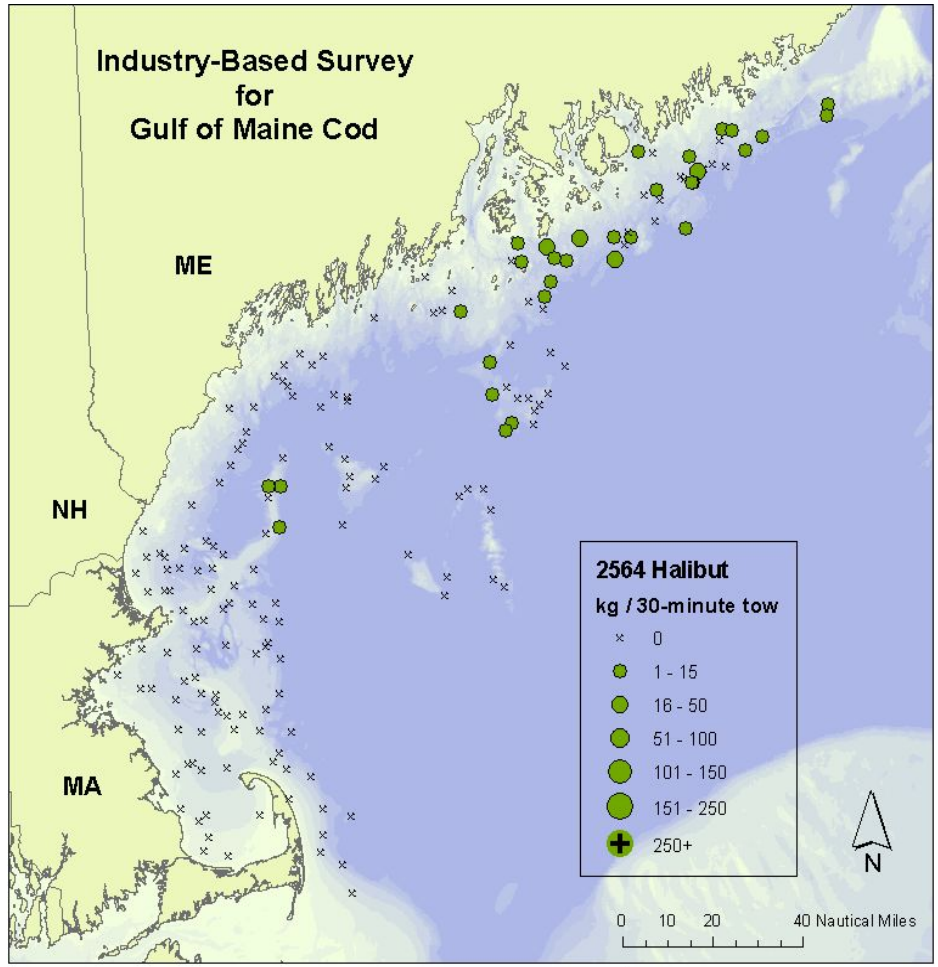


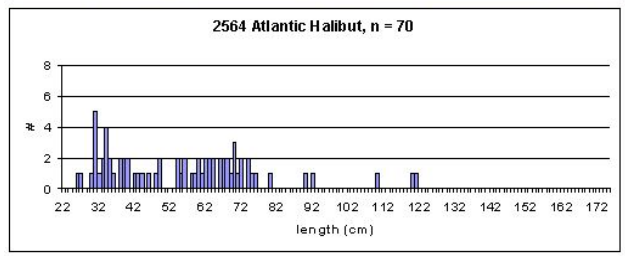
Atlantic Halibut
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

** Actual length frequency for all tows completed during cruise





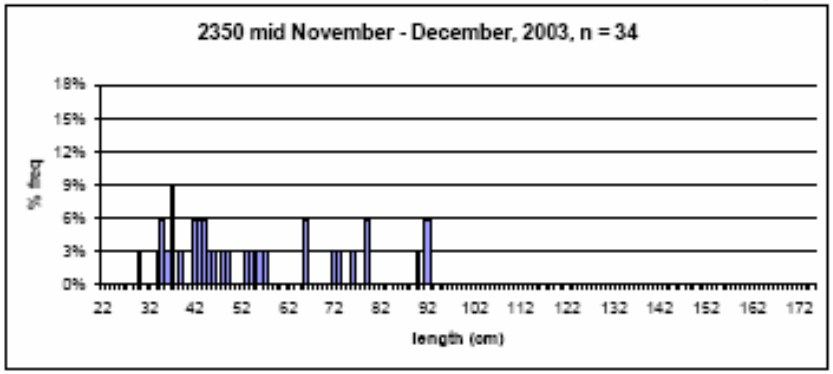
Atlantic Halibut
caught during the IBS for GOM cod survey

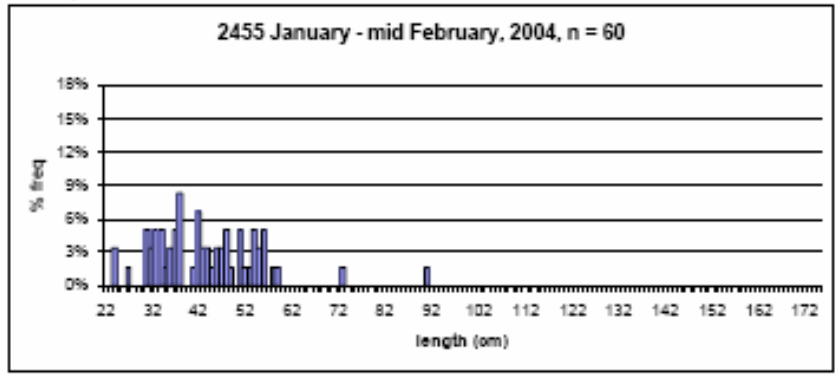
mid April - May
Year: 2005
Cruise: 2564

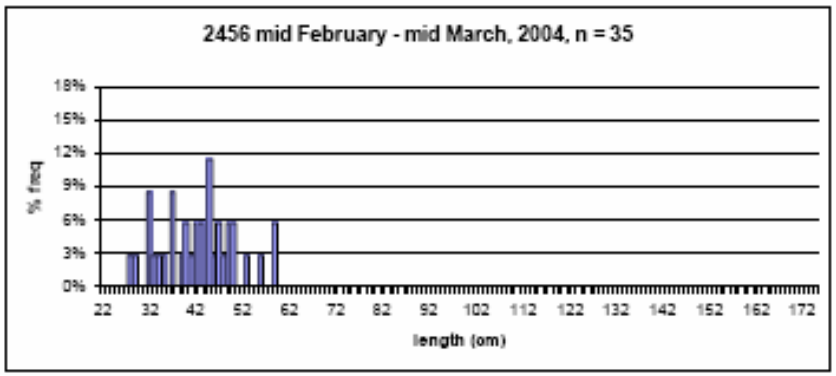
MarineFisheries

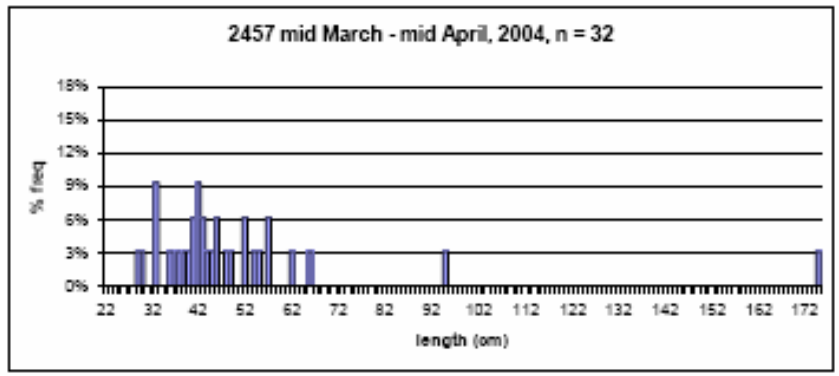
** Actual length frequency for all tows completed during cruise

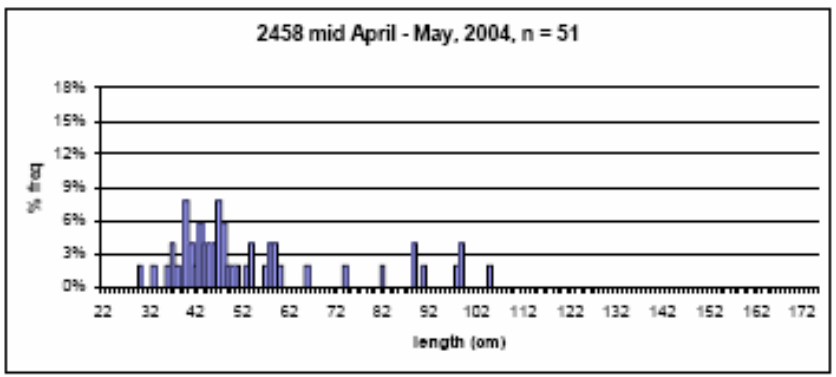
Atlantic Halibut
(2003 – 2004)



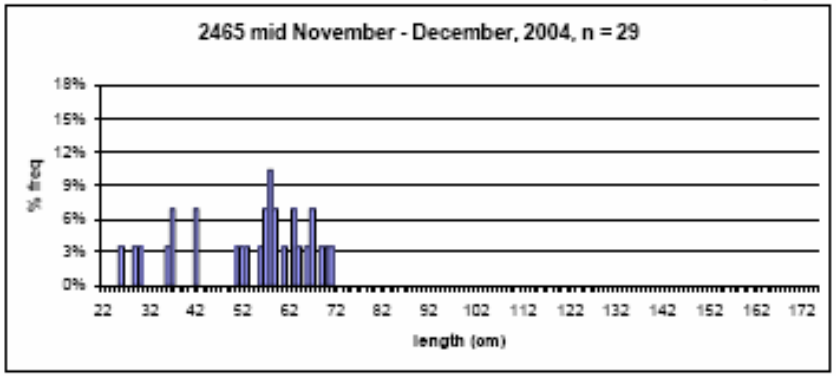


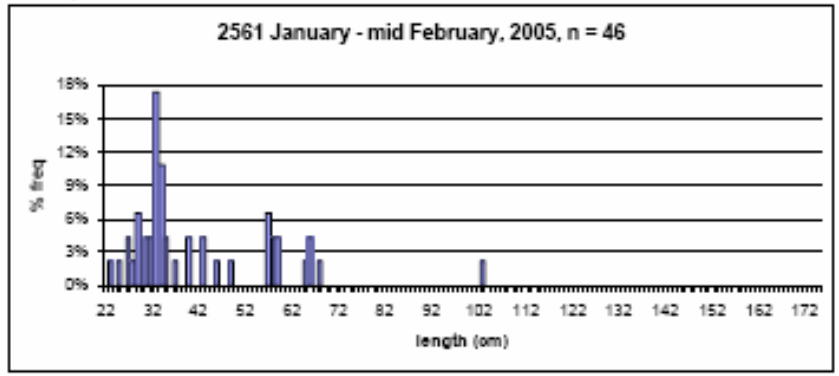


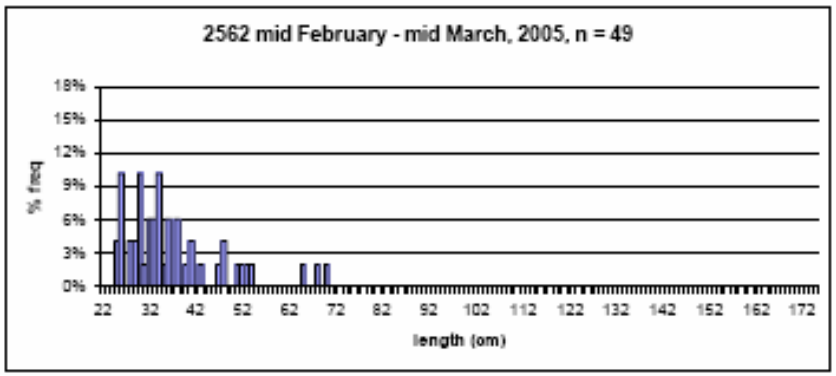


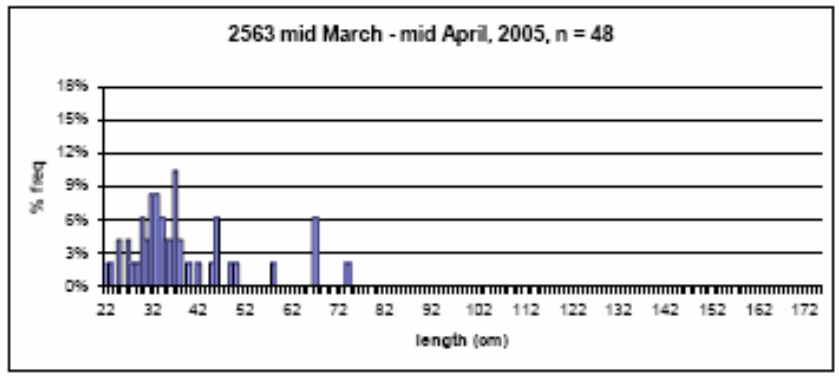


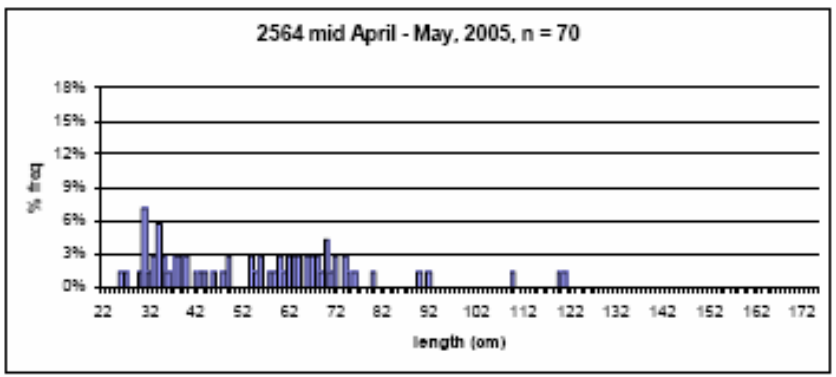
Atlantic Halibut
(2004 – 2005)









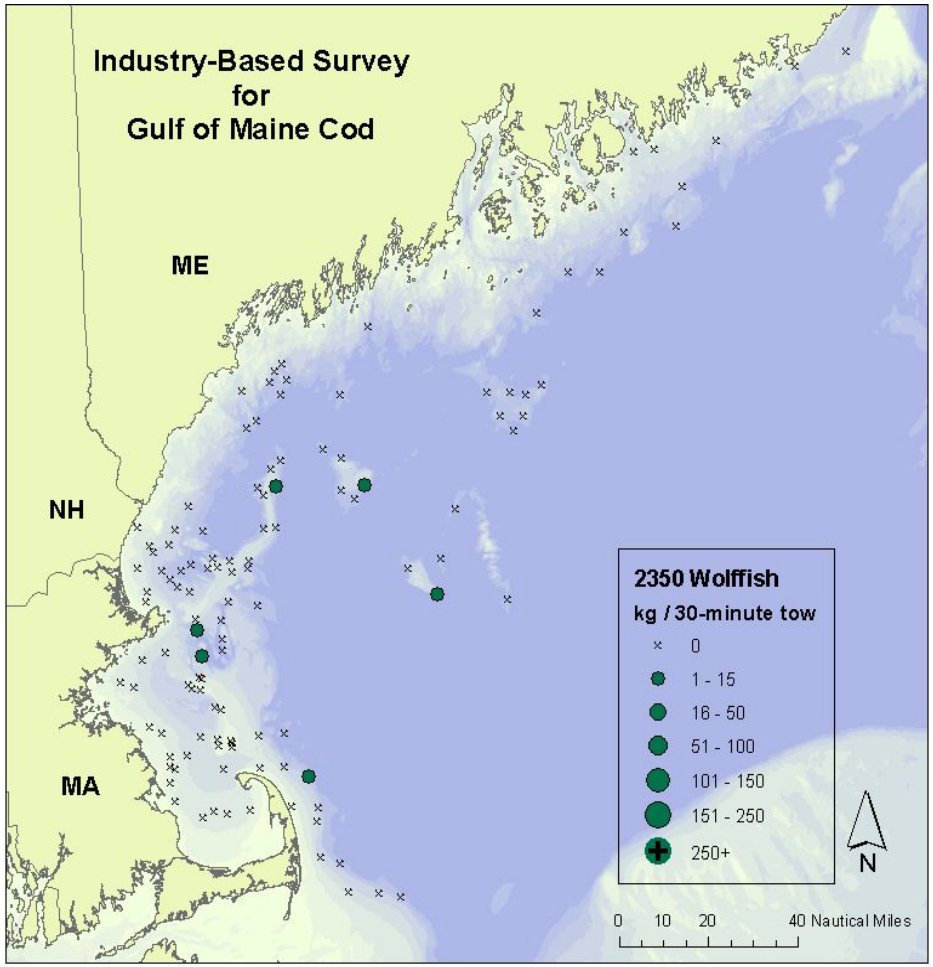


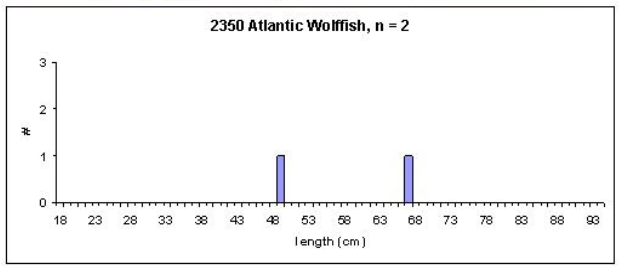
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

Atlantic Wolffish

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise



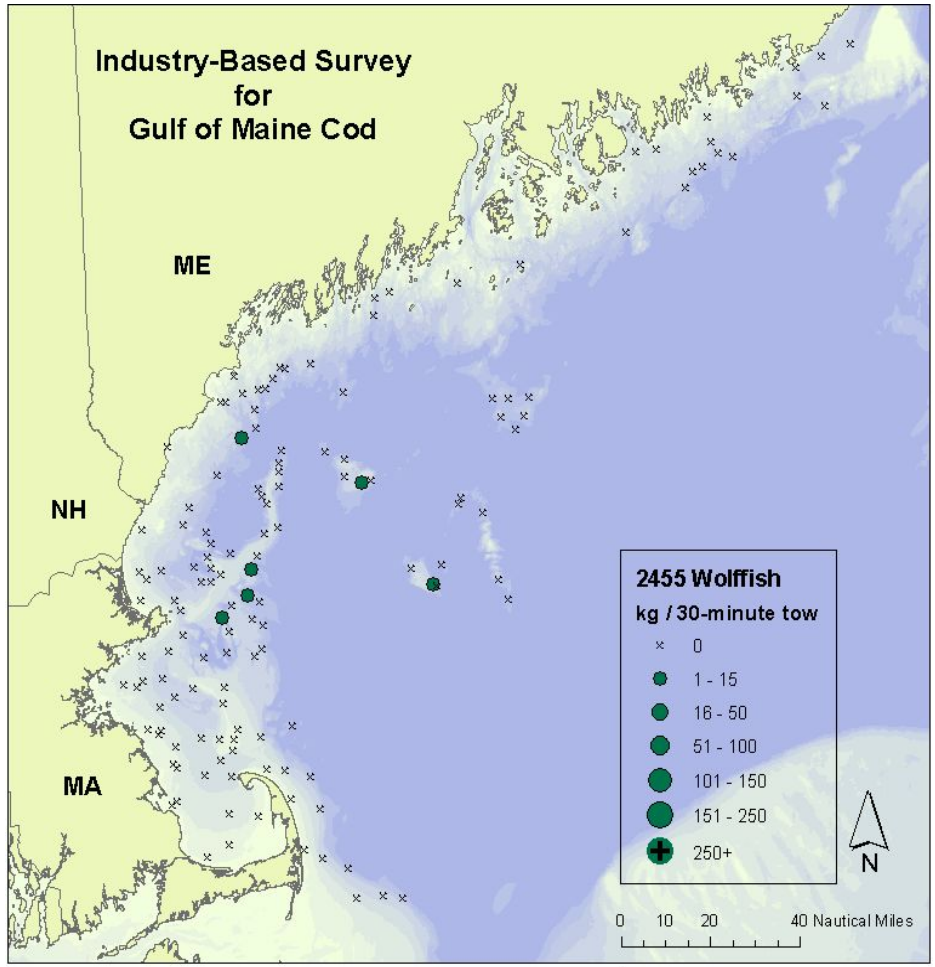


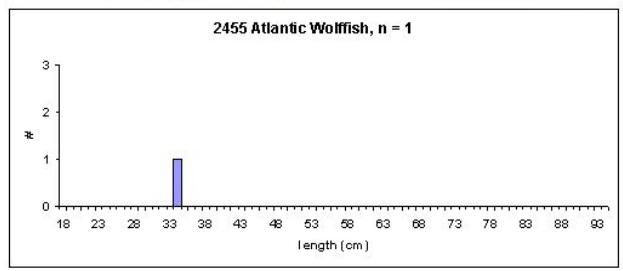
Wolffish
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

** Actual length frequency for all tows completed during cruise



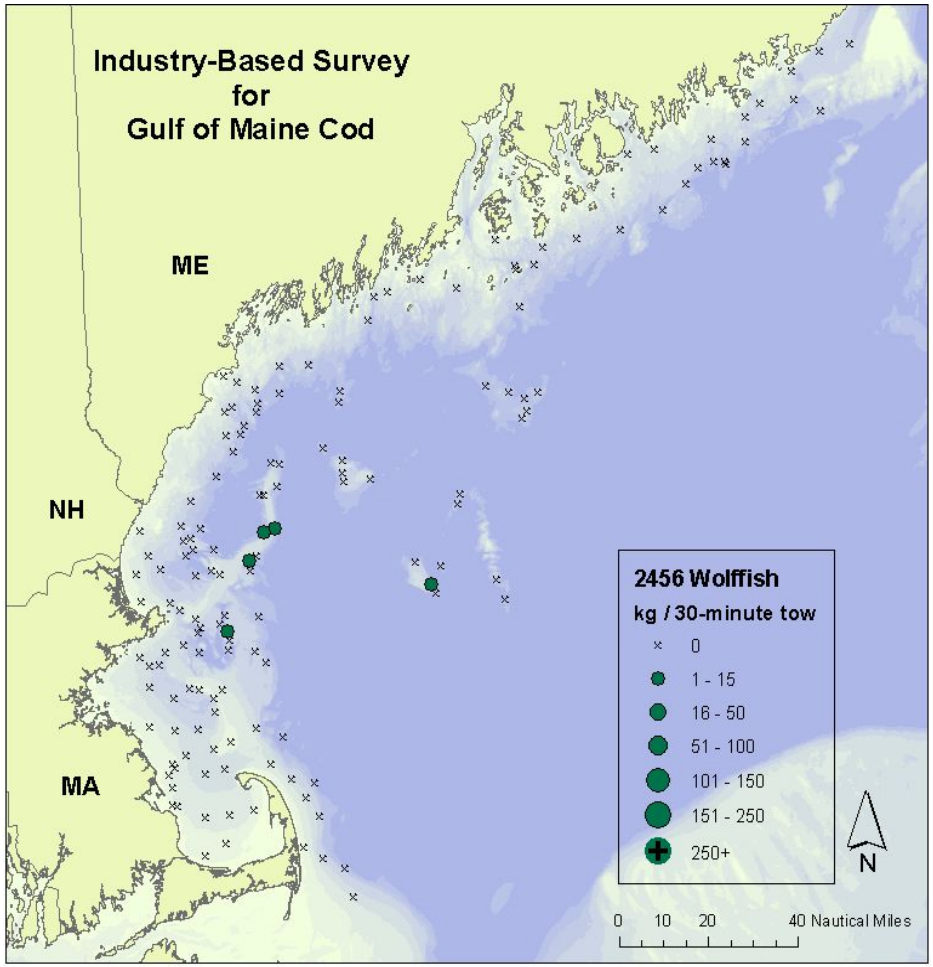


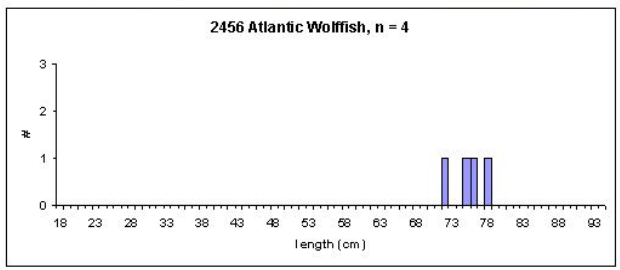
Wolffish
caught during the IBS for GOM cod survey

January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

** Actual length frequency for all tows completed during cruise



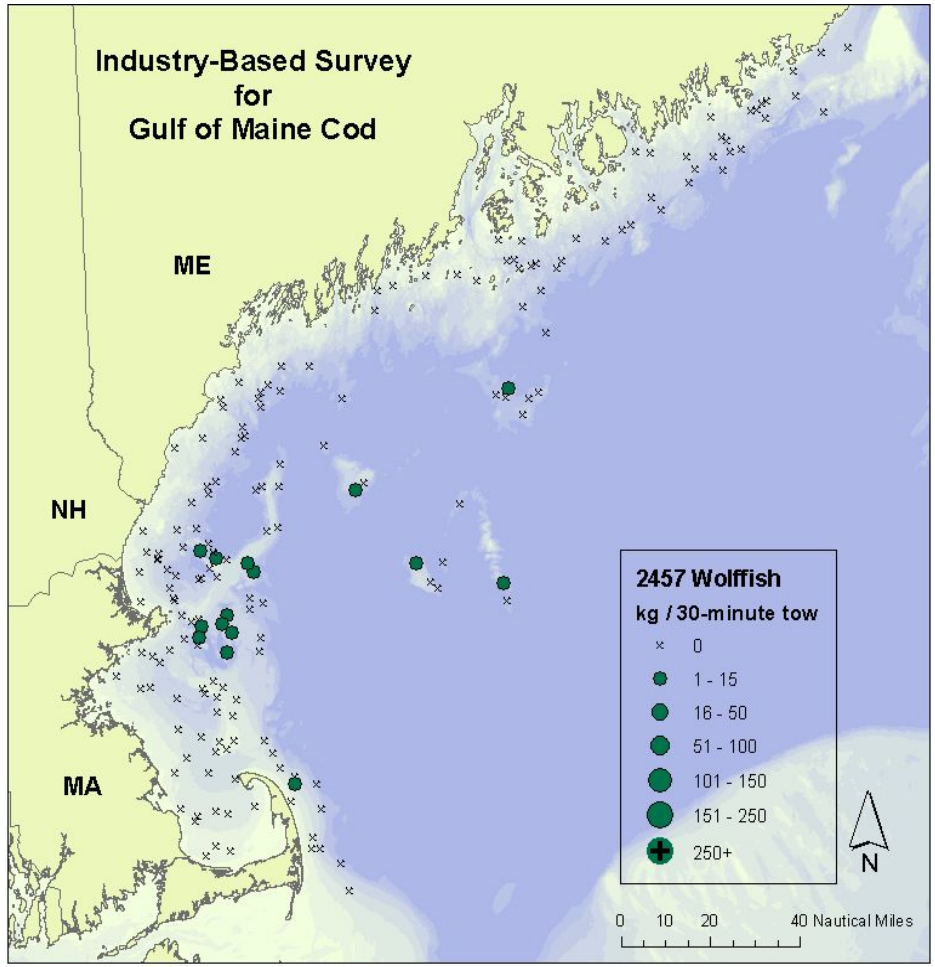


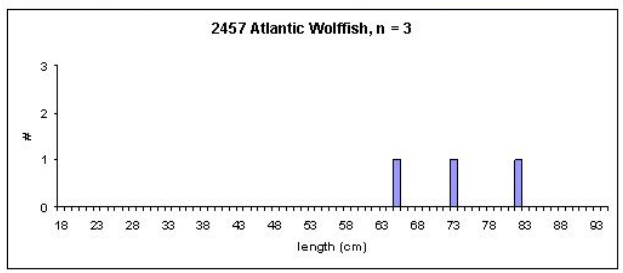
Wolffish
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

** Actual length frequency for all tows completed during cruise



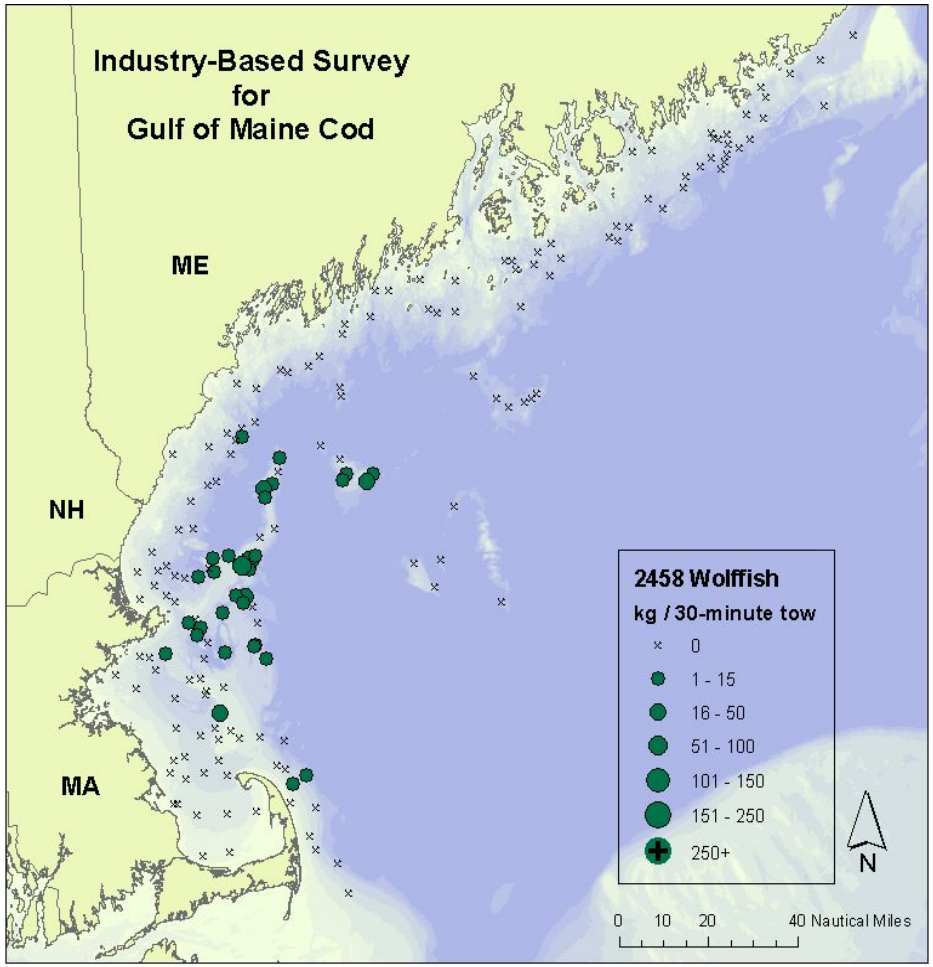


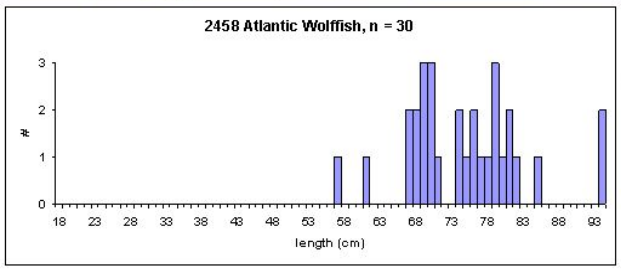
Wolffish
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

** Actual length frequency for all tows completed during cruise



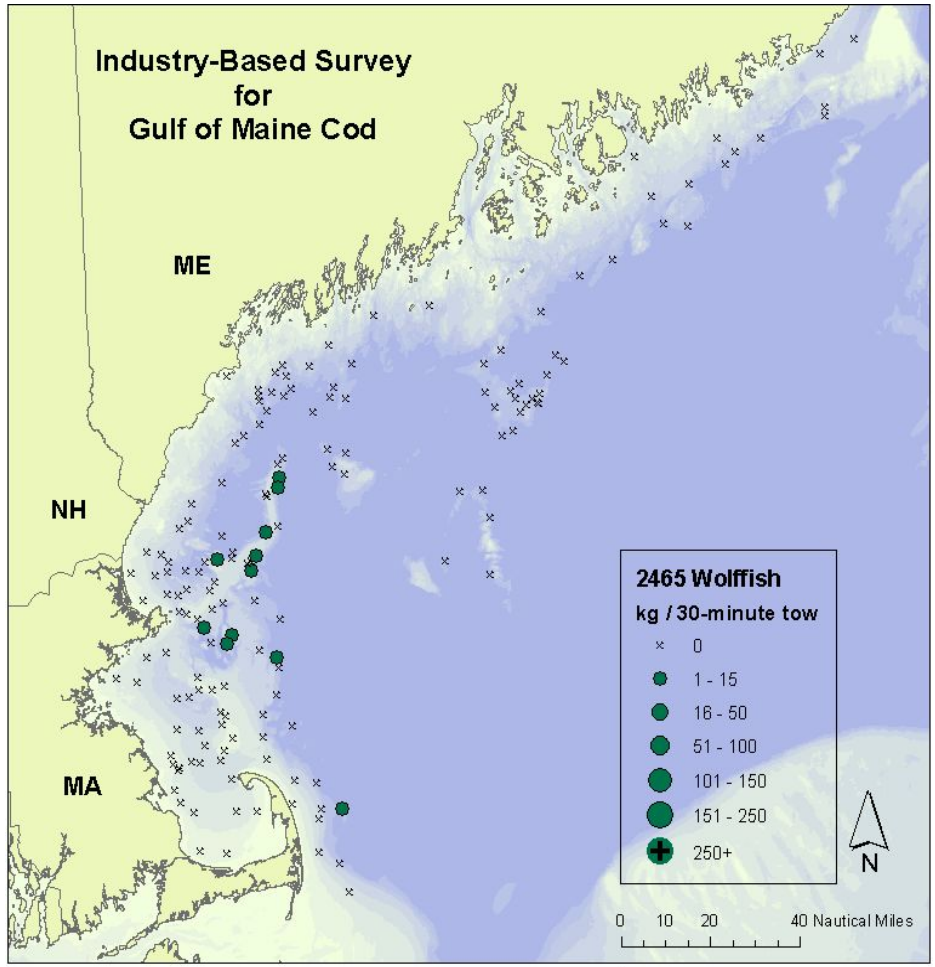


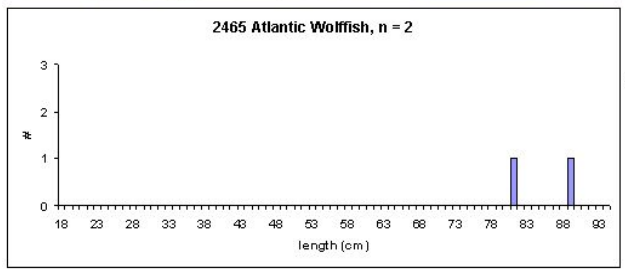
Wolffish
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

MarineFisheries

** Actual length frequency for all tows completed during cruise



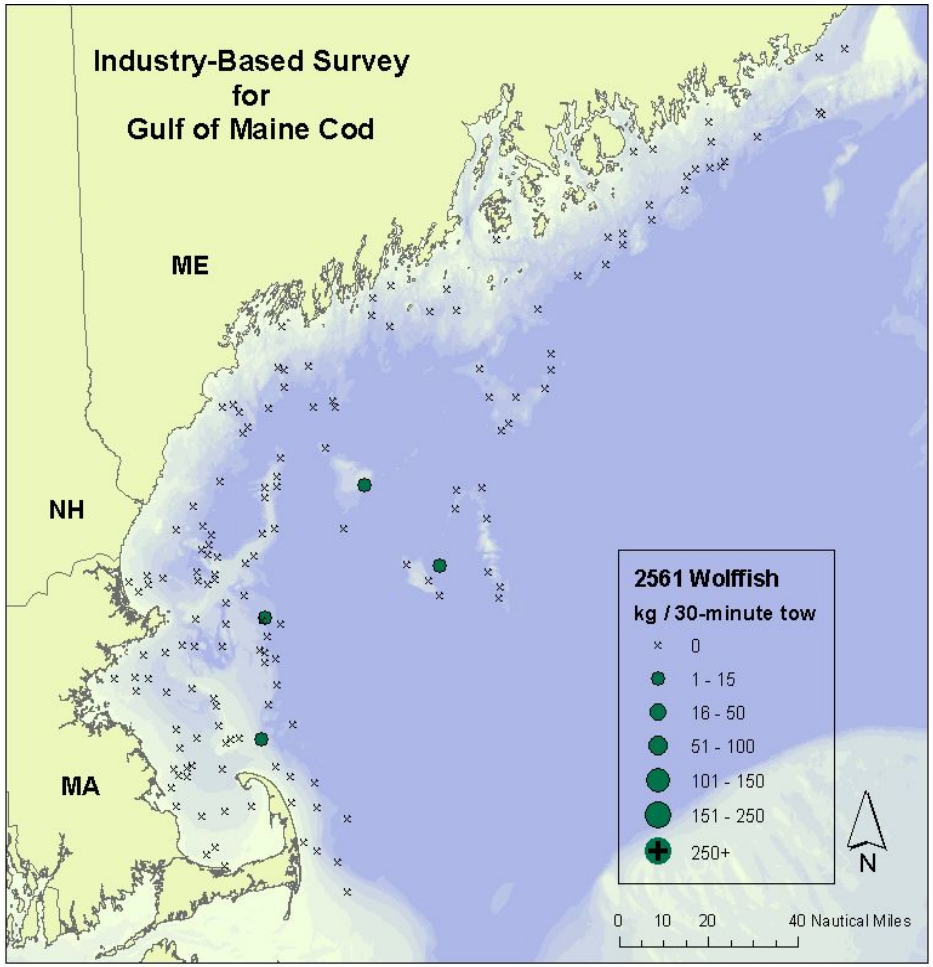


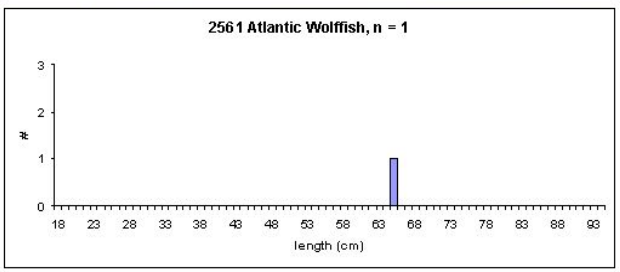
Wolffish
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

MarineFisheries

** Actual length frequency for all tows completed during cruise



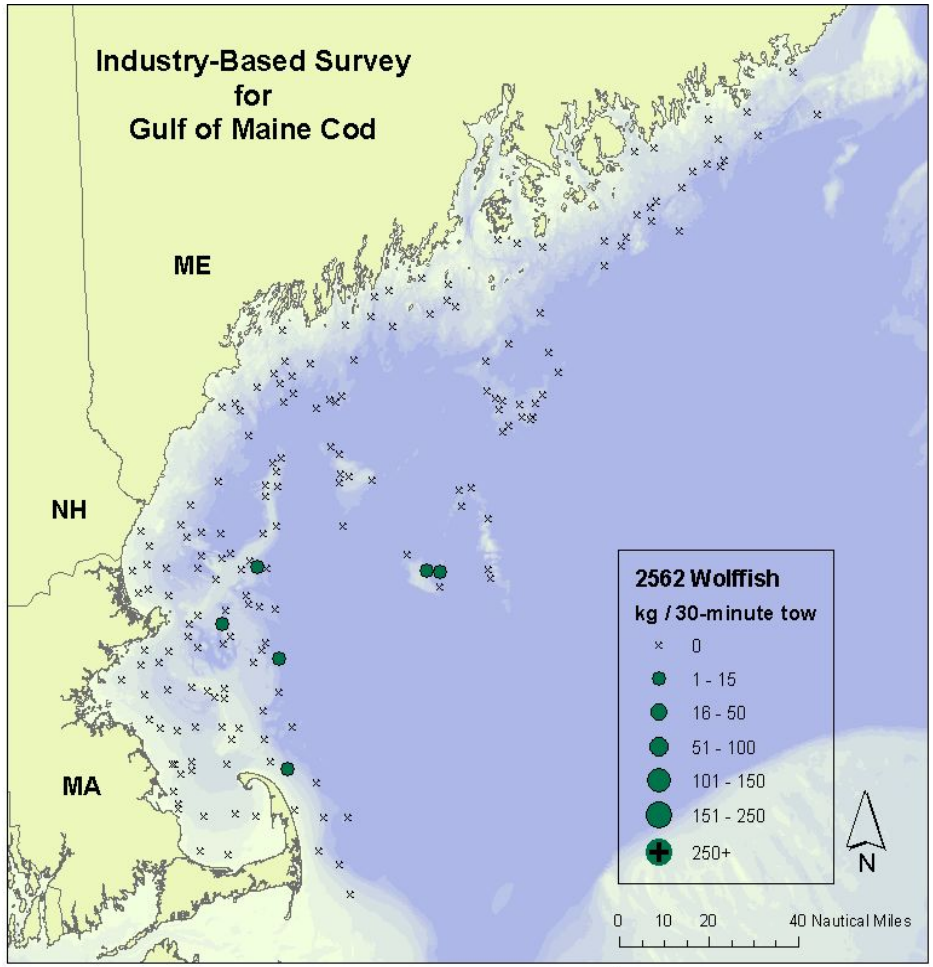


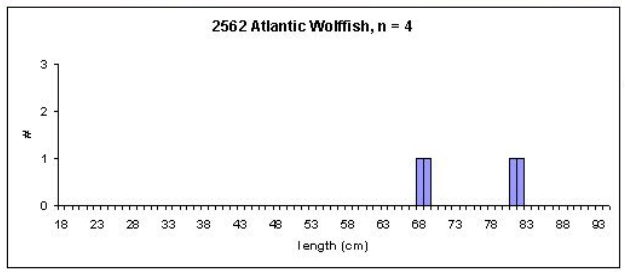
Wolffish
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

** Actual length frequency for all tows completed during cruise



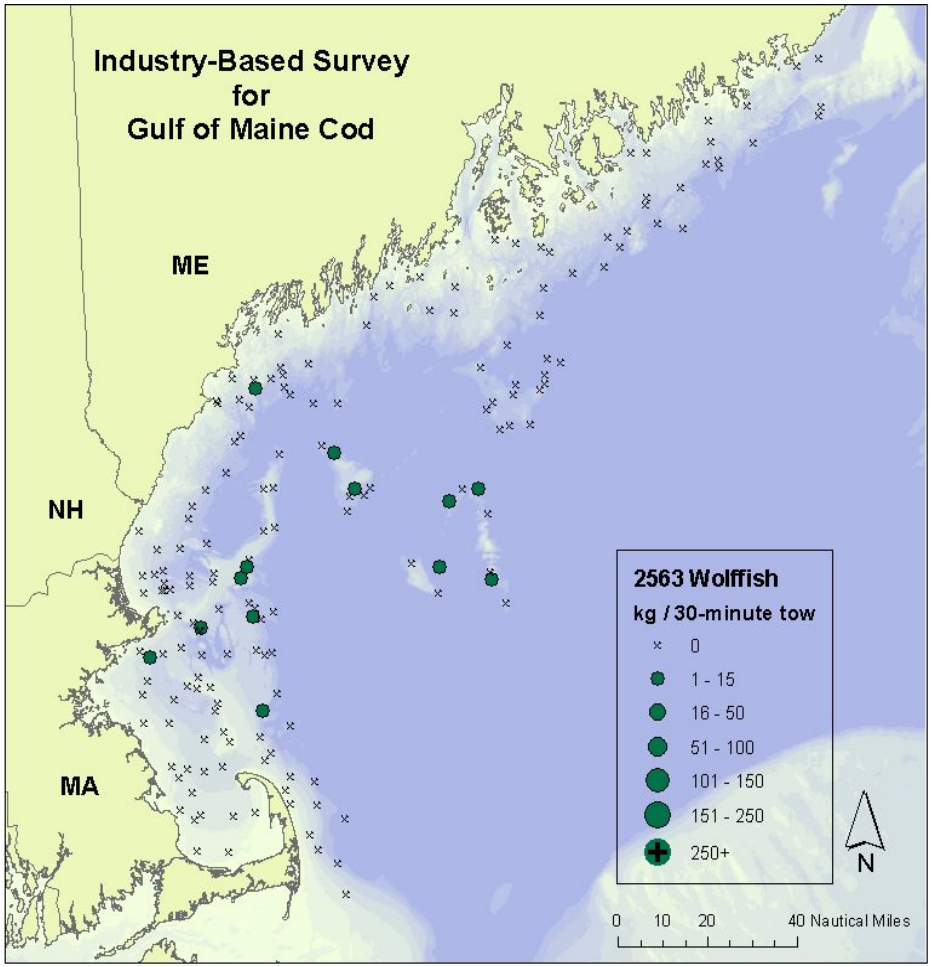


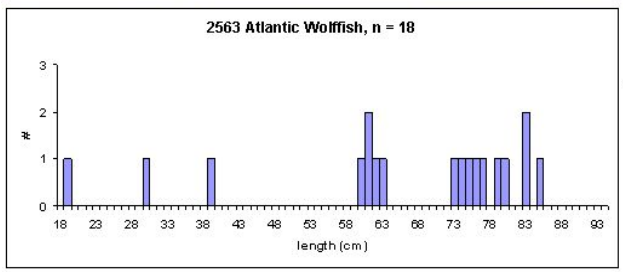
Wolffish
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

** Actual length frequency for all tows completed during cruise



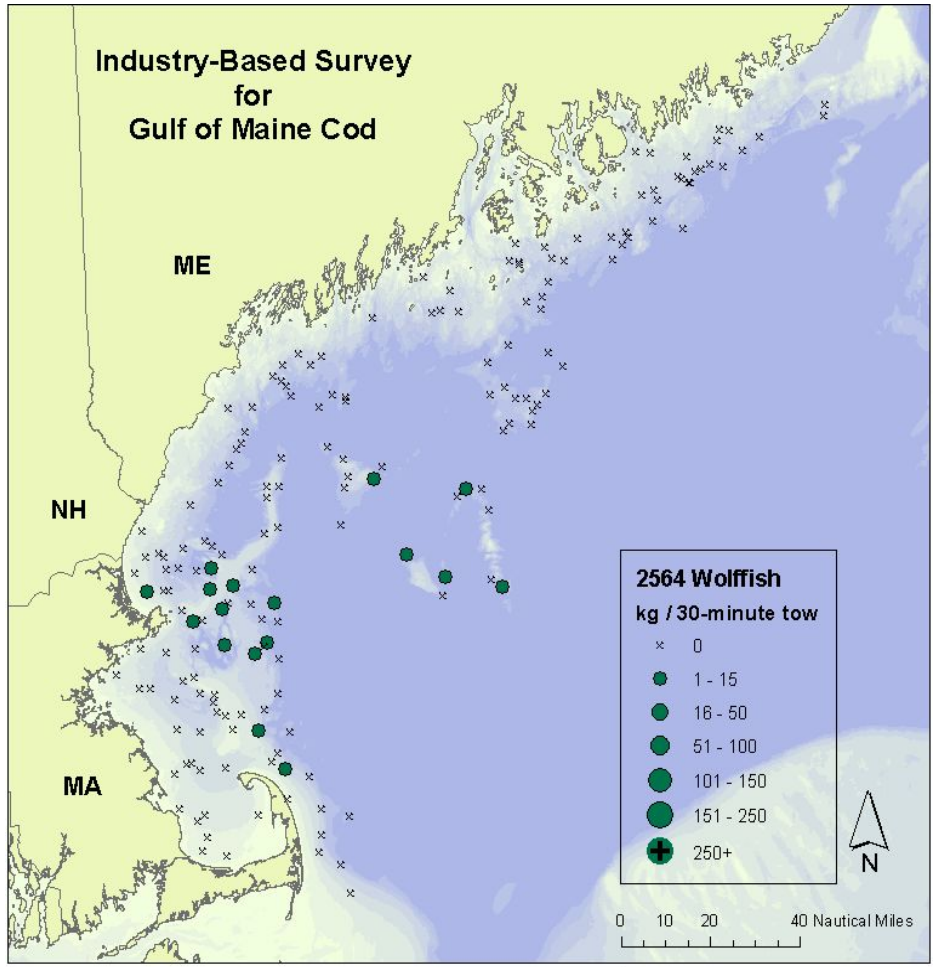


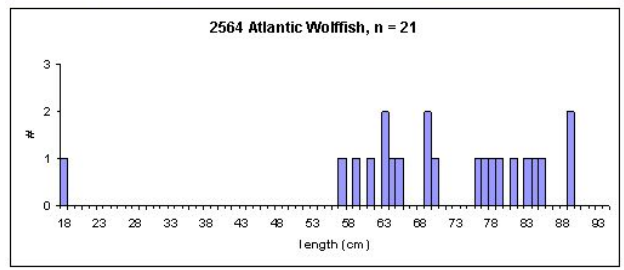
Wolffish
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

** Actual length frequency for all tows completed during cruise





Wolffish
caught during the IBS for GOM cod survey

mid April - May
Year: 2005
Cruise: 2564

MarineFisheries

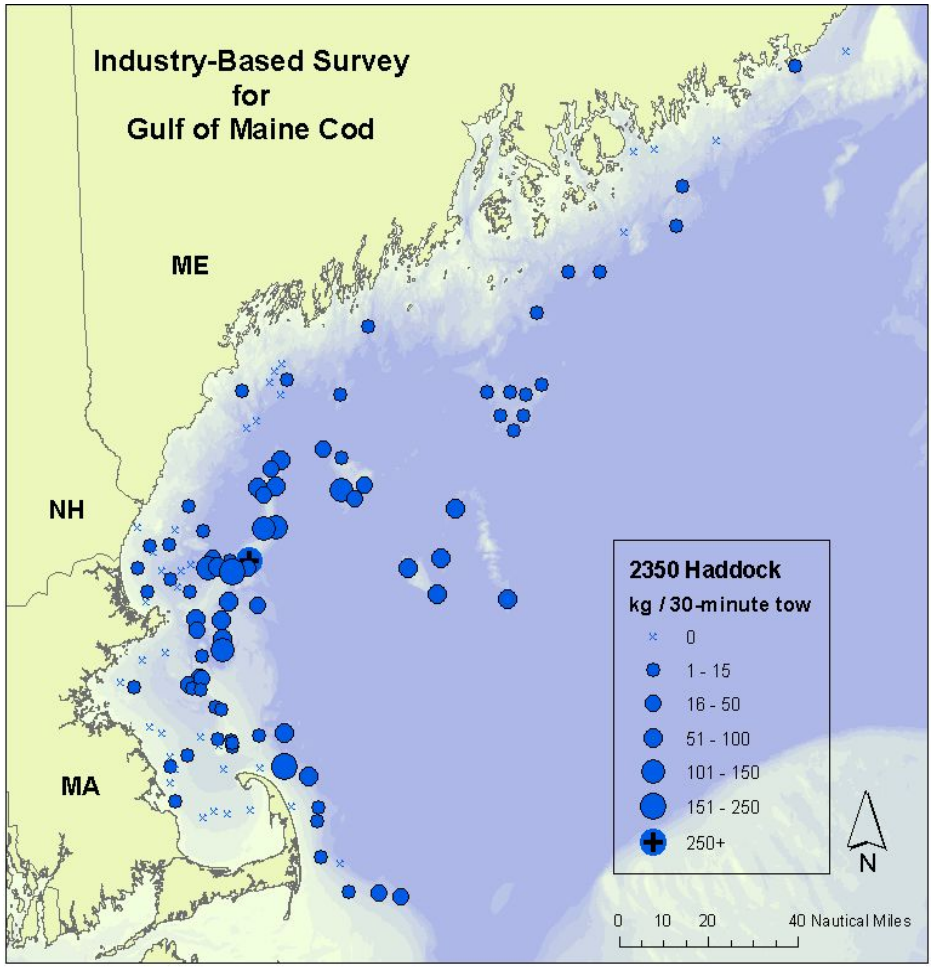
** Actual length frequency for all tows completed during cruise

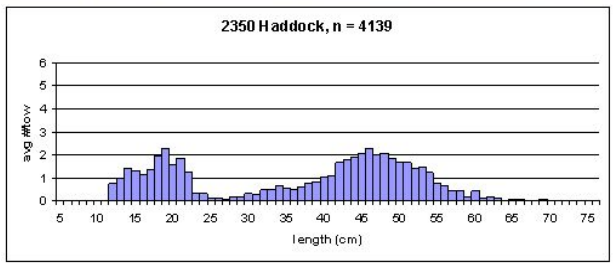
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

Haddock

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise



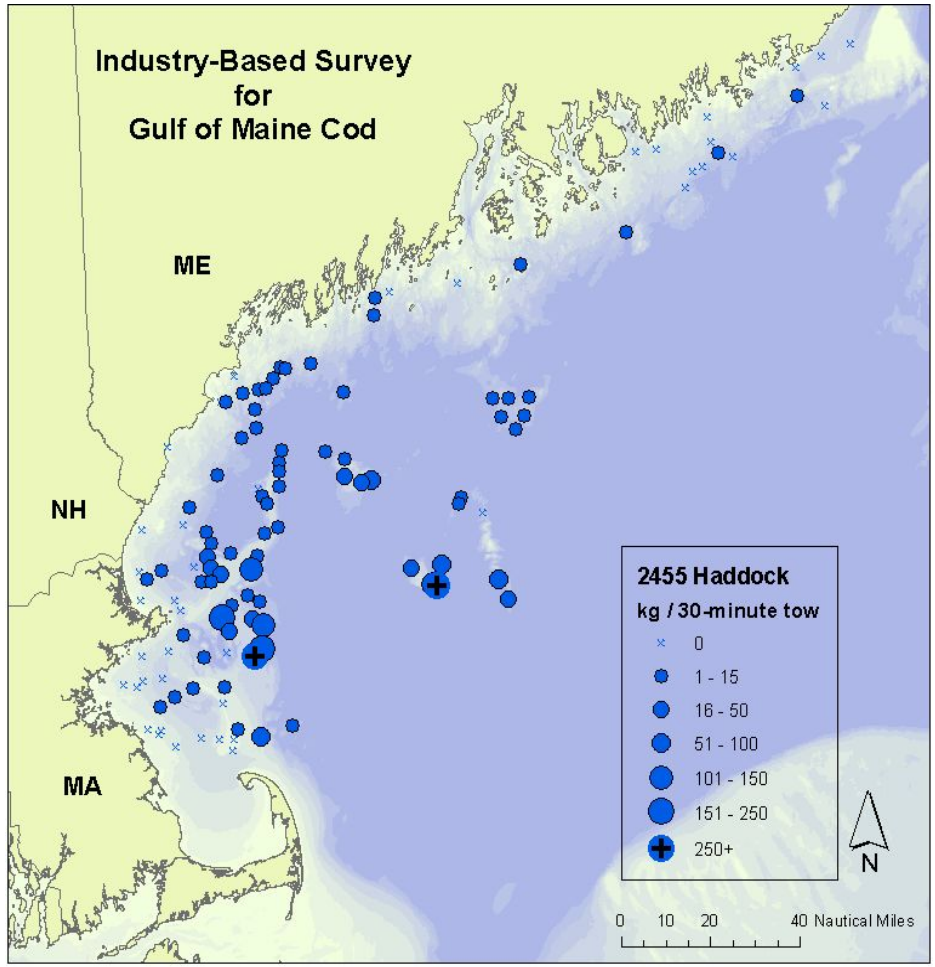


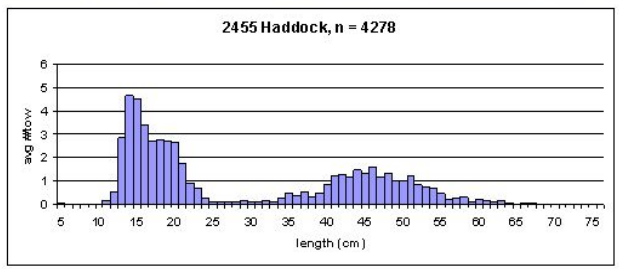
Haddock
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

**Average number of fish at length for all tows where species were caught



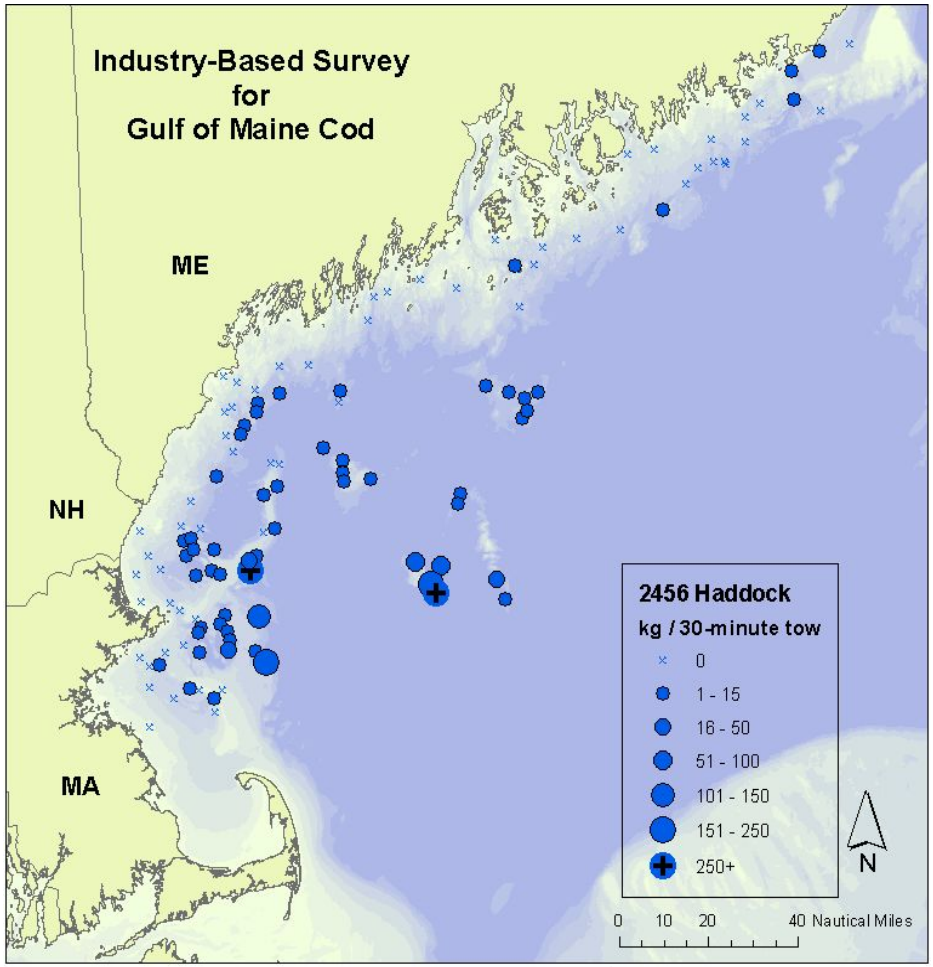


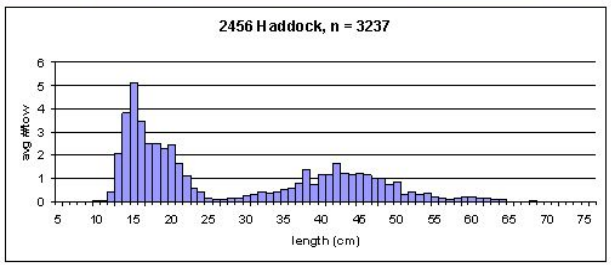
Haddock
caught during the IBS for GOM cod survey

January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

**Average number of fish at length for all tows where species were caught



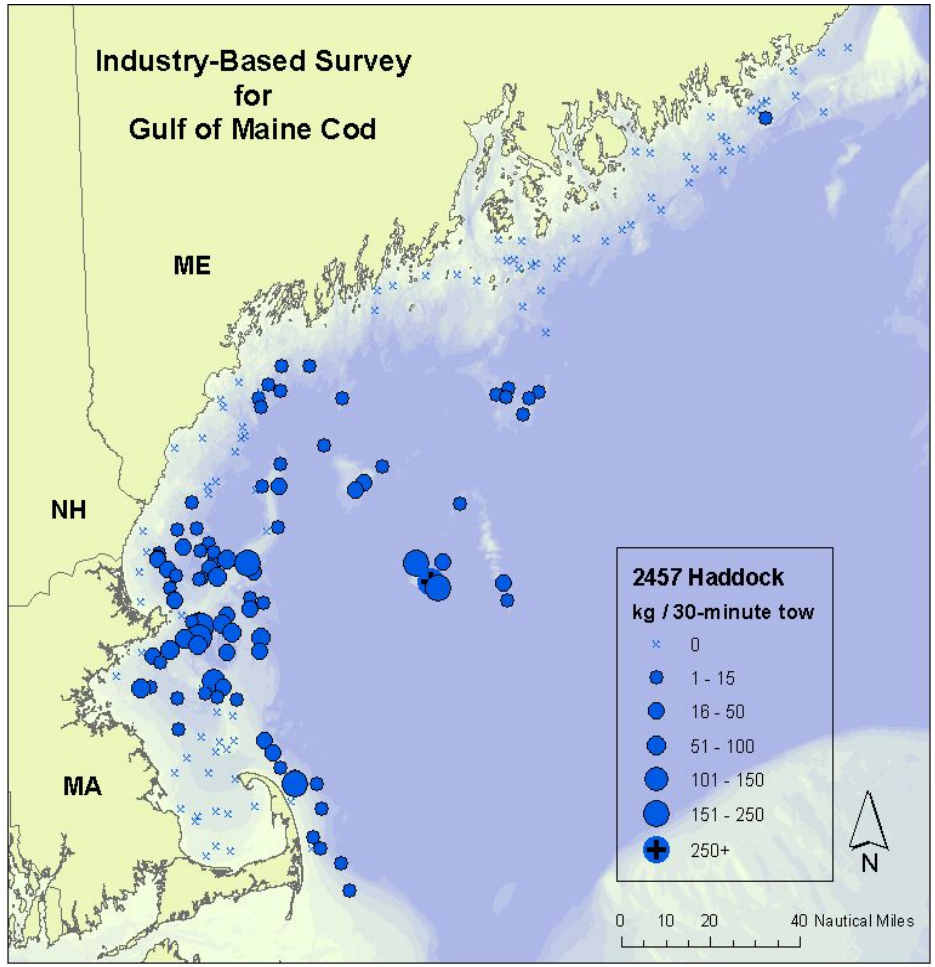


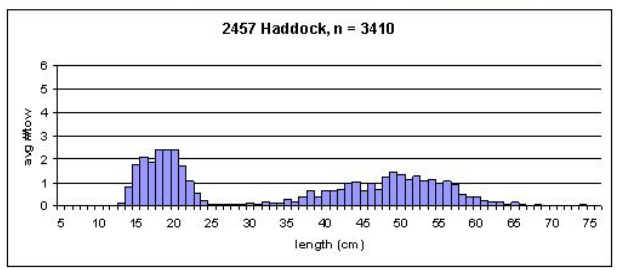
Haddock
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

**Average number of fish at length for all tows where species were caught



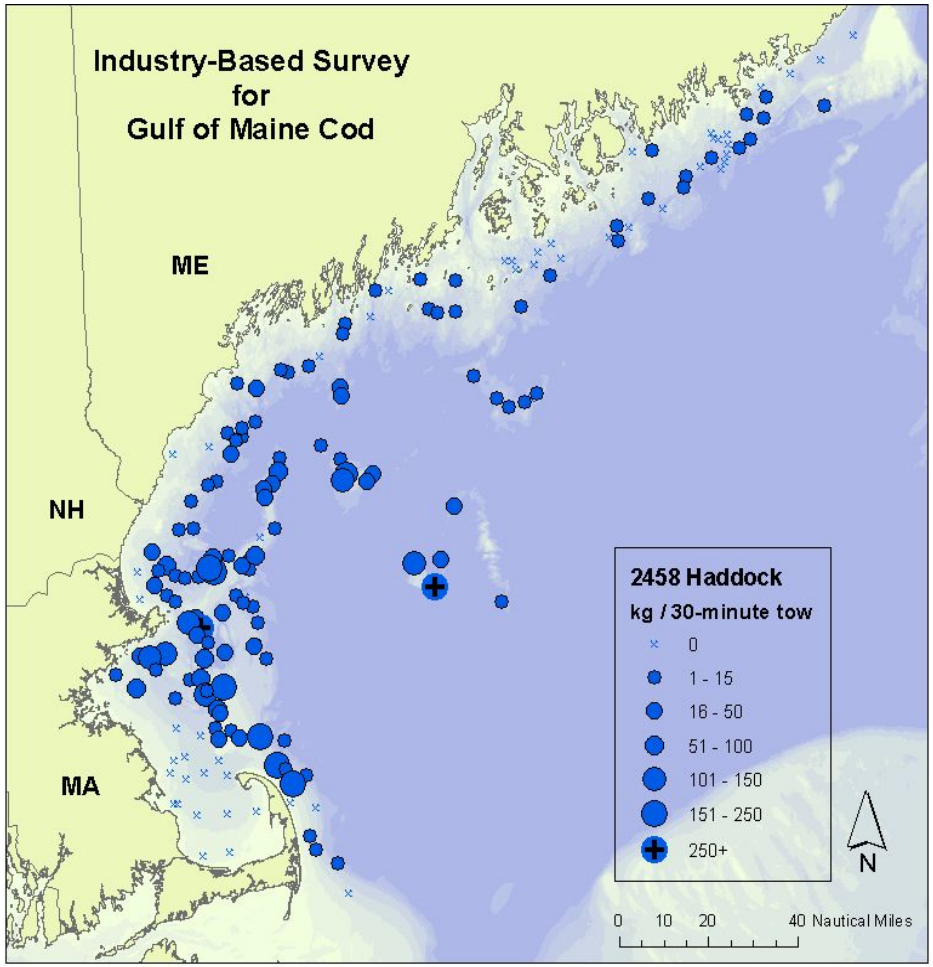


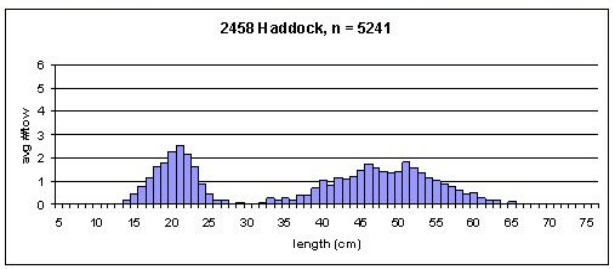
Haddock
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

**Average number of fish at length for all tows where species were caught

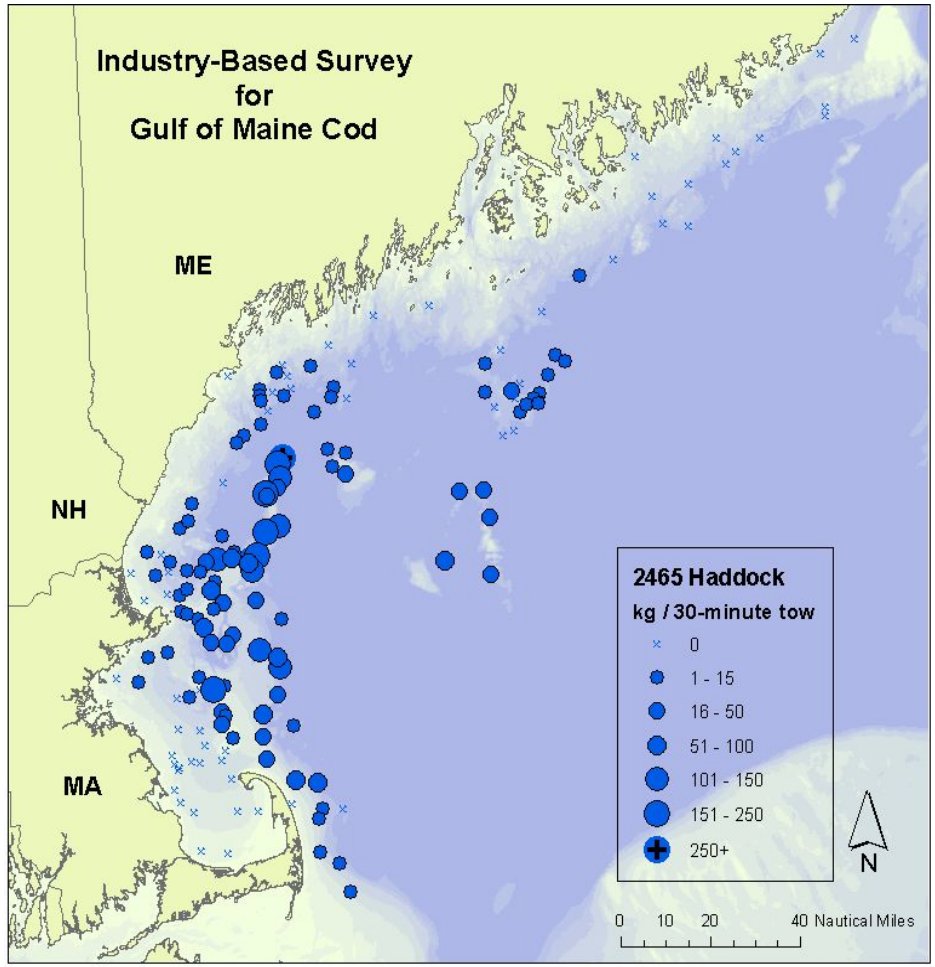


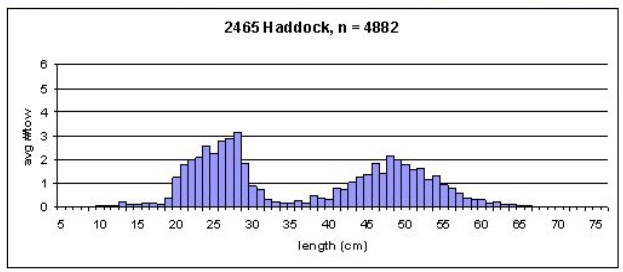


Haddock
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

**Average number of fish at length for all tows where species were caught

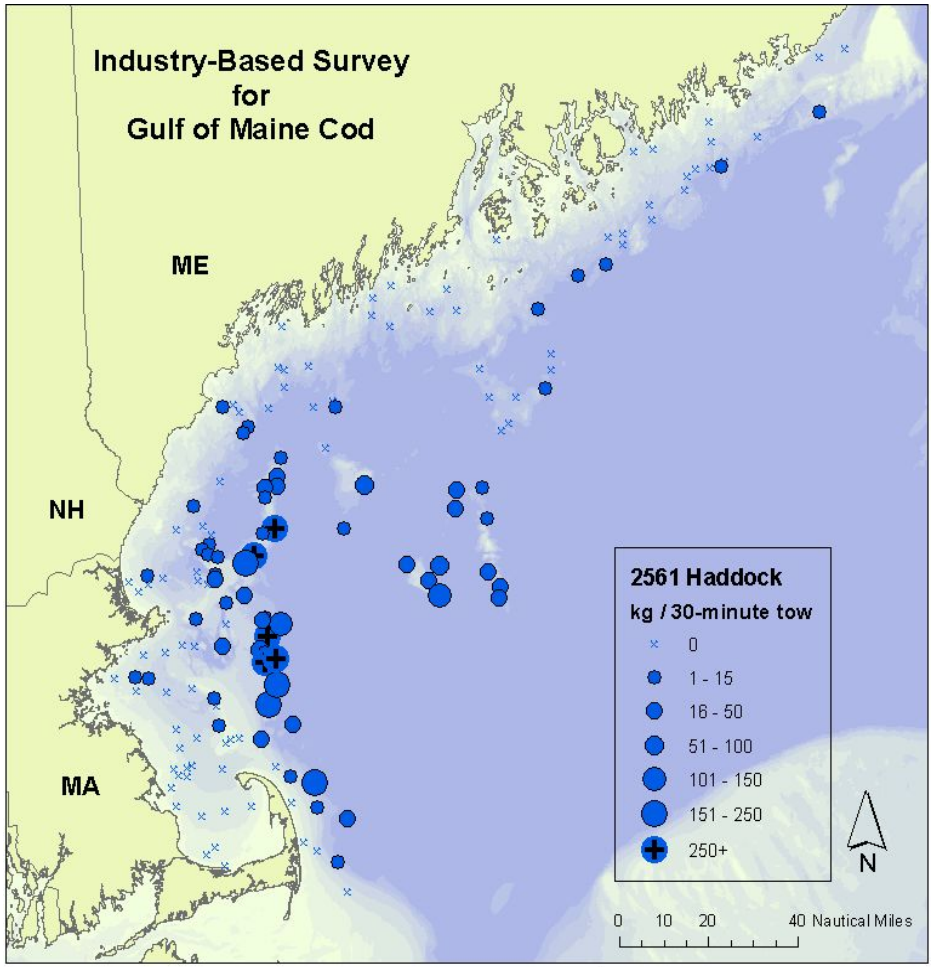


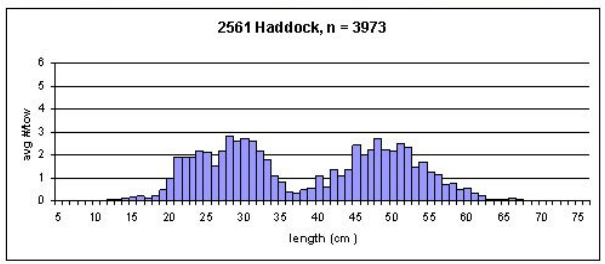


Haddock
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

**Average number of fish at length for all tows where species were caught



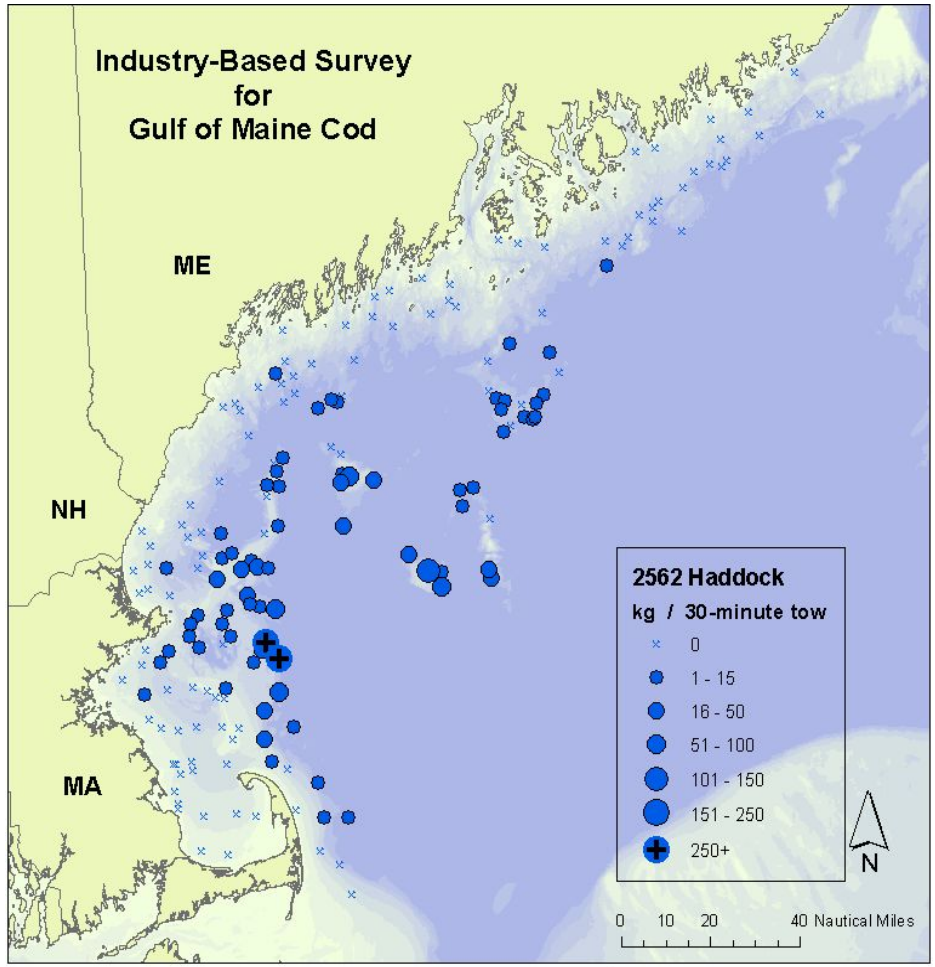


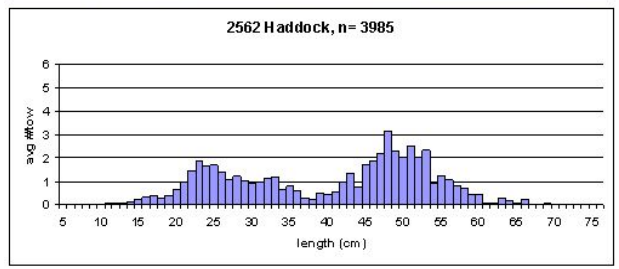
Haddock
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

**Average number of fish at length for all tows where species were caught



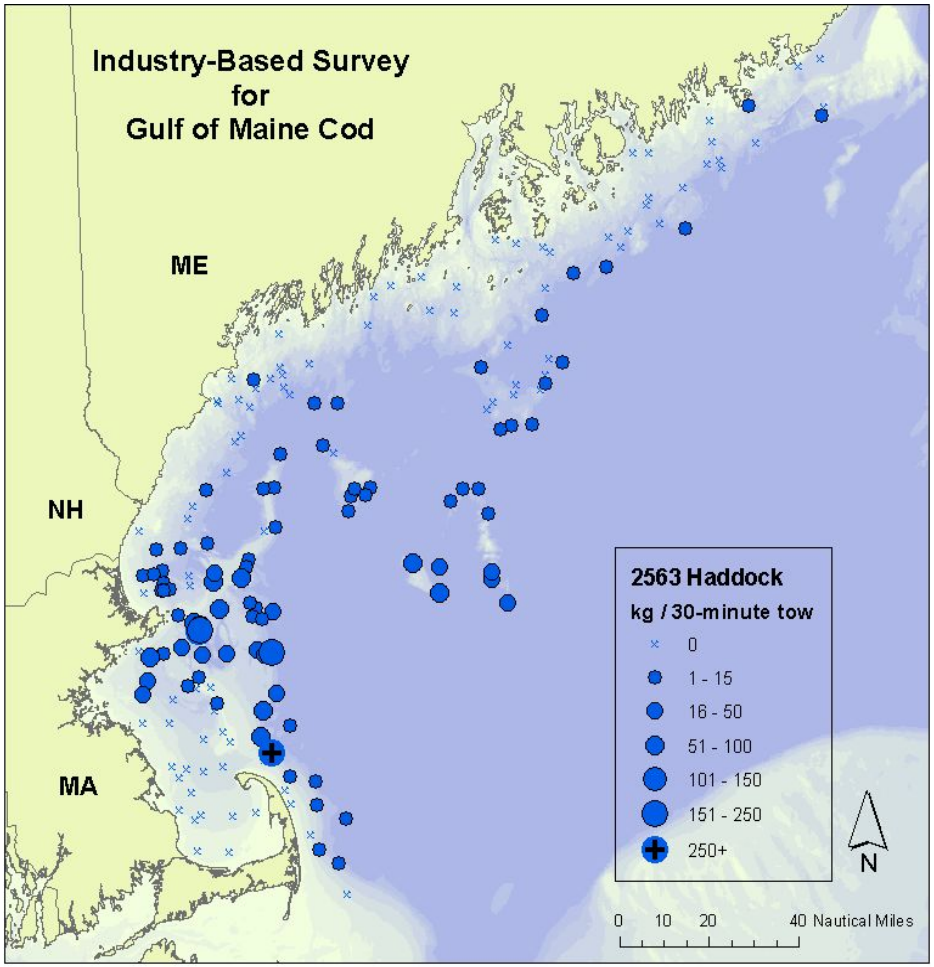


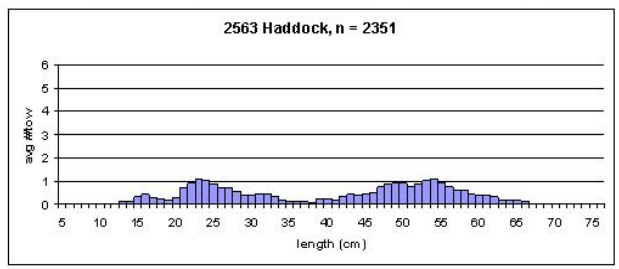
Haddock
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

**Average number of fish at length for all tows where species were caught



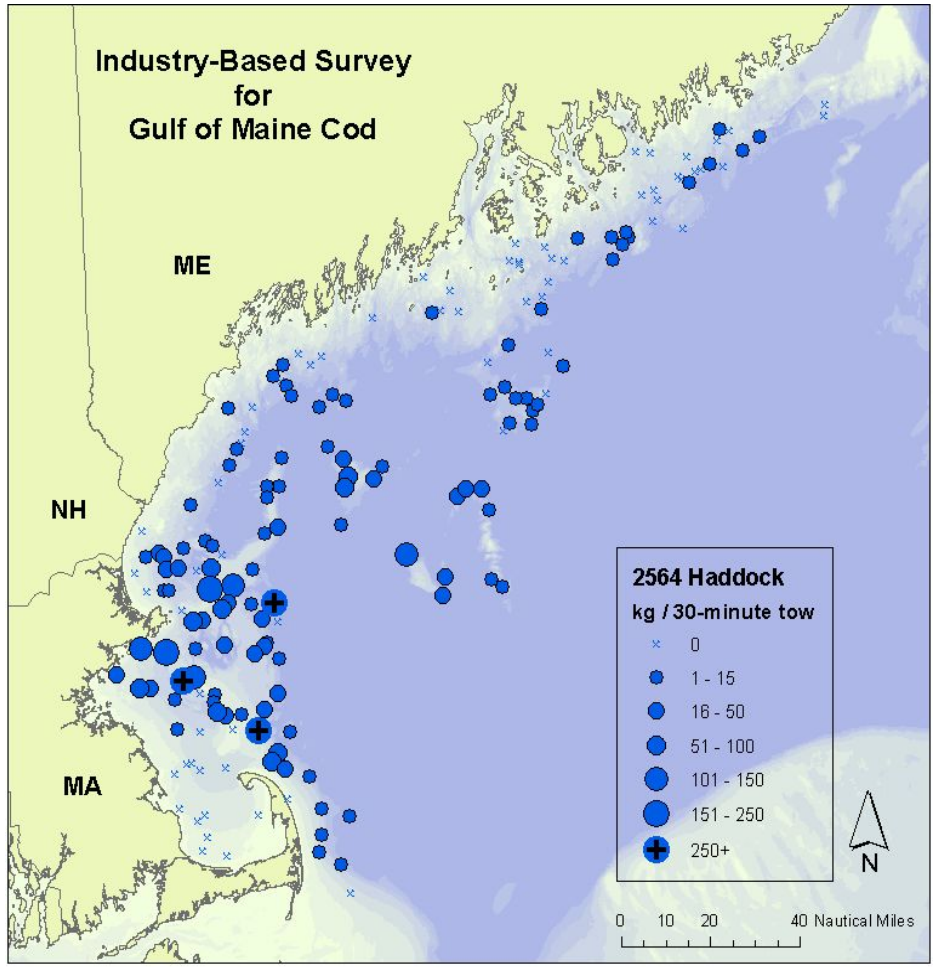


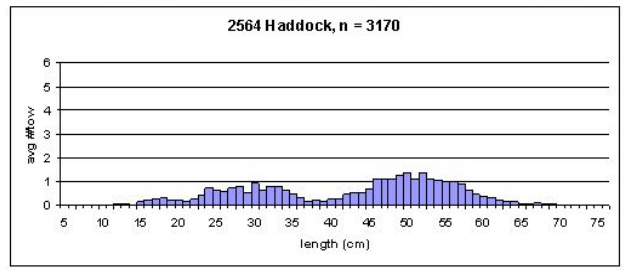
Haddock
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

**Average number of fish at length for all tows where species were caught





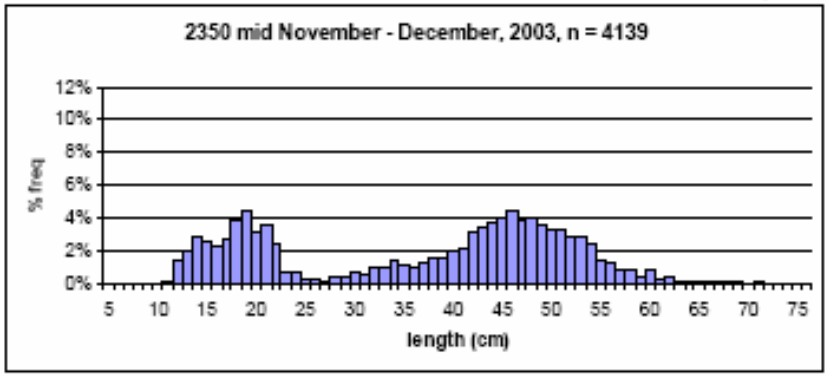
Haddock
caught during the IBS for GOM cod survey

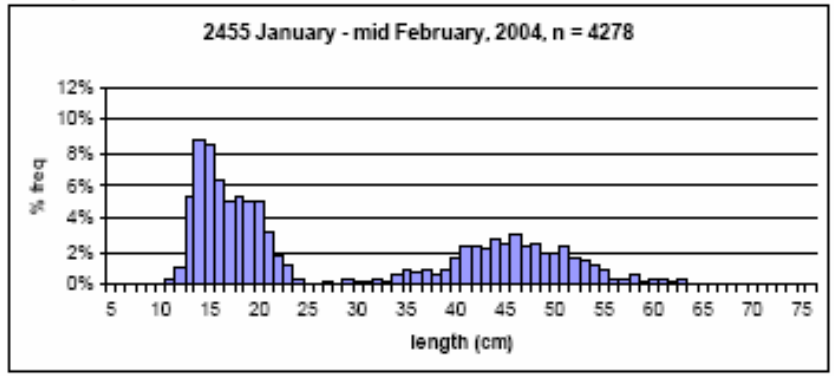
mid April - May
Year: 2005
Cruise: 2564

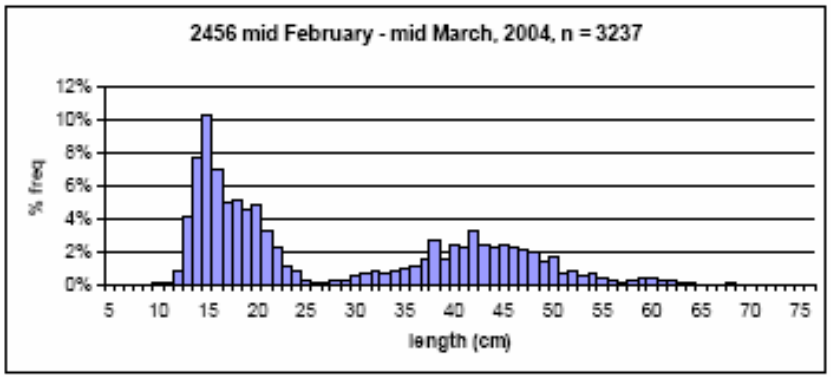
MarineFisheries

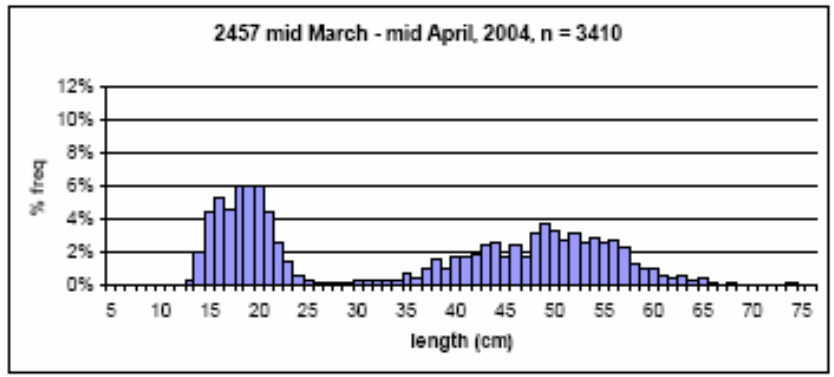
**Average number of fish at length for all tows where species were caught

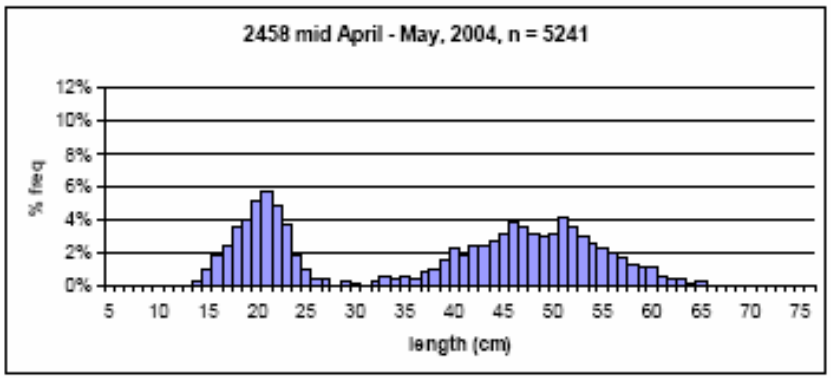
Haddock
(2003 – 2004)



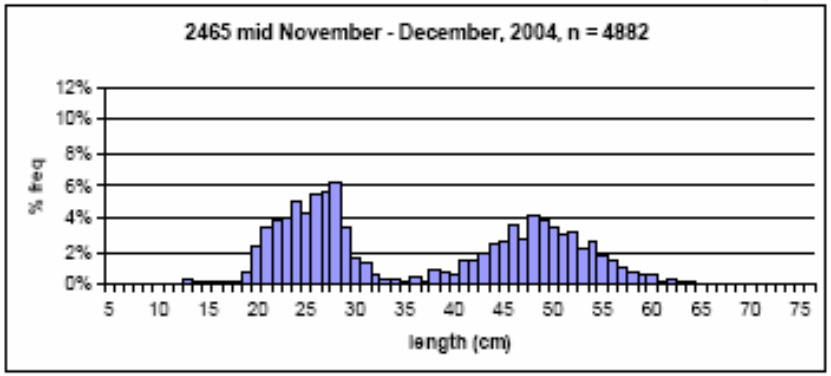


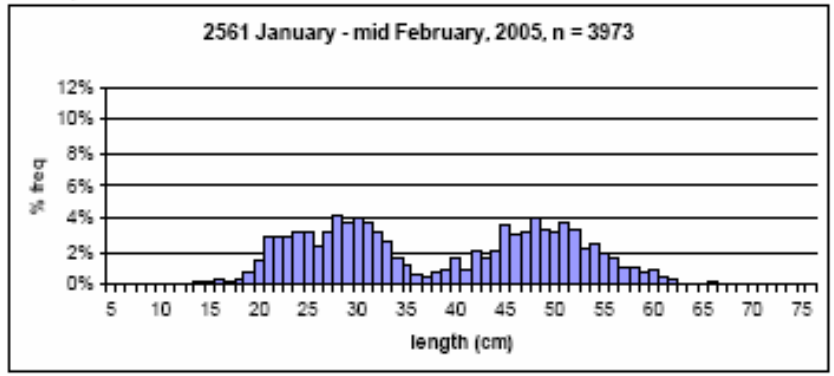


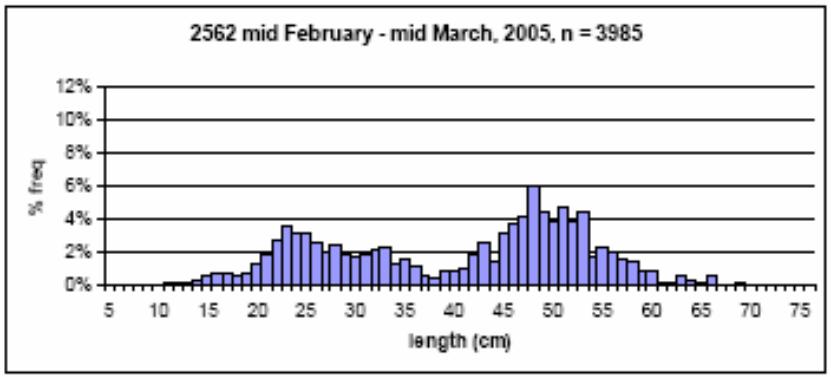


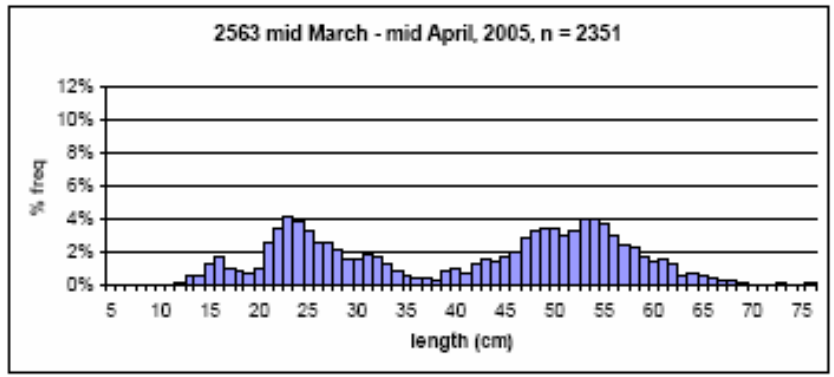


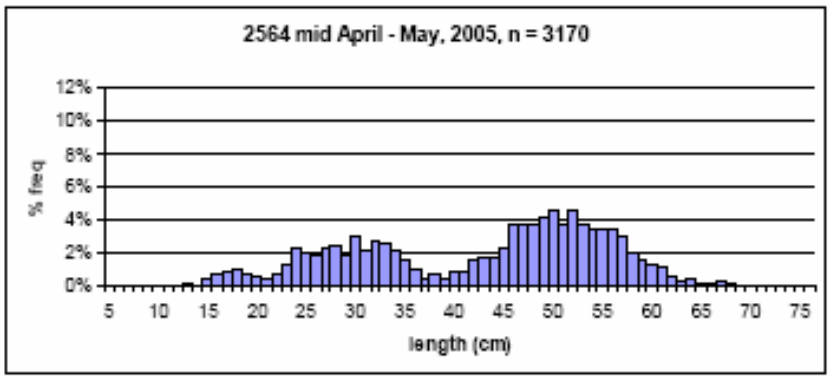
Haddock
(2004 – 2005)









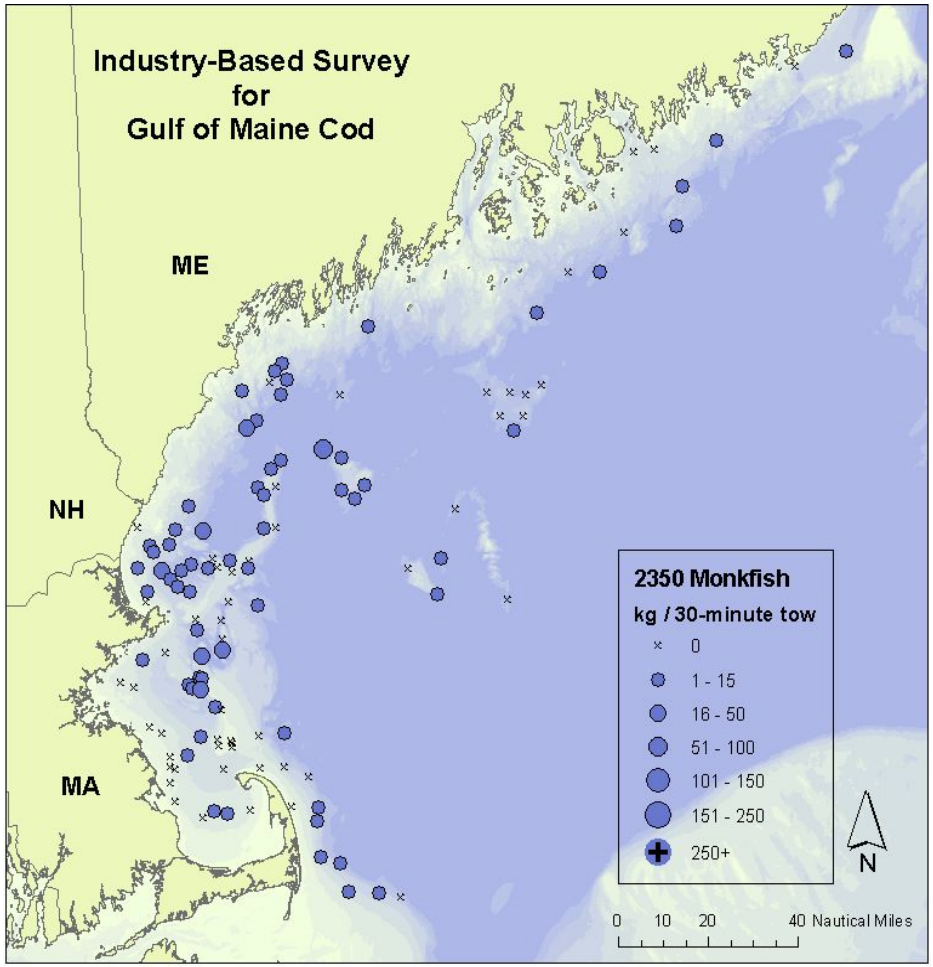


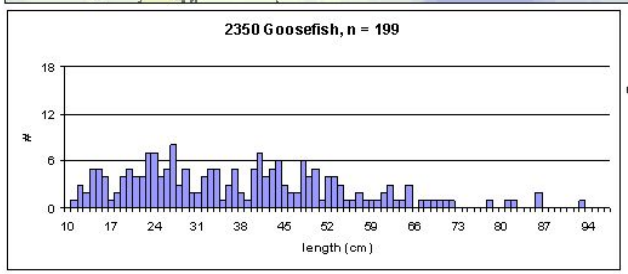
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

Monkfish

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise



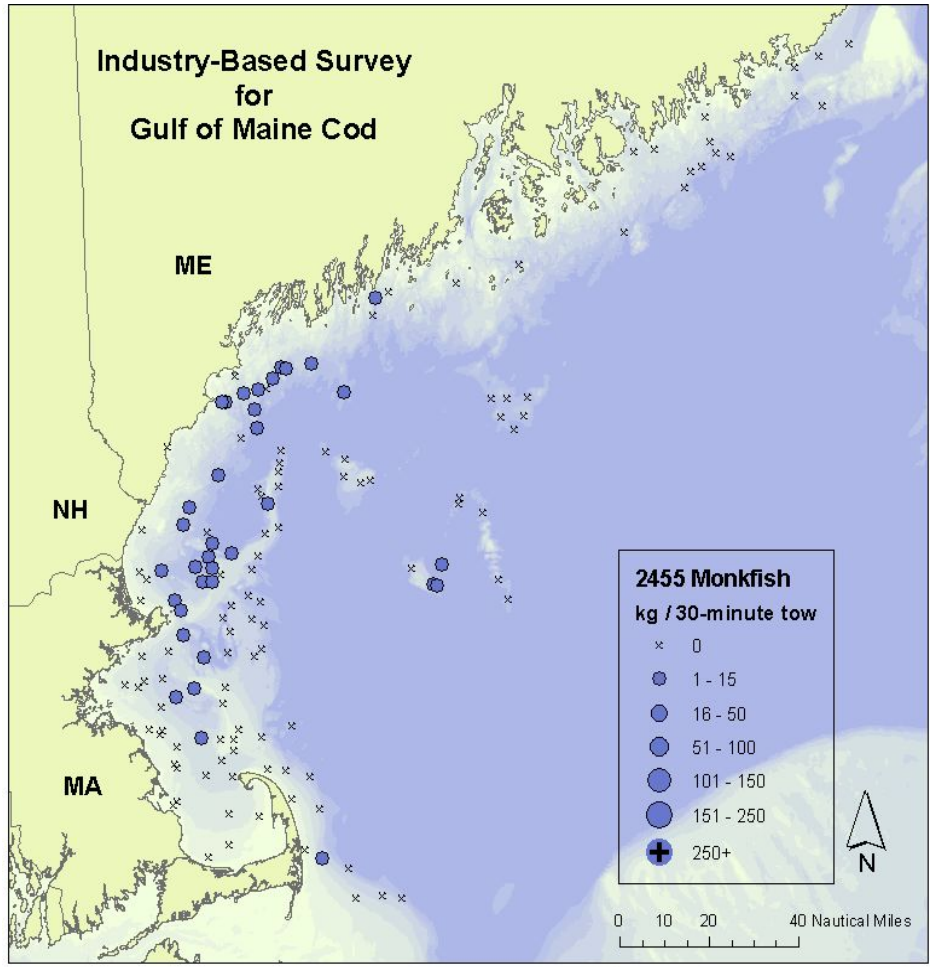


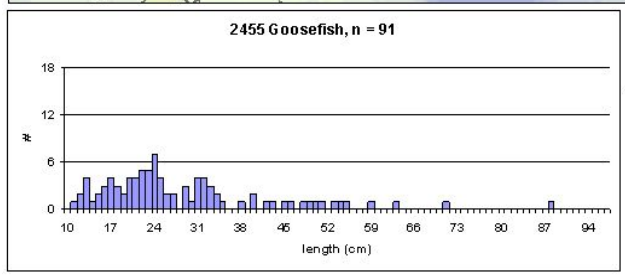
Monkfish
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

** Actual length frequency for all tows completed during cruise



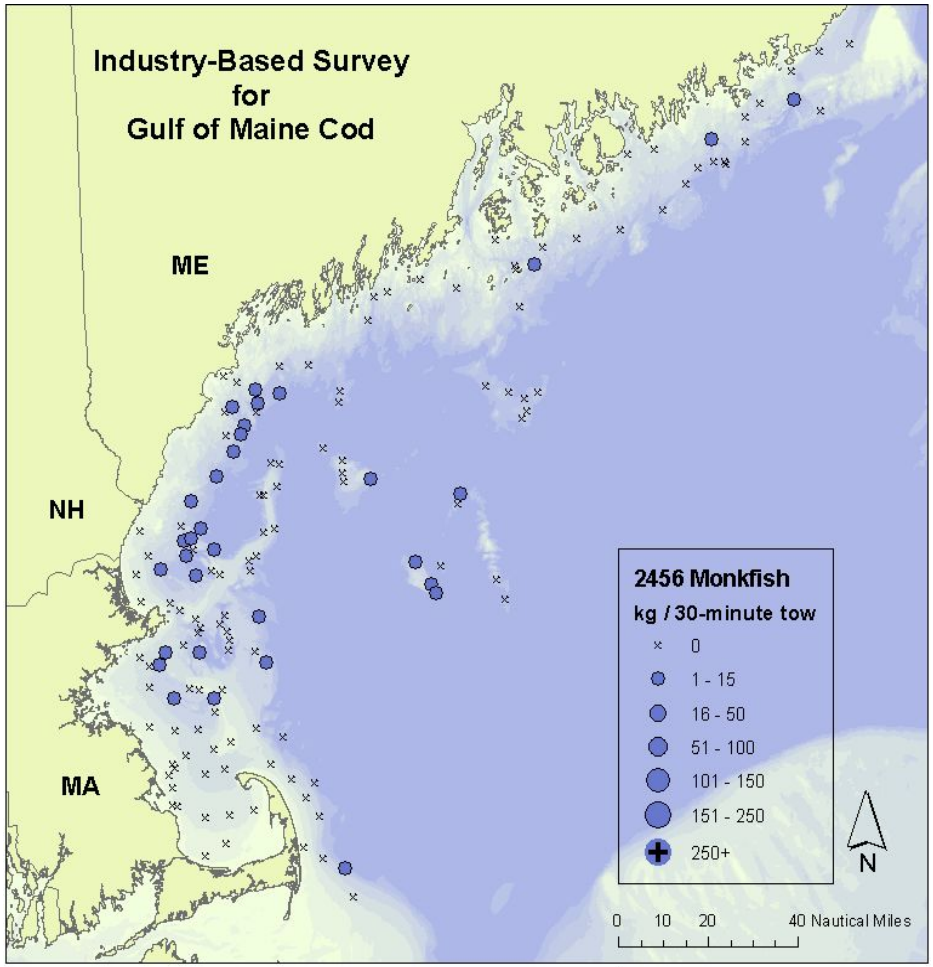


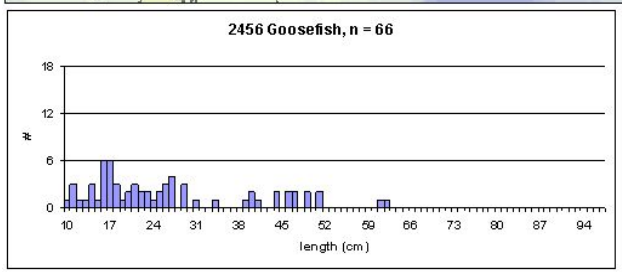
Monkfish
caught during the IBS for GOM cod survey

January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

** Actual length frequency for all tows completed during cruise



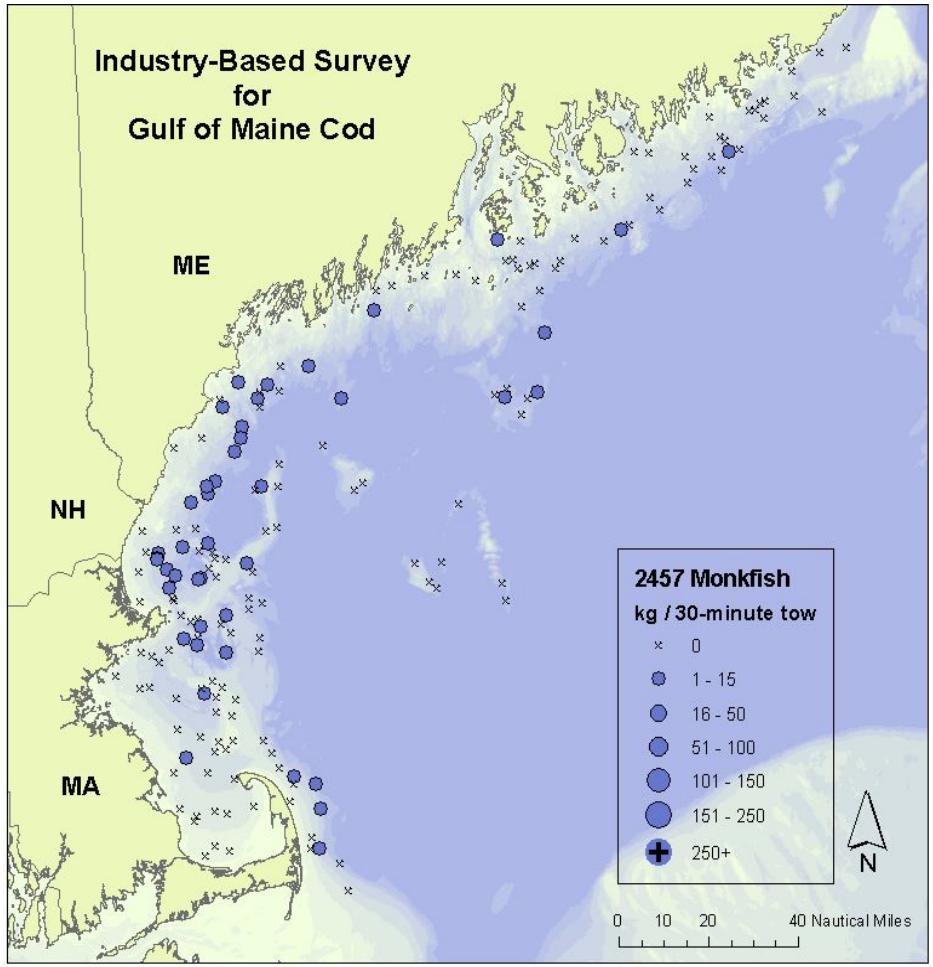


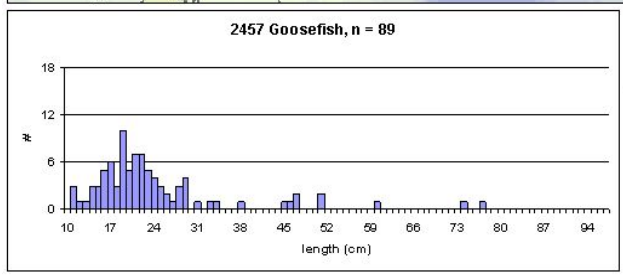
Monkfish
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

** Actual length frequency for all tows completed during cruise



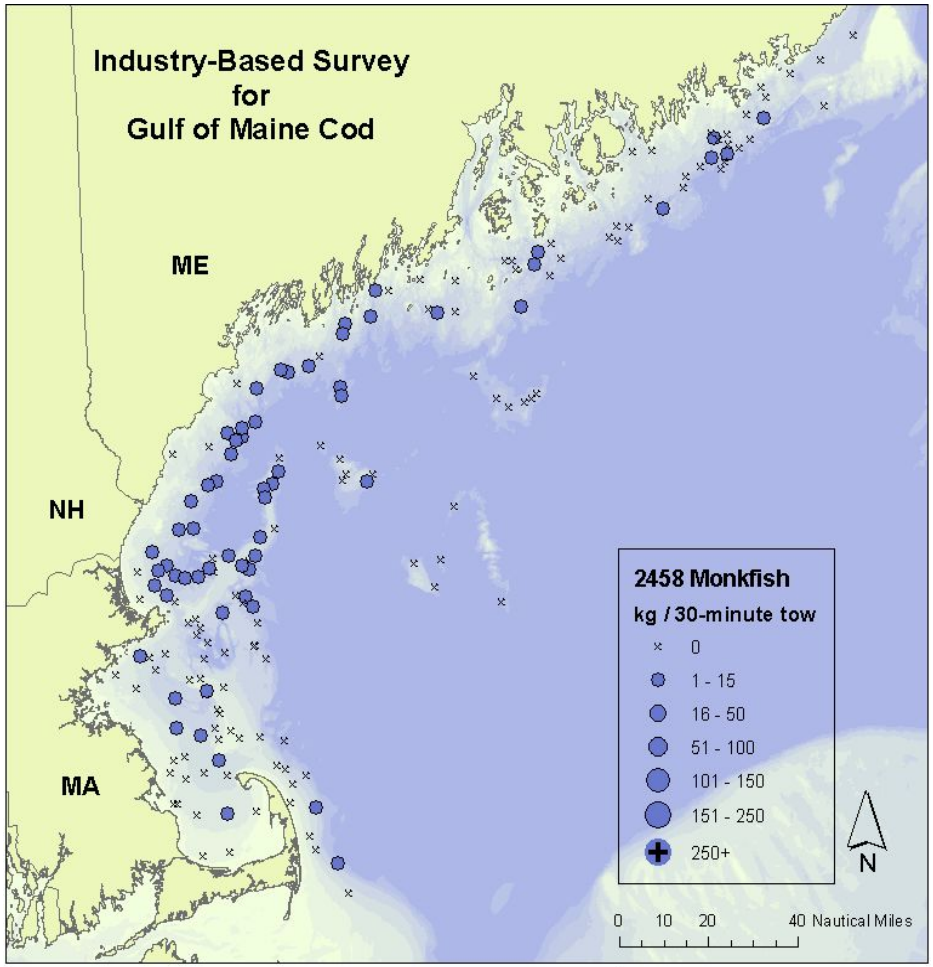


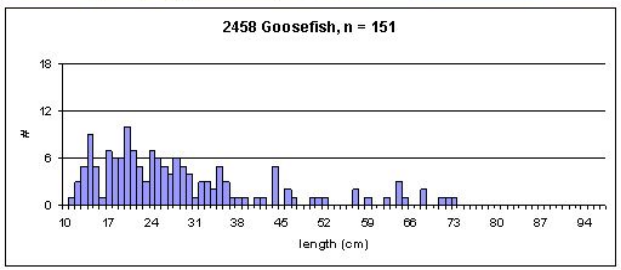
Monkfish
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

** Actual length frequency for all tows completed during cruise



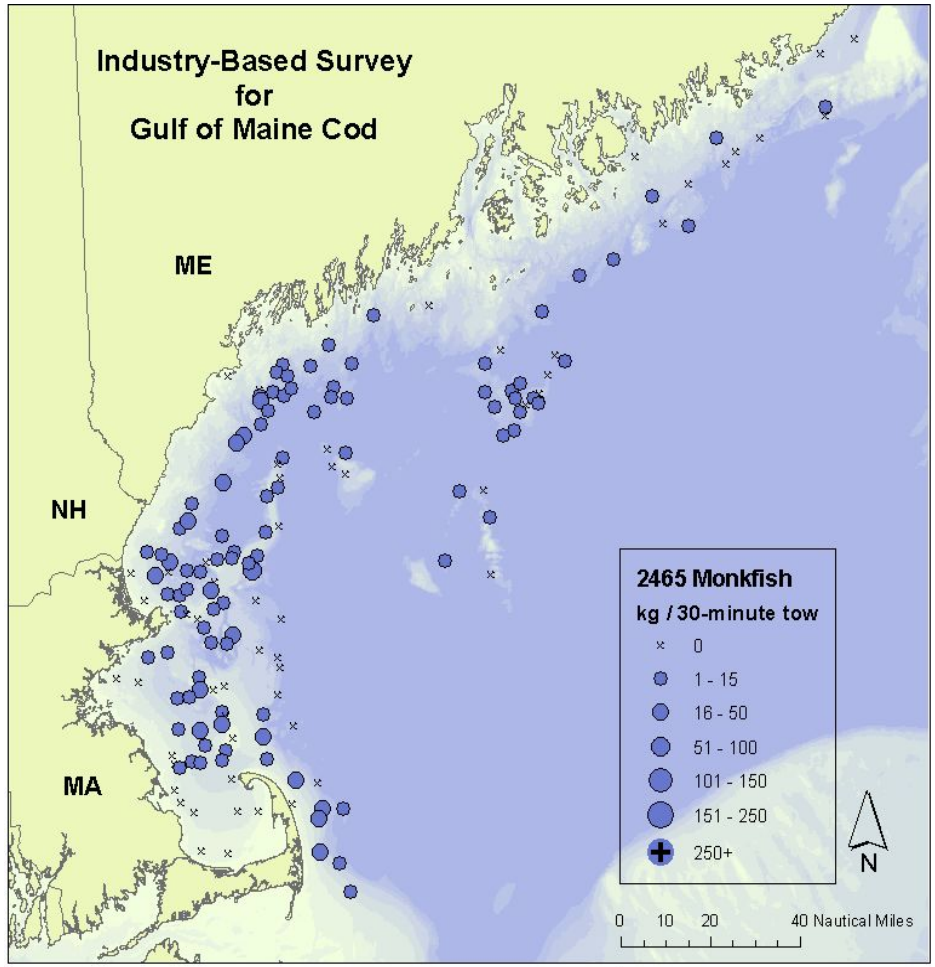


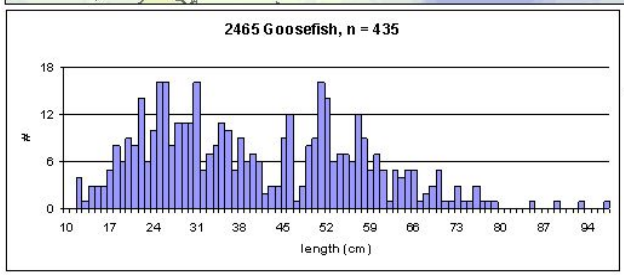
Monkfish
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

MarineFisheries

** Actual length frequency for all tows completed during cruise



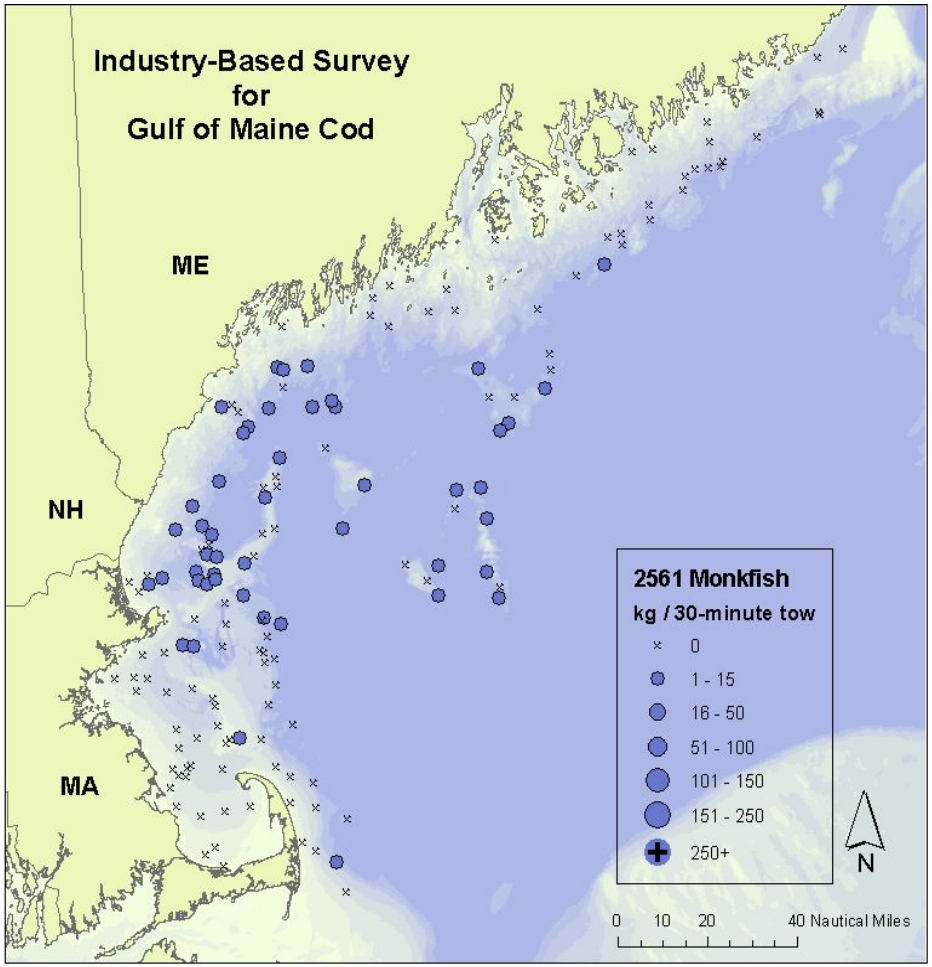


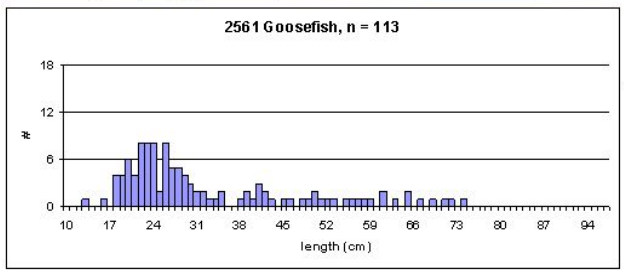
Monkfish
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

MarineFisheries

** Actual length frequency for all tows completed during cruise



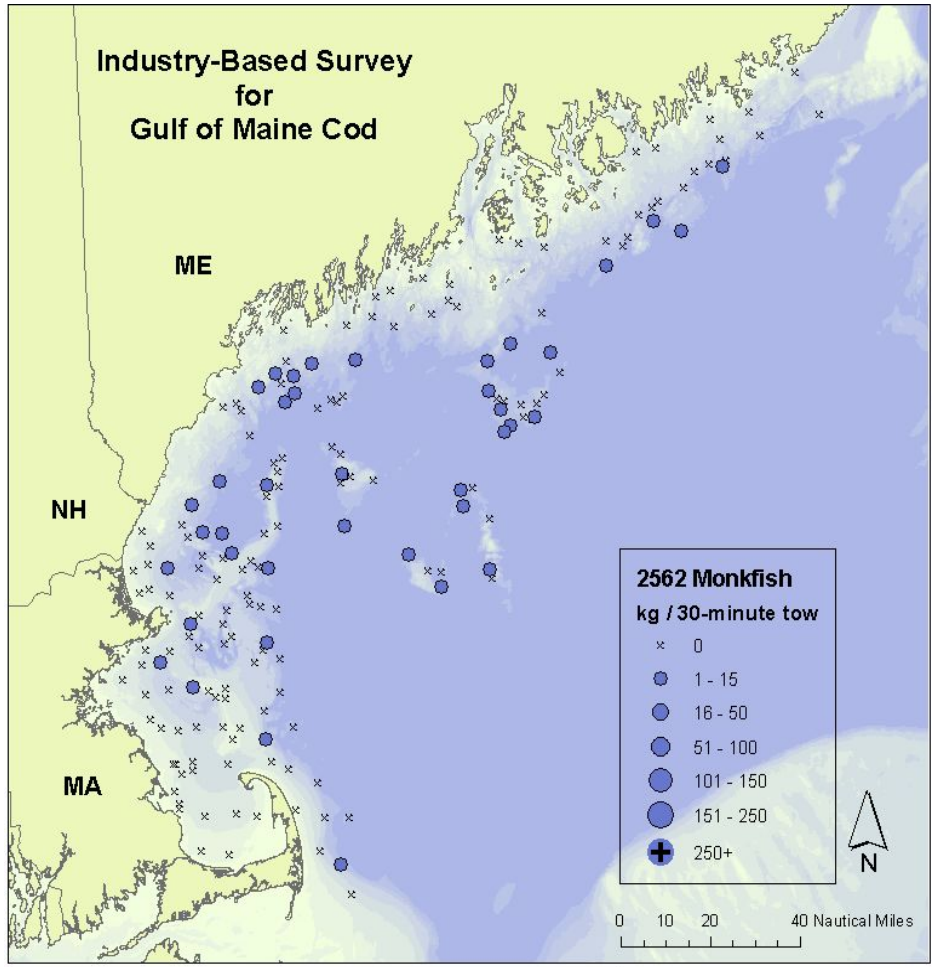


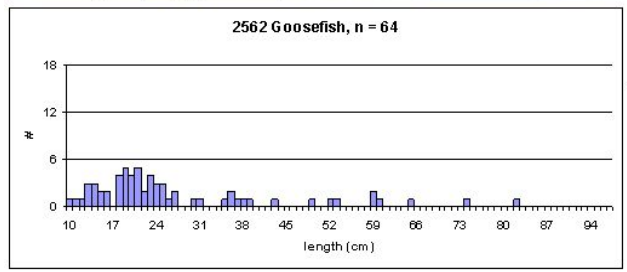
Monkfish
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

** Actual length frequency for all tows completed during cruise



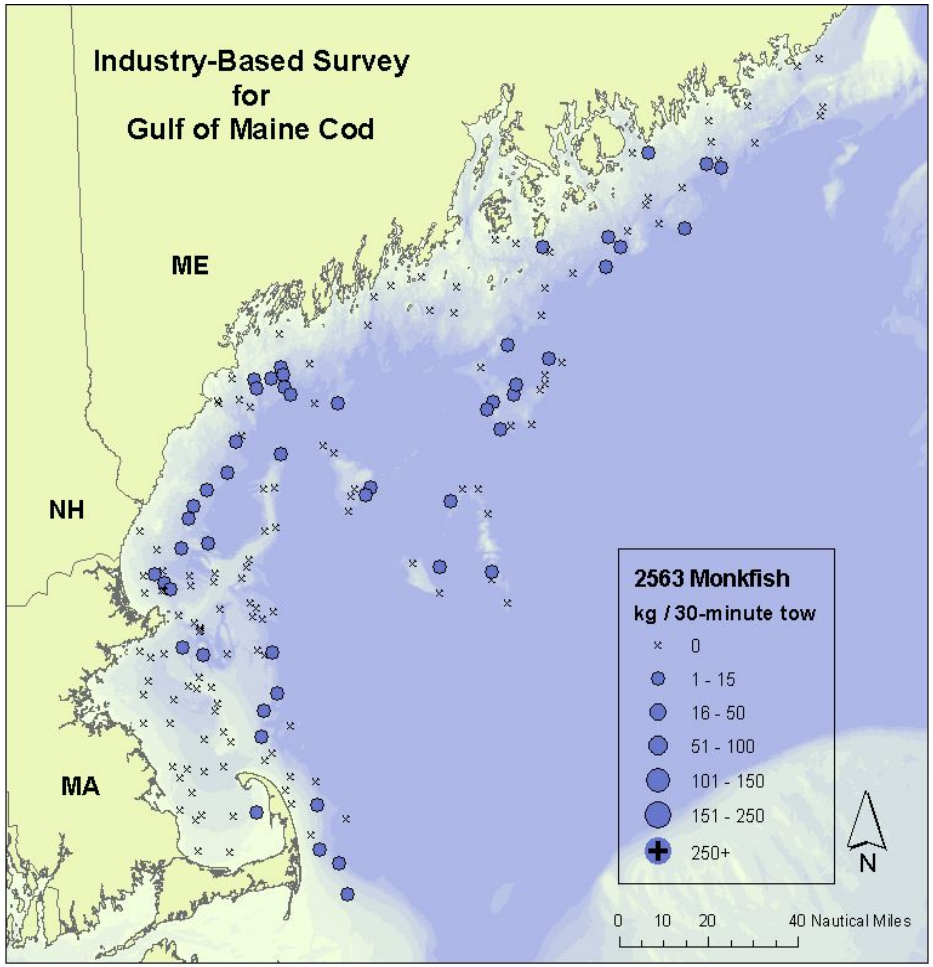


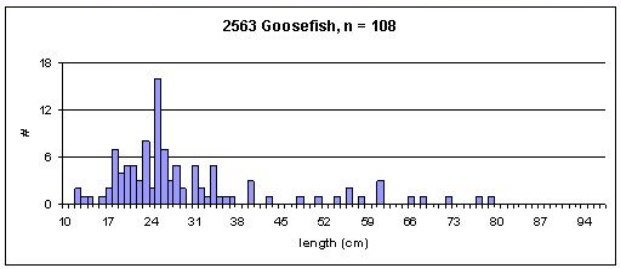
Monkfish
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

** Actual length frequency for all tows completed during cruise



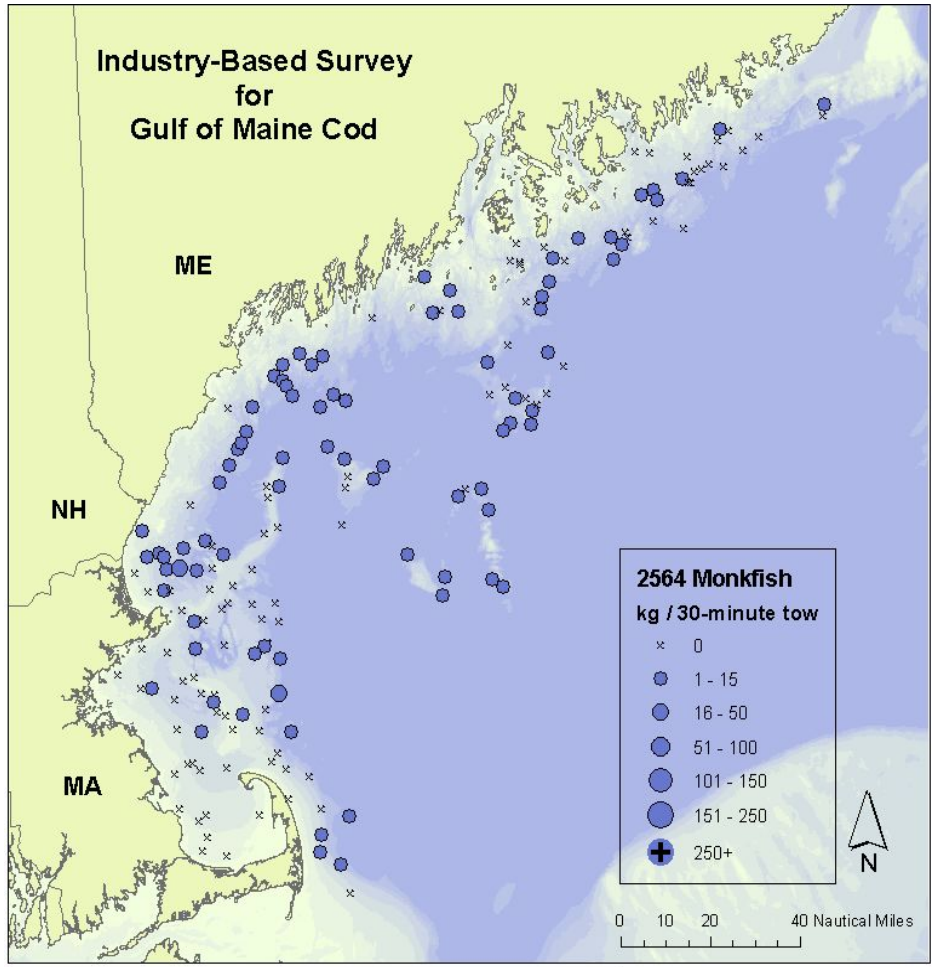


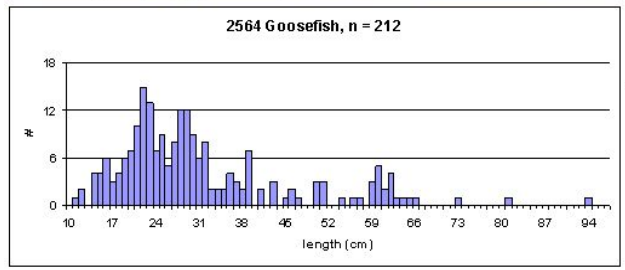
Monkfish
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

** Actual length frequency for all tows completed during cruise





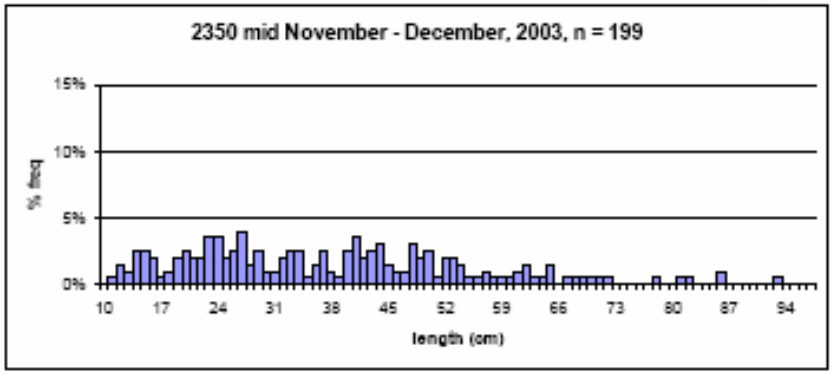
Monkfish
caught during the IBS for GOM cod survey

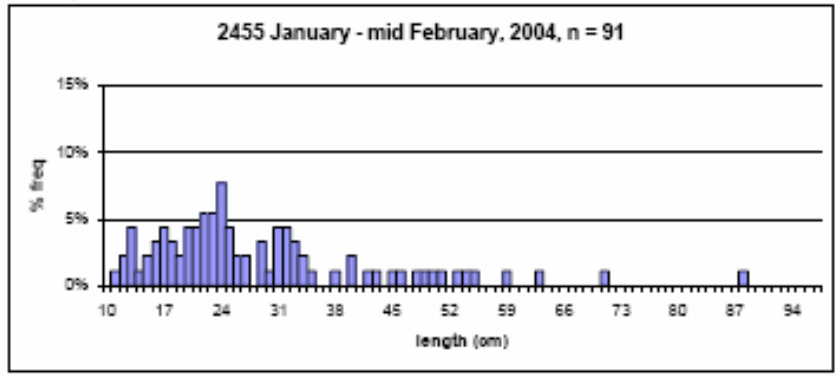
mid April - May
Year: 2005
Cruise: 2564

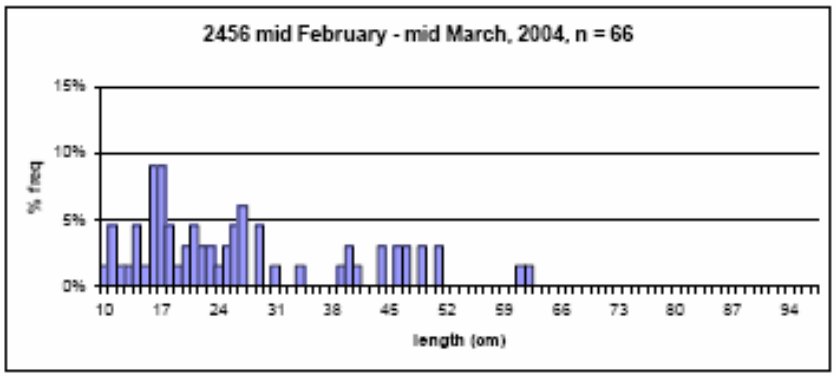
MarineFisheries

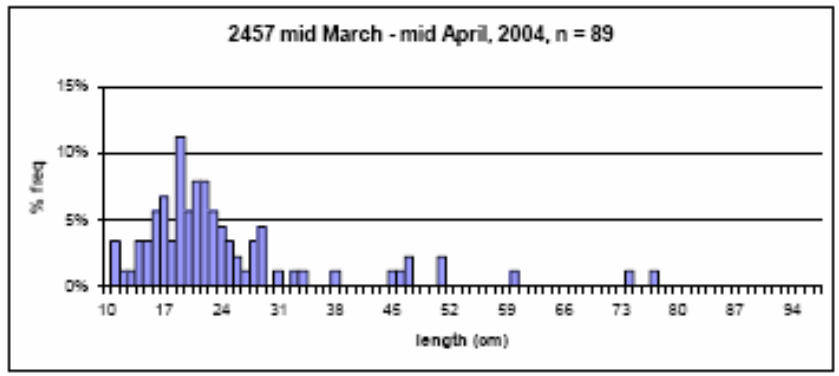
** Actual length frequency for all tows completed during cruise

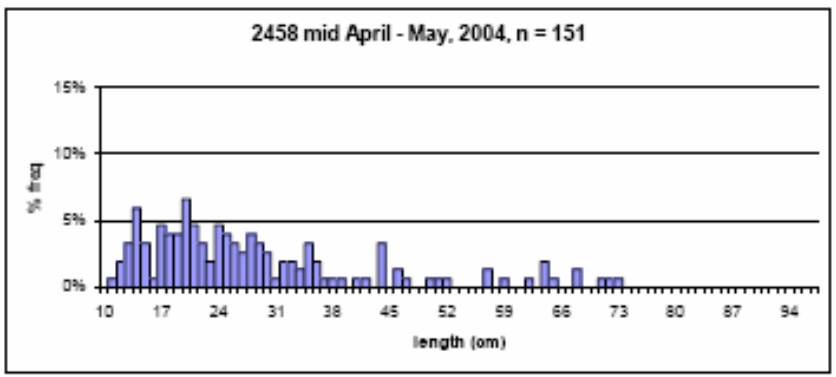
Goosefish
(2003 – 2004)



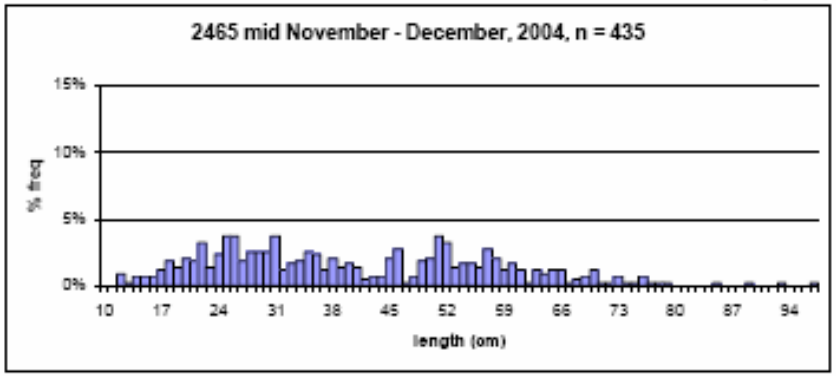


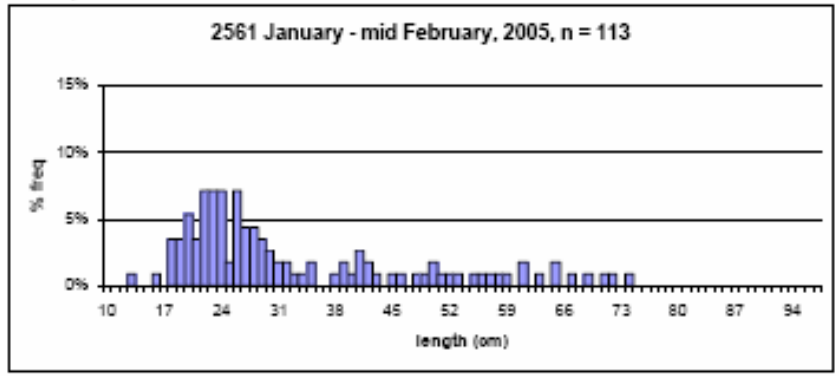


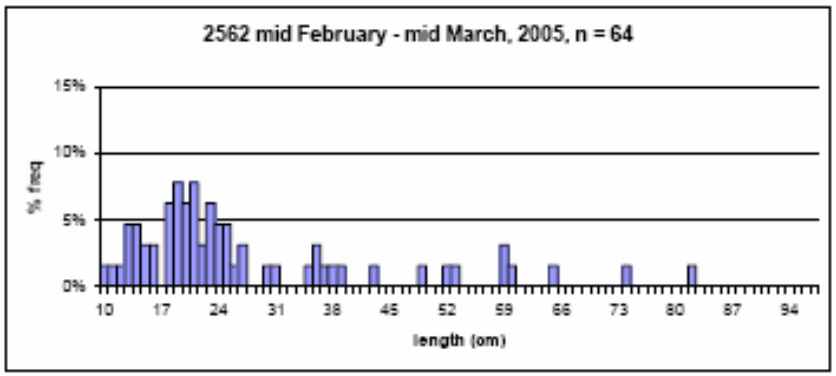


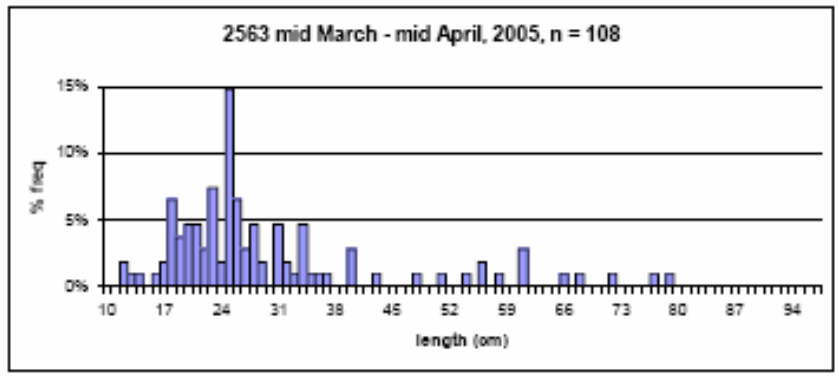


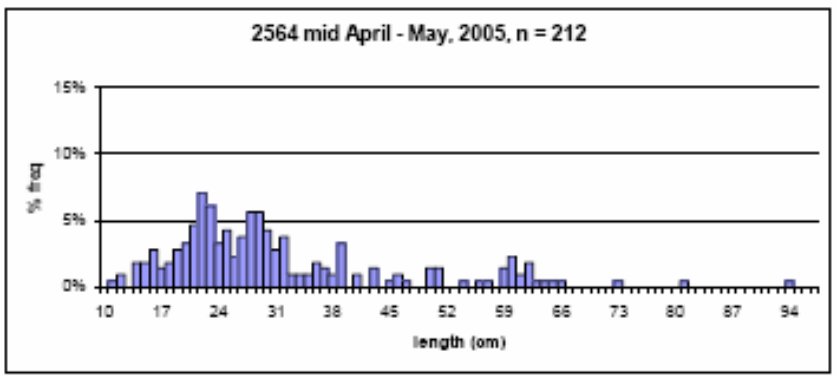
Goosefish
(2004 – 2005)









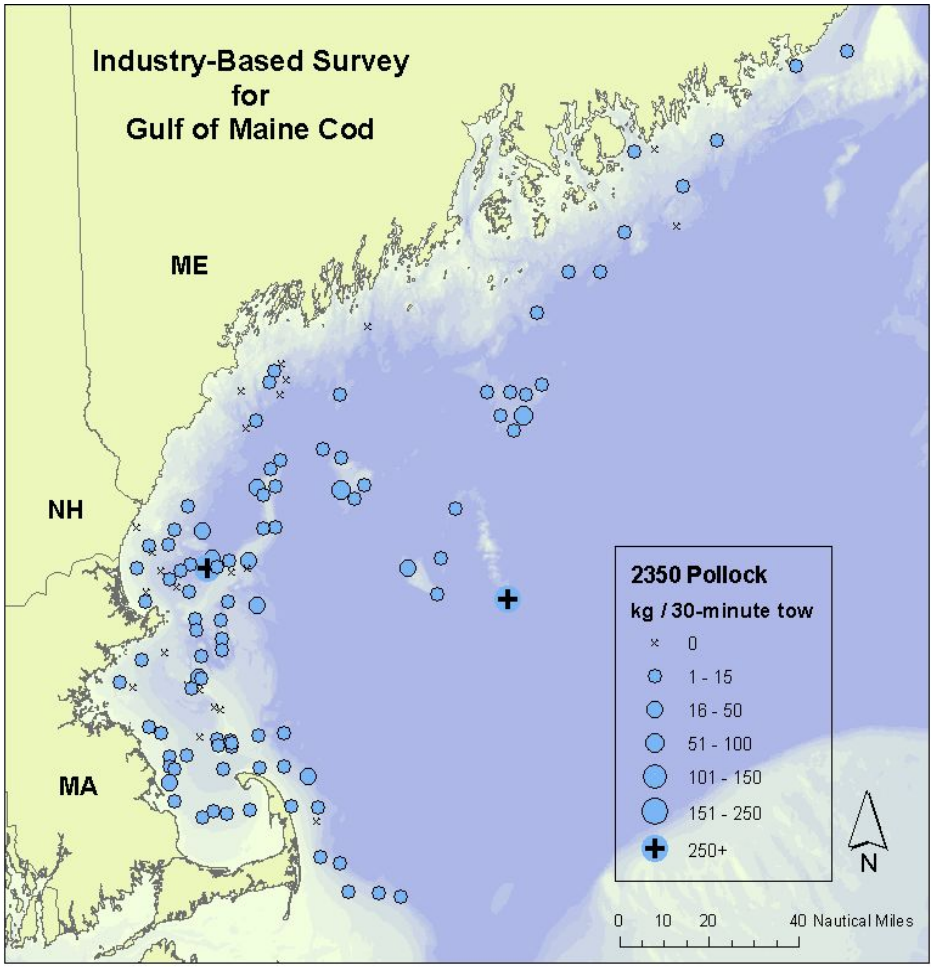


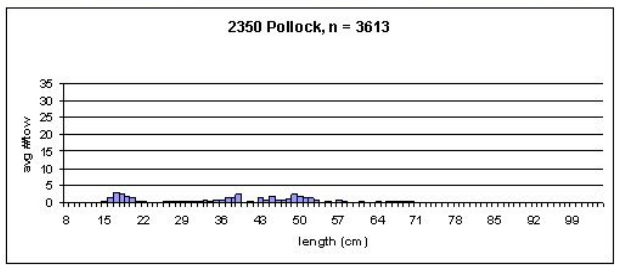
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

Pollock

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise



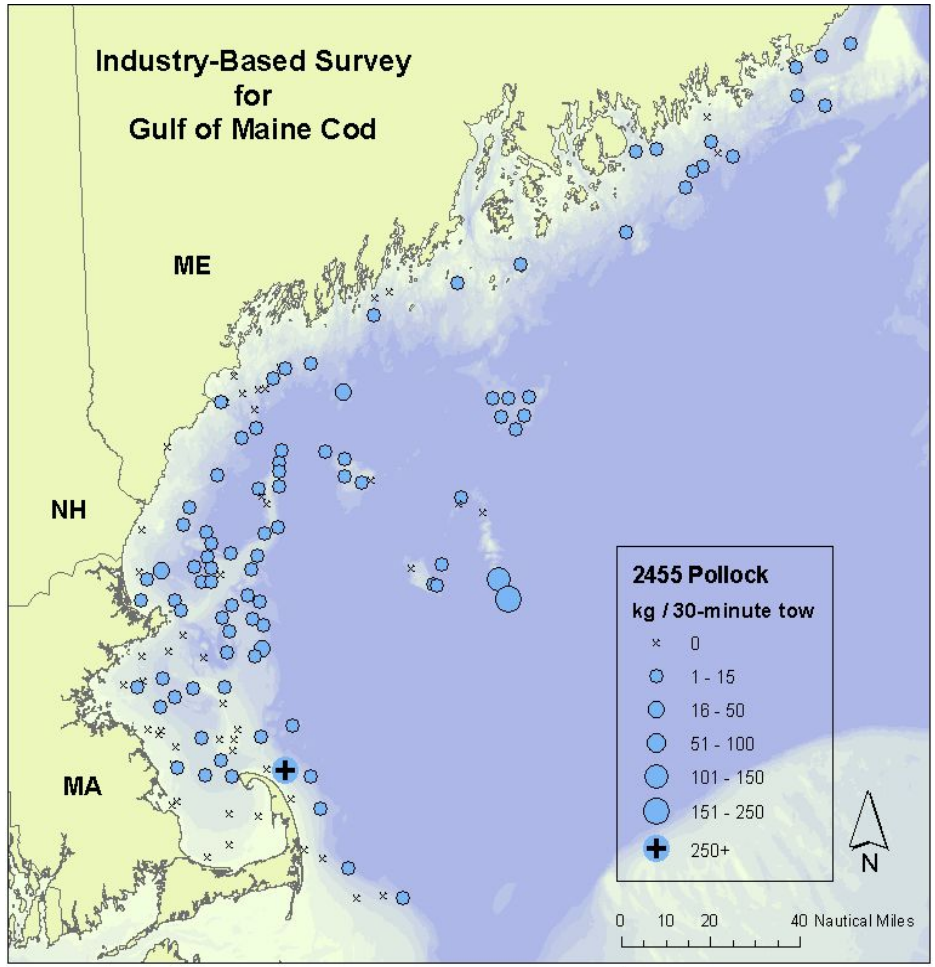


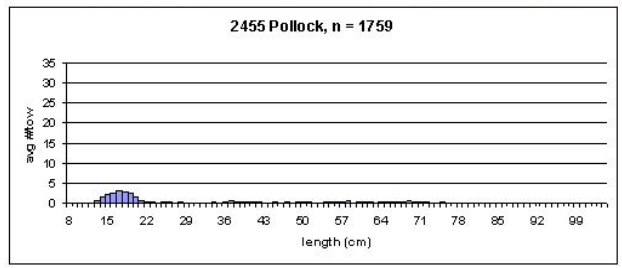
Pollock
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

**Average number of fish at length for all tows where species were caught



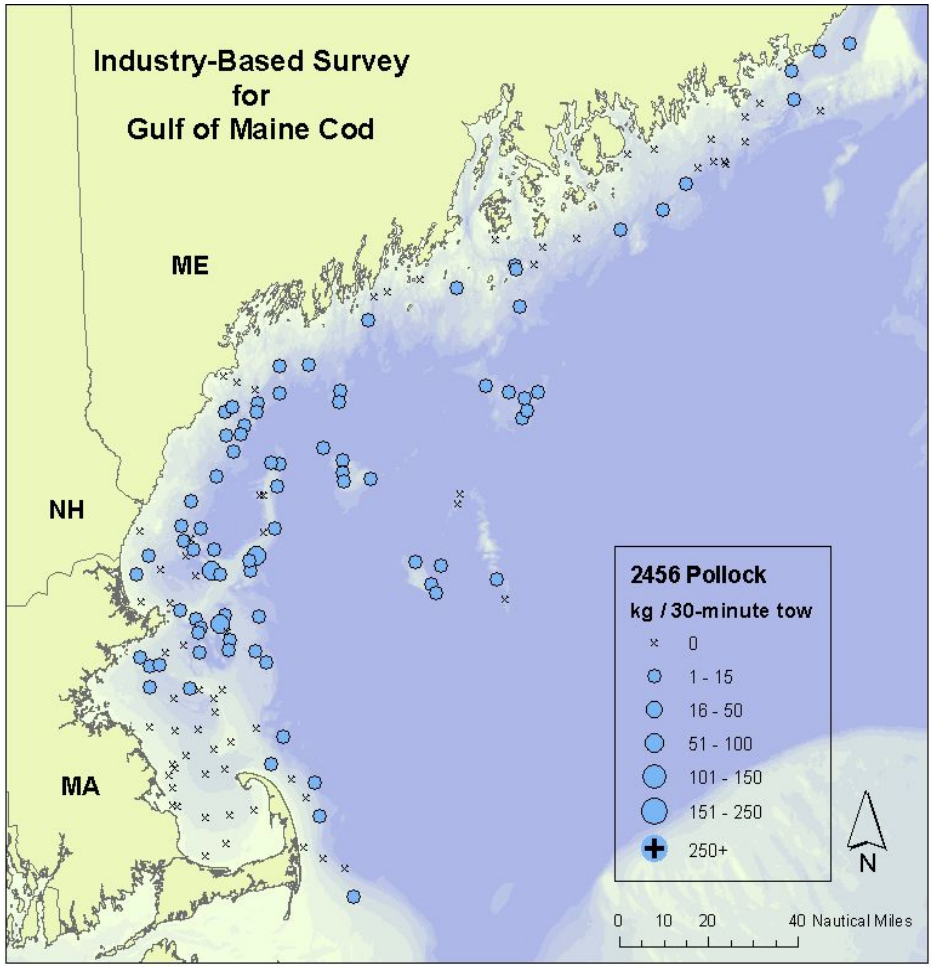


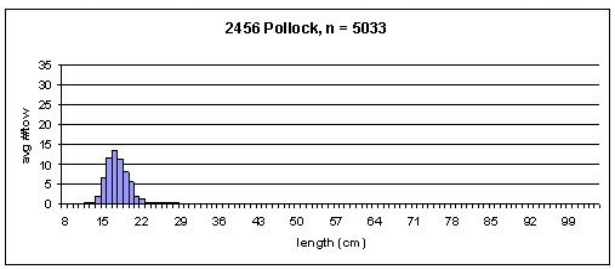
Pollock
caught during the IBS for GOM cod survey

January - Mid February
Year: 2004
Cruise: 2455

MarineFisheries

**Average number of fish at length for all tows where species were caught



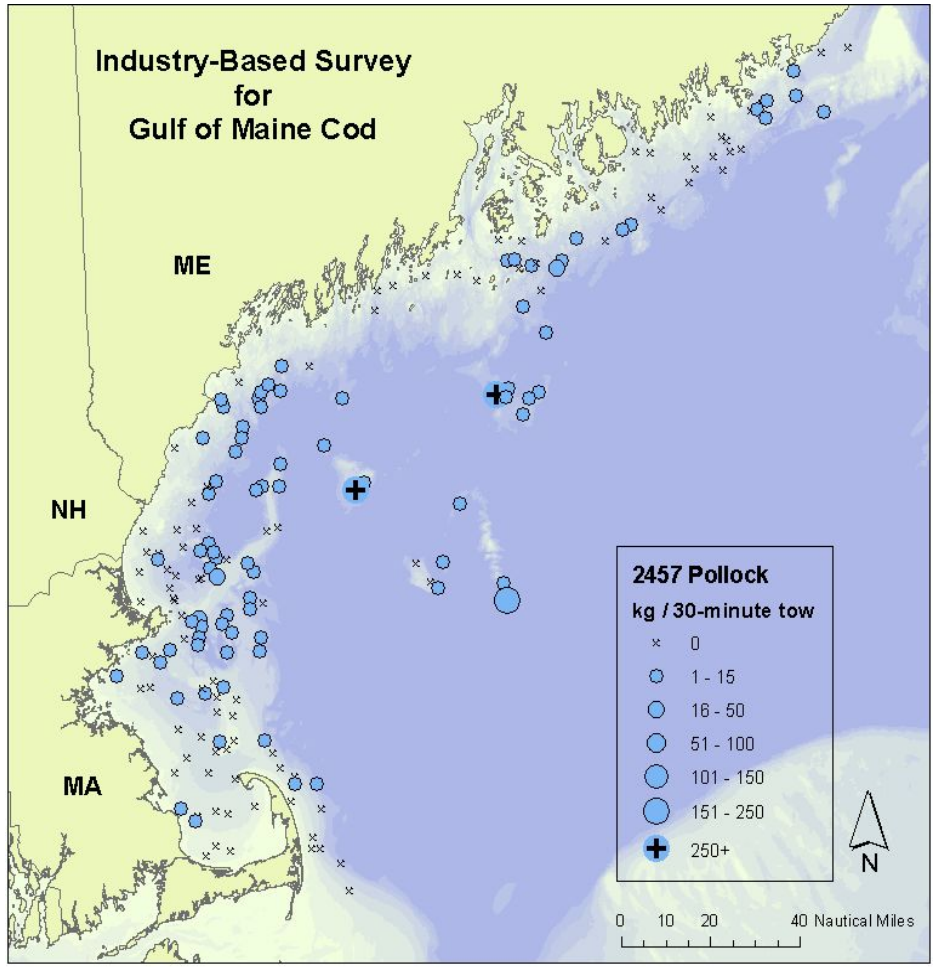


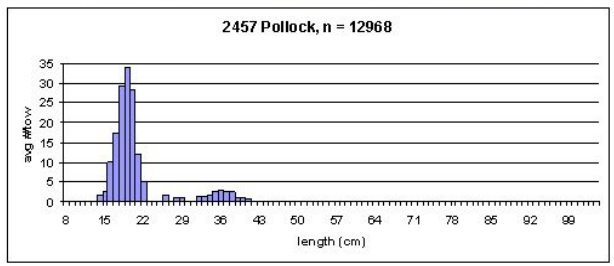
Pollock
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

**Average number of fish at length for all tows where species were caught



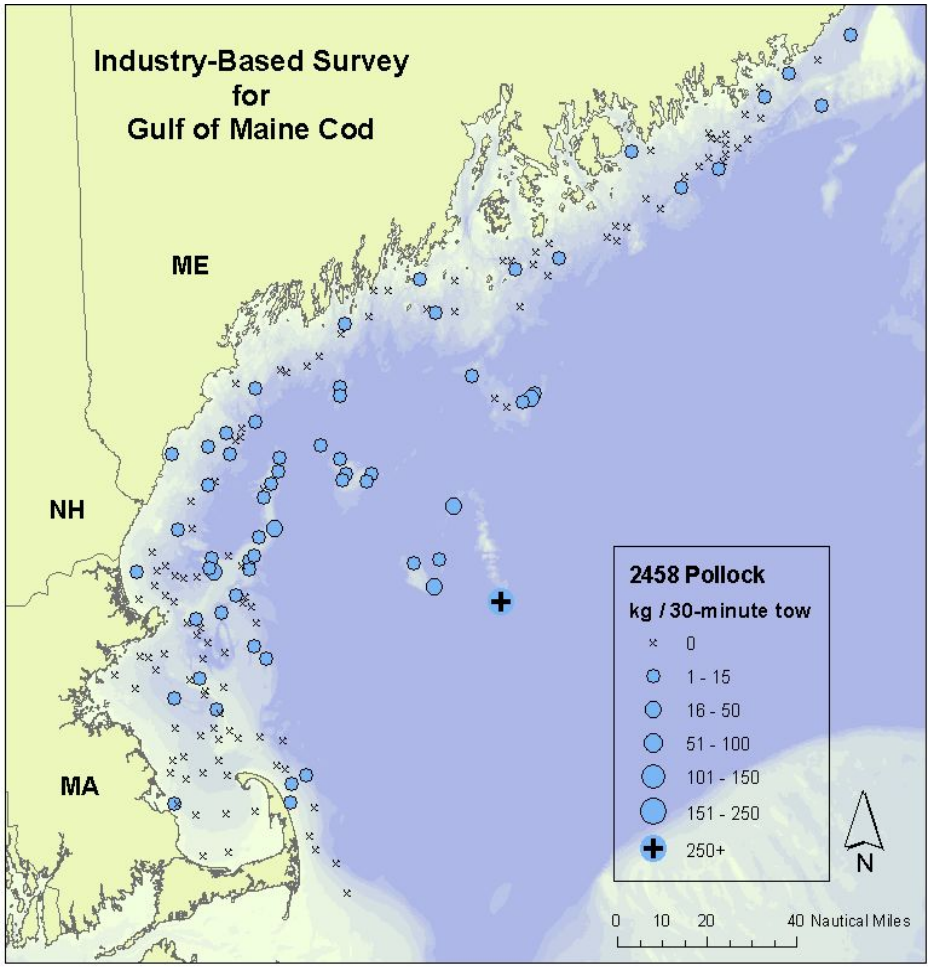


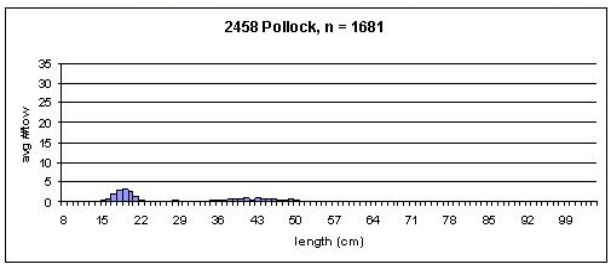
Pollock
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

**Average number of fish at length for all tows where species were caught



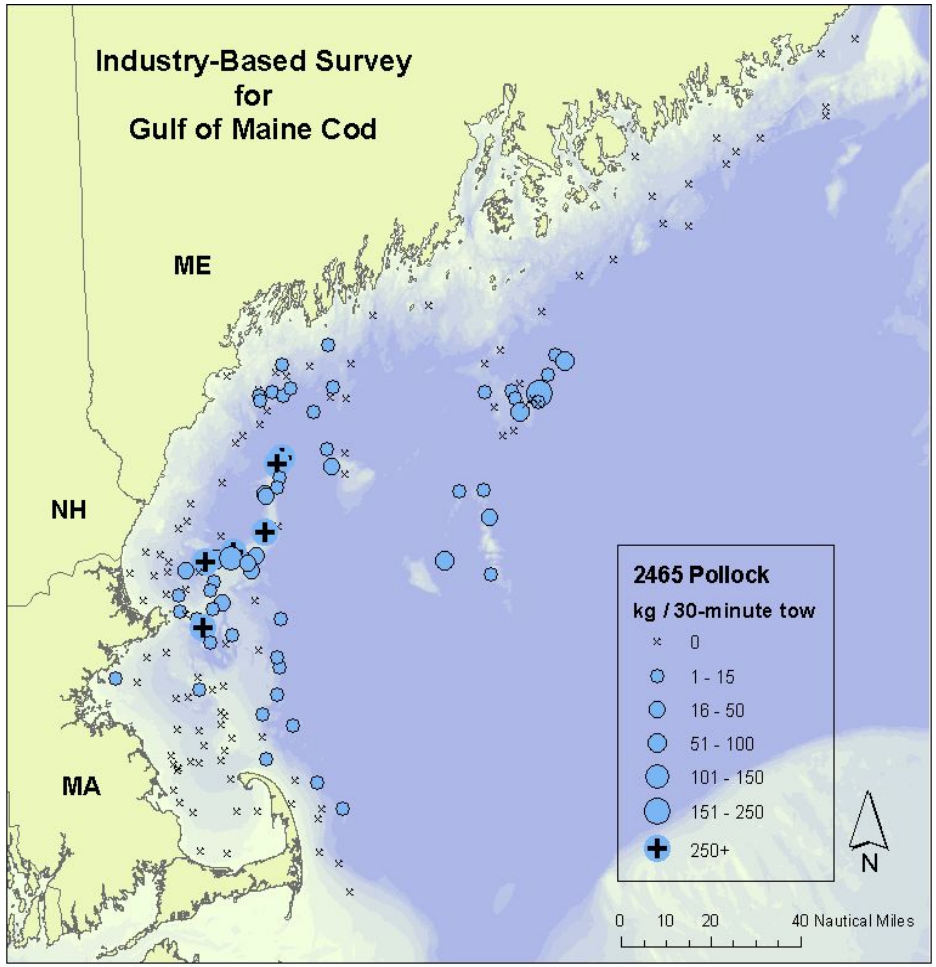


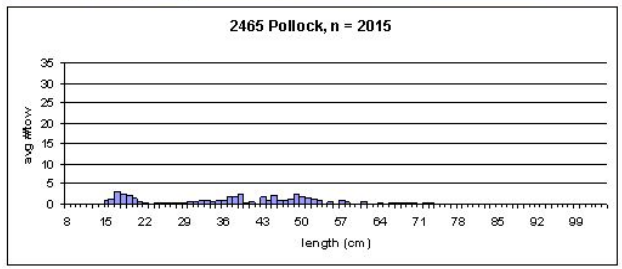
Pollock
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

MarineFisheries

**Average number of fish at length for all tows where species were caught



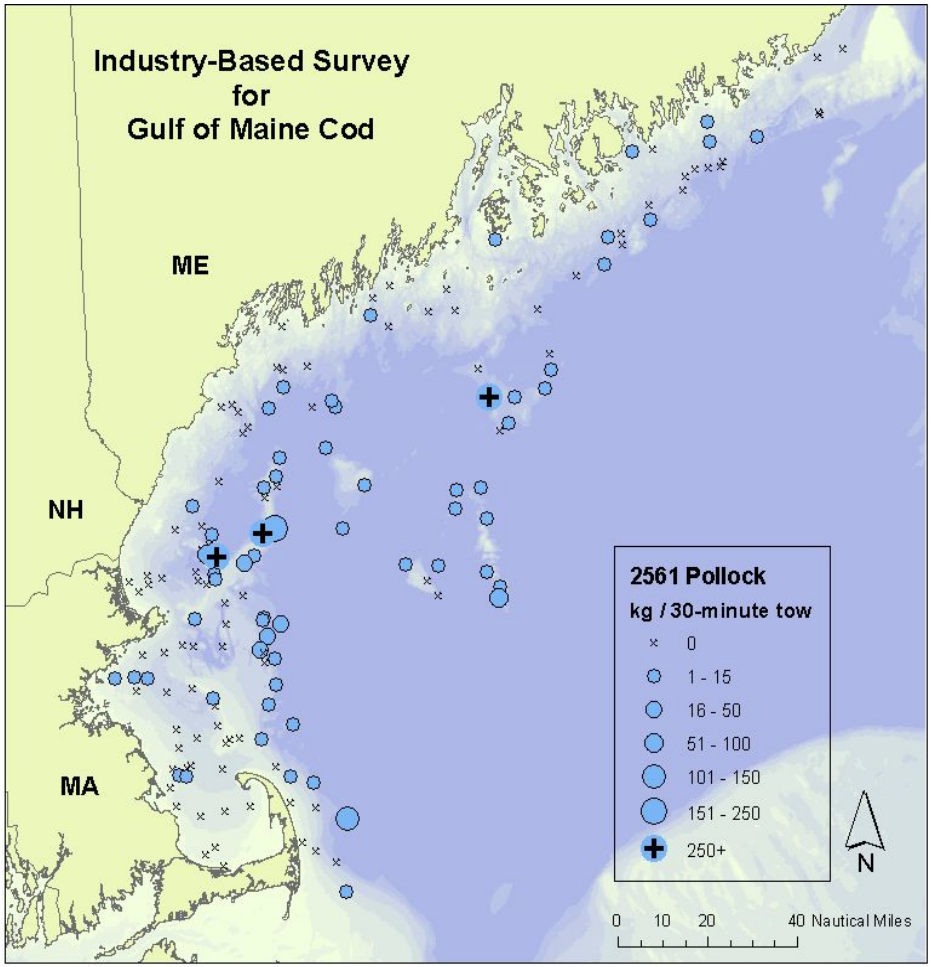


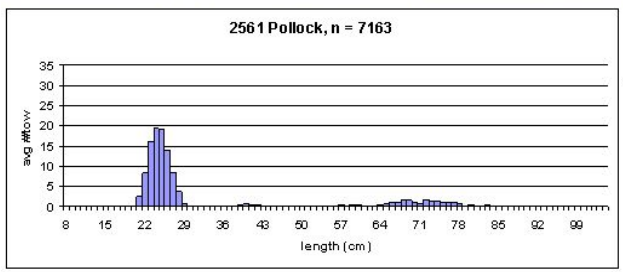
Pollock
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

MarineFisheries

**Average number of fish at length for all tows where species were caught



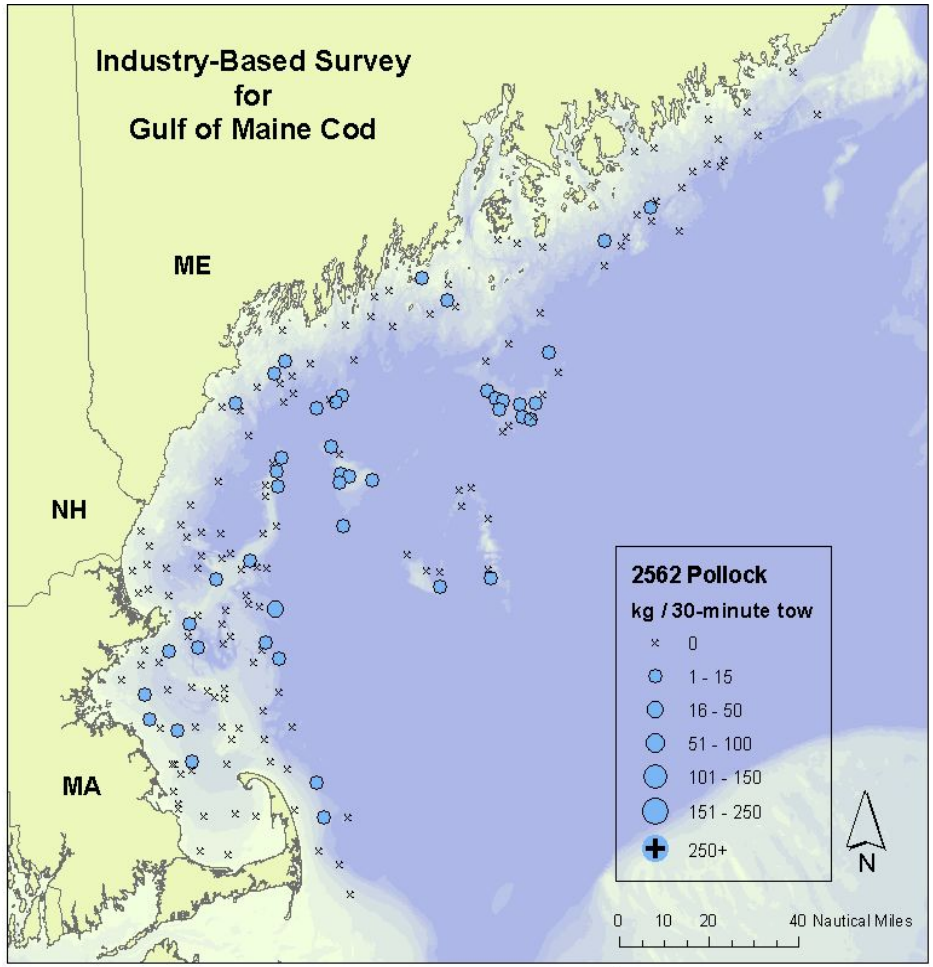


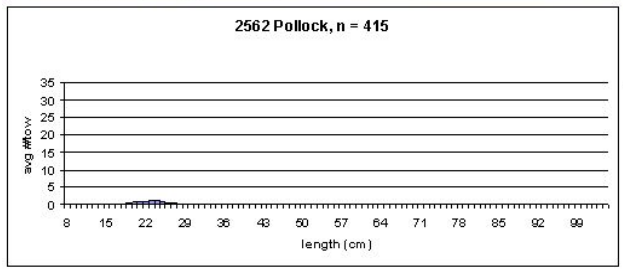
Pollock
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

**Average number of fish at length for all tows where species were caught



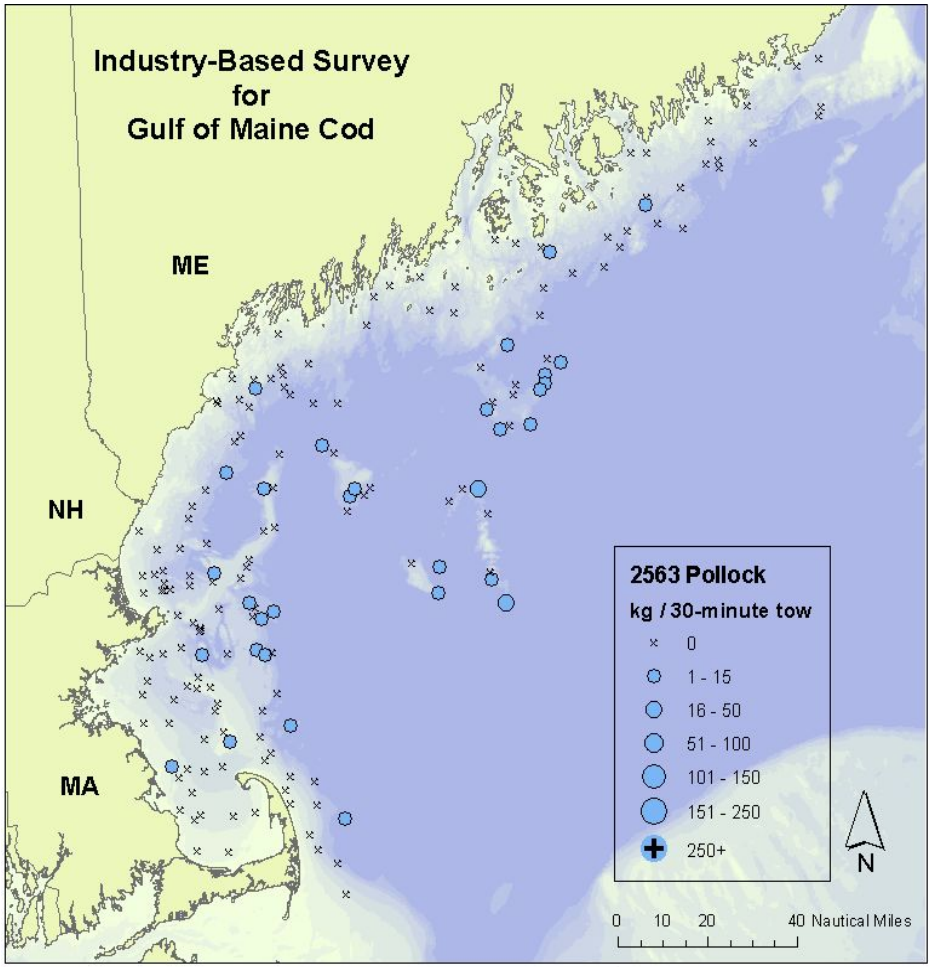


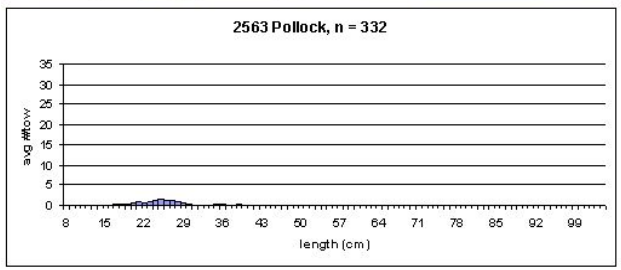
Pollock
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

**Average number of fish at length for all tows where species were caught



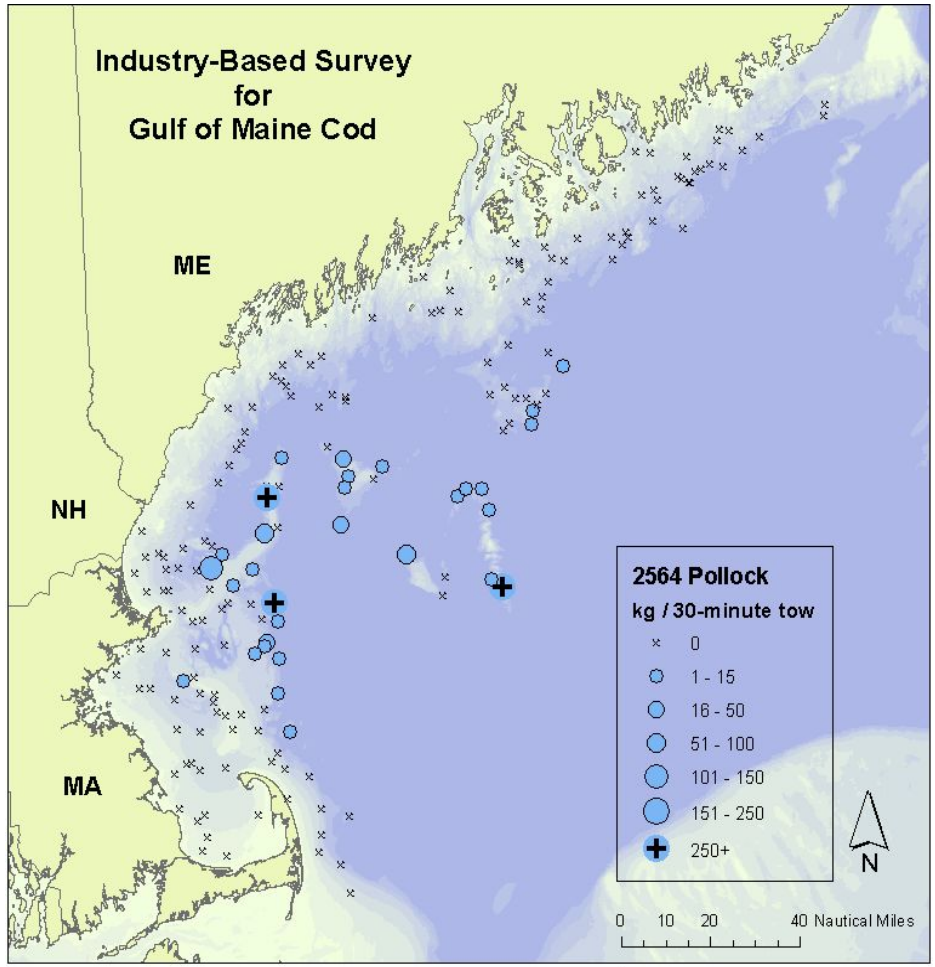


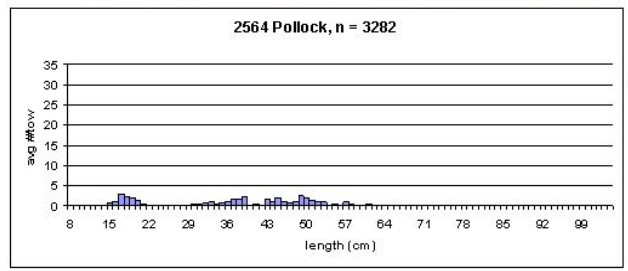
Pollock
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

**Average number of fish at length for all tows where species were caught





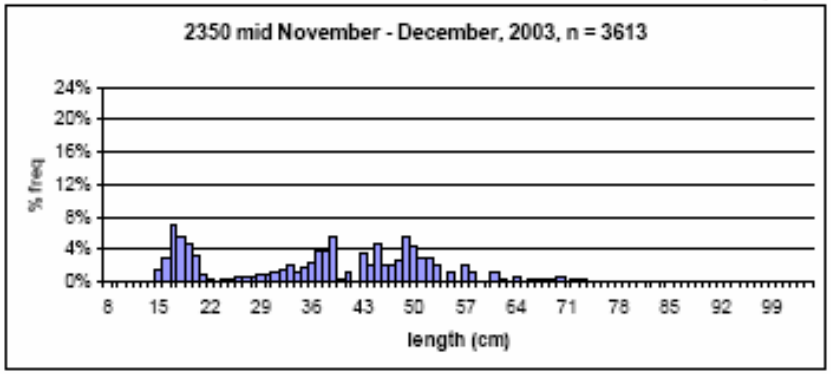
Pollock
caught during the IBS for GOM cod survey

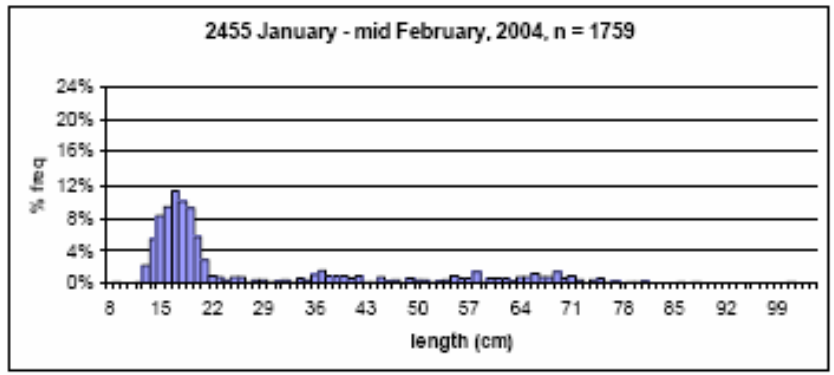
mid April - May
Year: 2005
Cruise: 2564

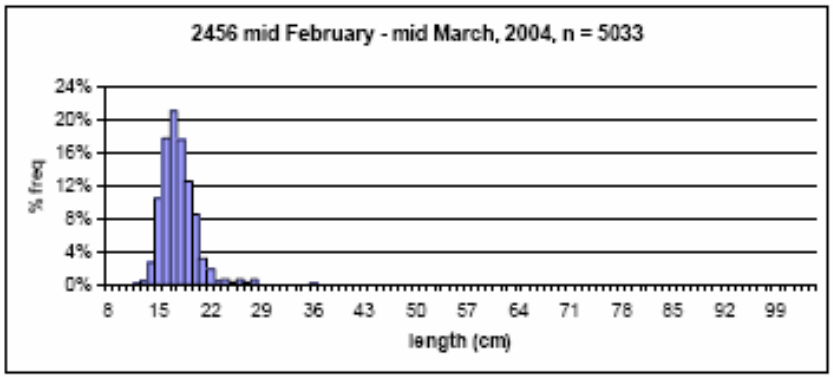
MarineFisheries

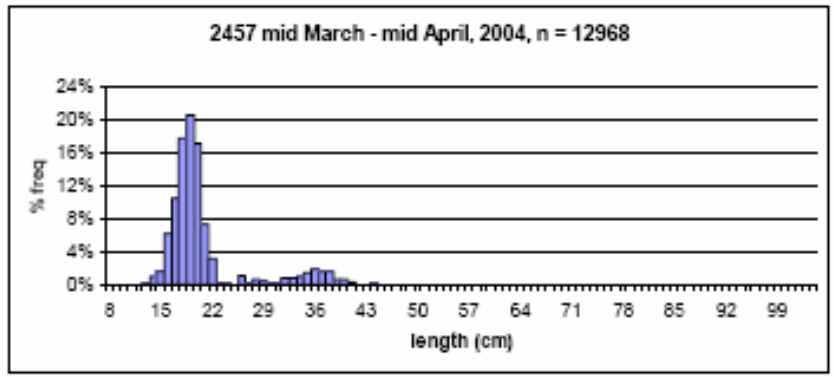
**Average number of fish at length for all tows where species were caught

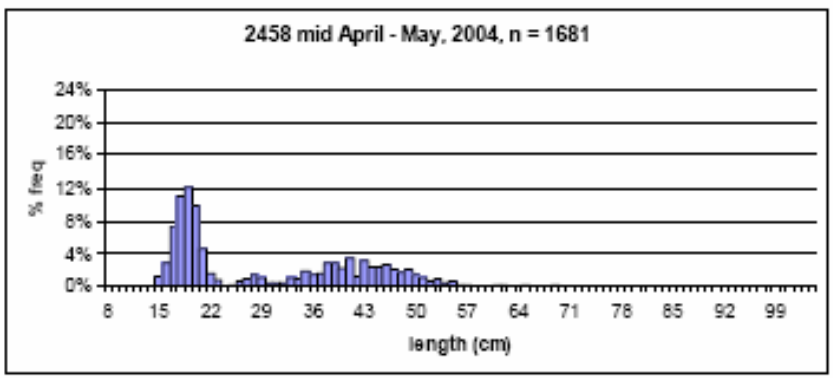
Pollock
(2003 – 2004)



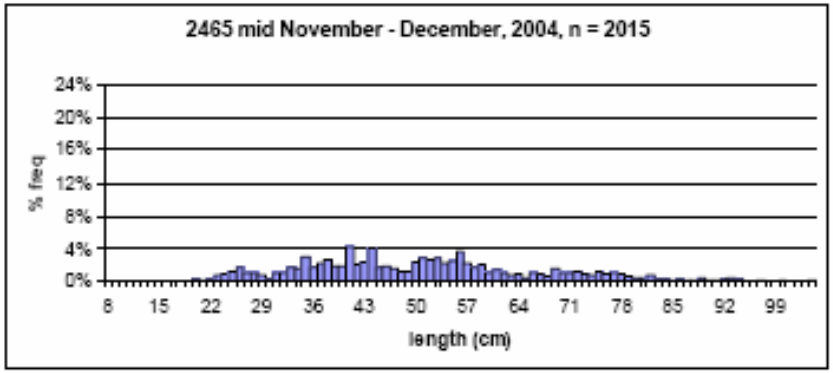


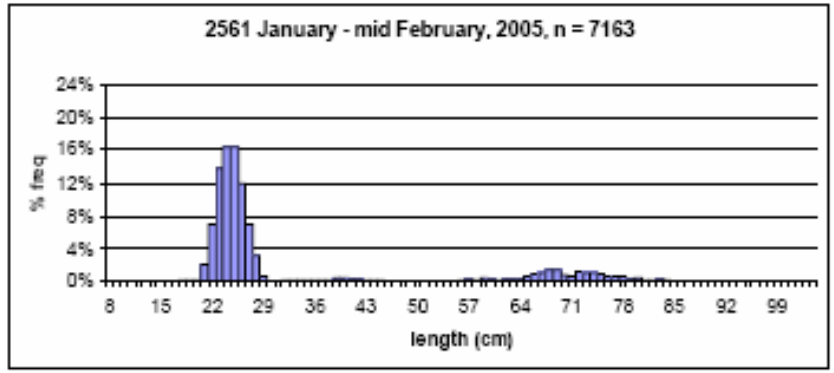


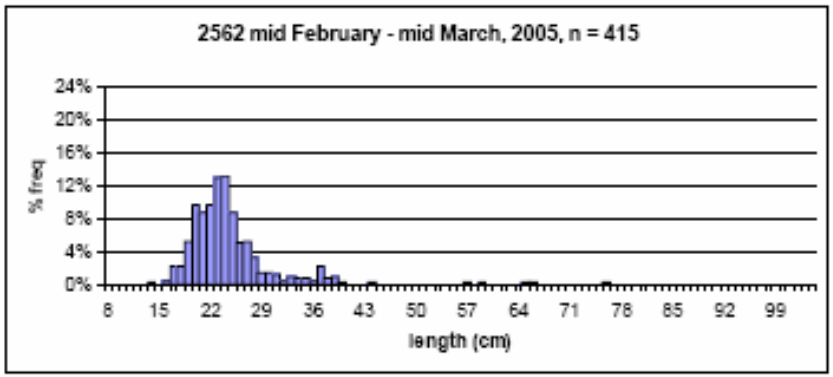


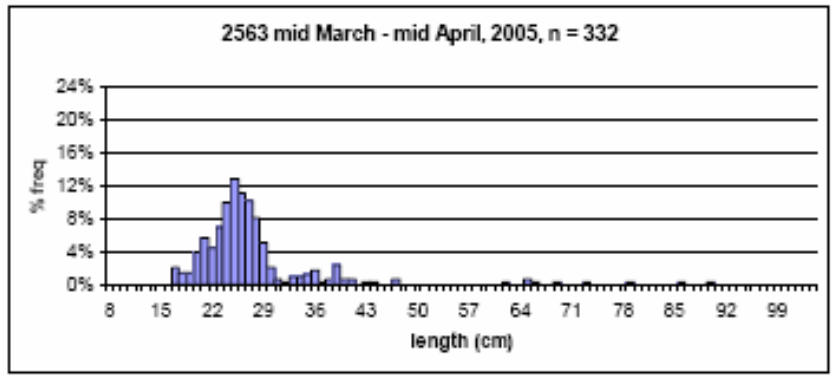


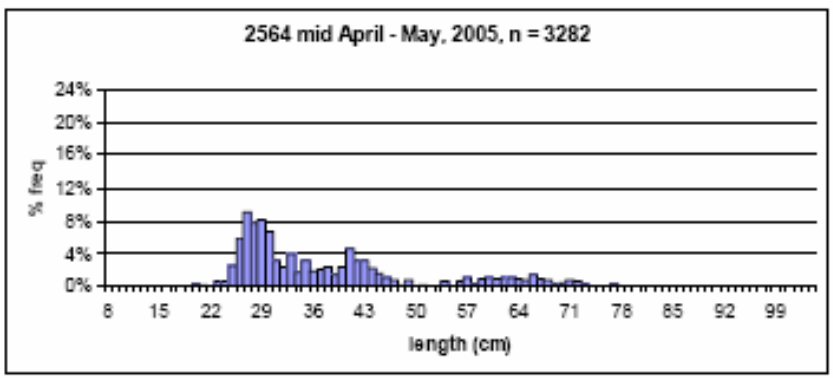
Pollock
(2004 – 2005)









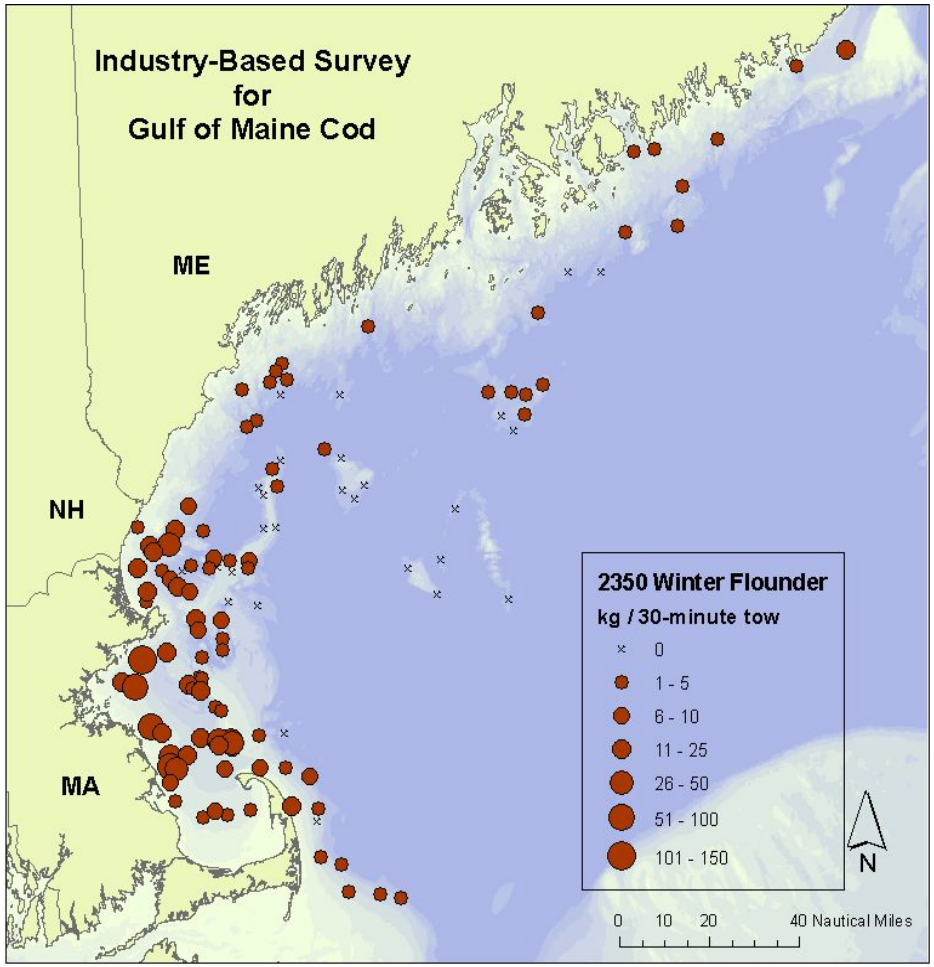


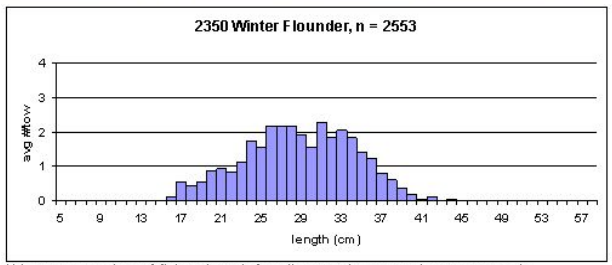
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

Winter Flounder

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise



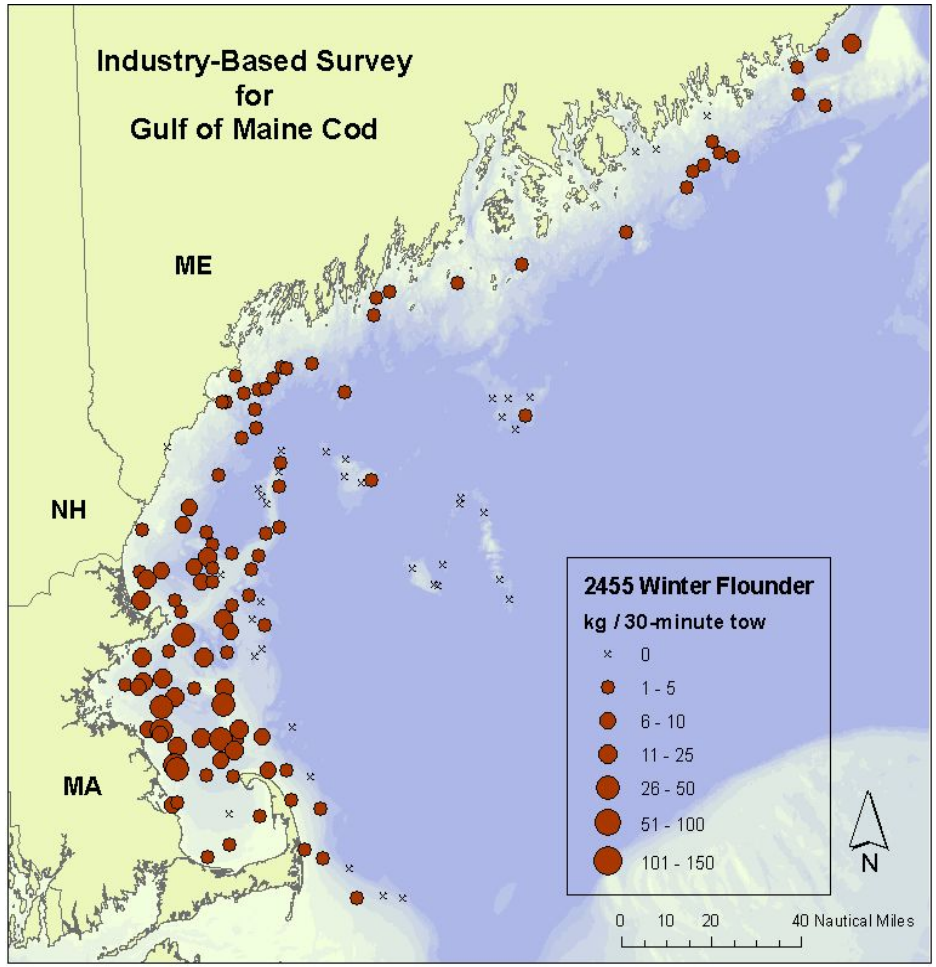


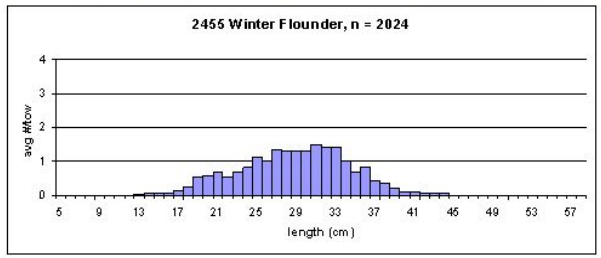
Winter Flounder
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



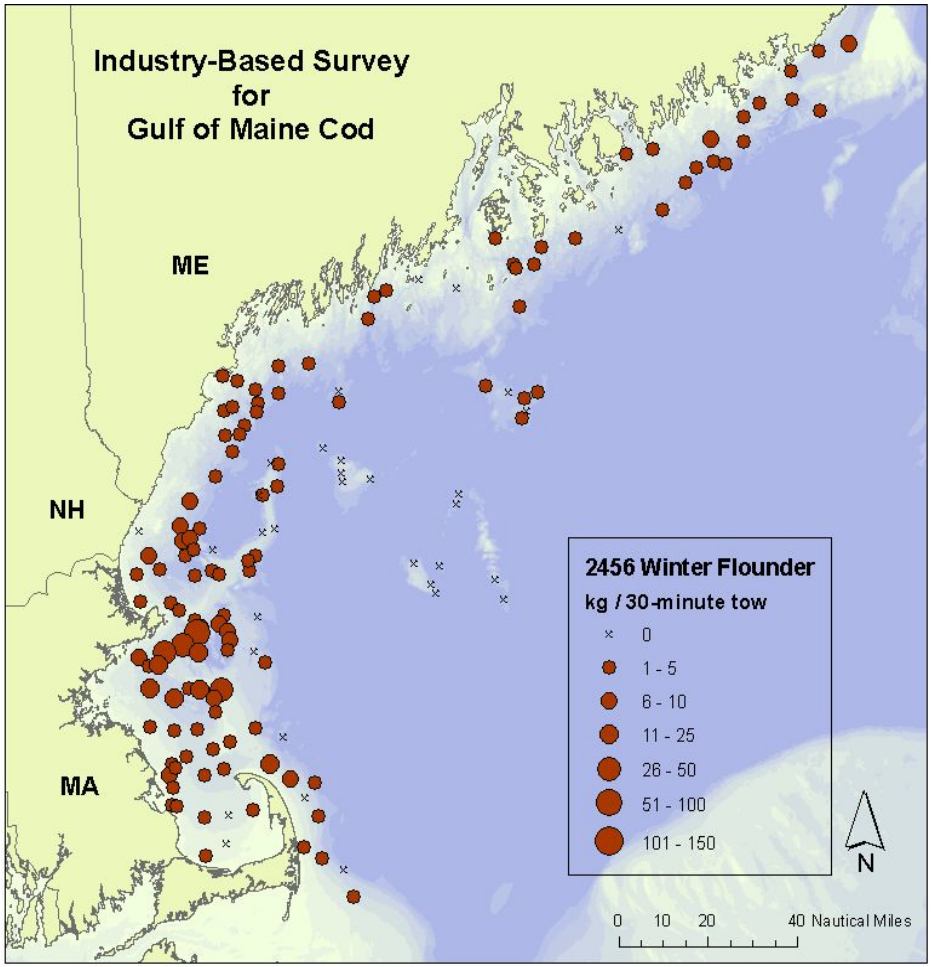


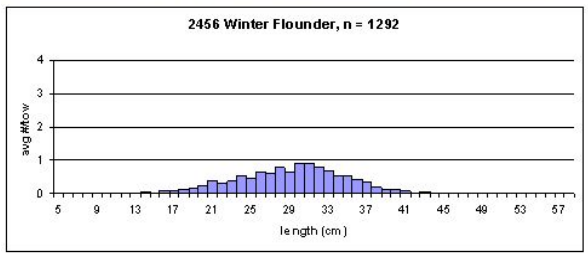
Winter Flounder
caught during the IBS for GOM cod survey

January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



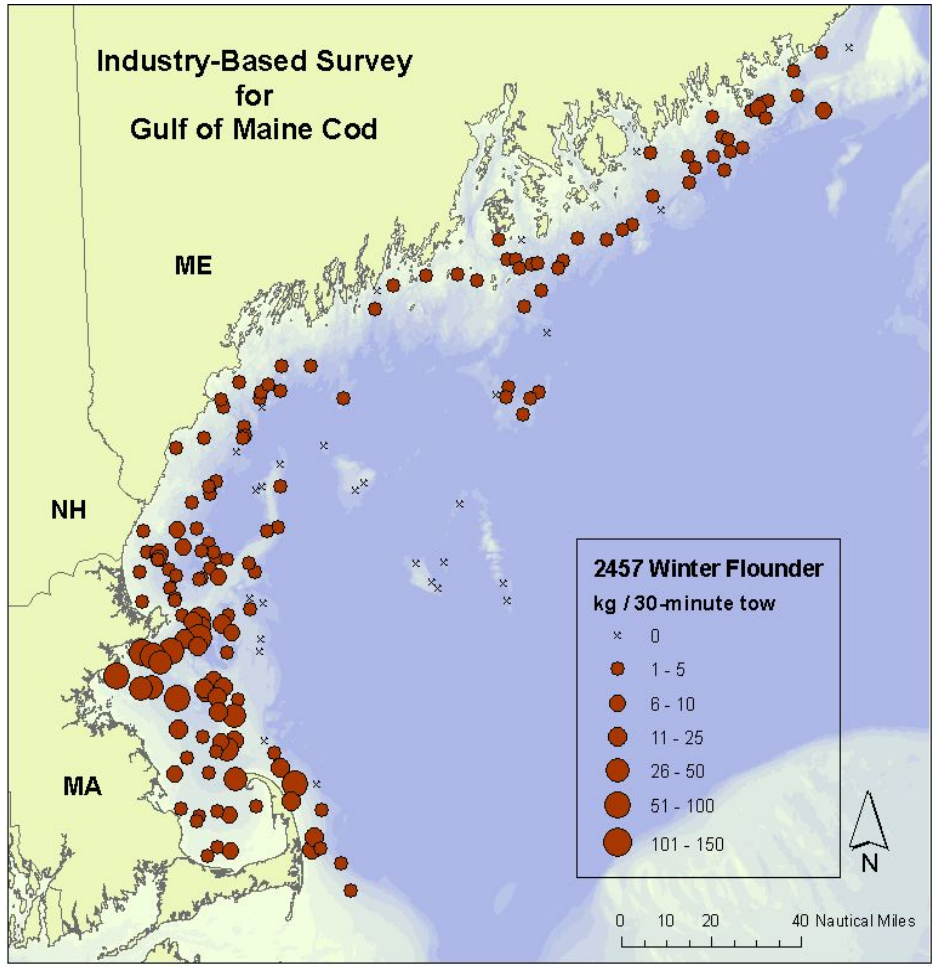


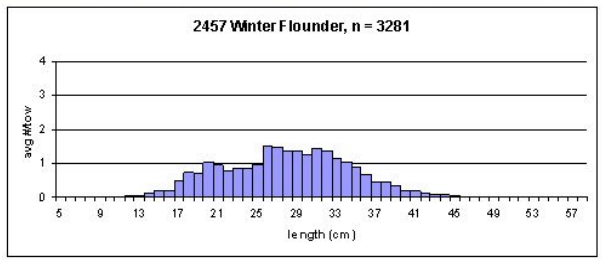
Winter Flounder
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



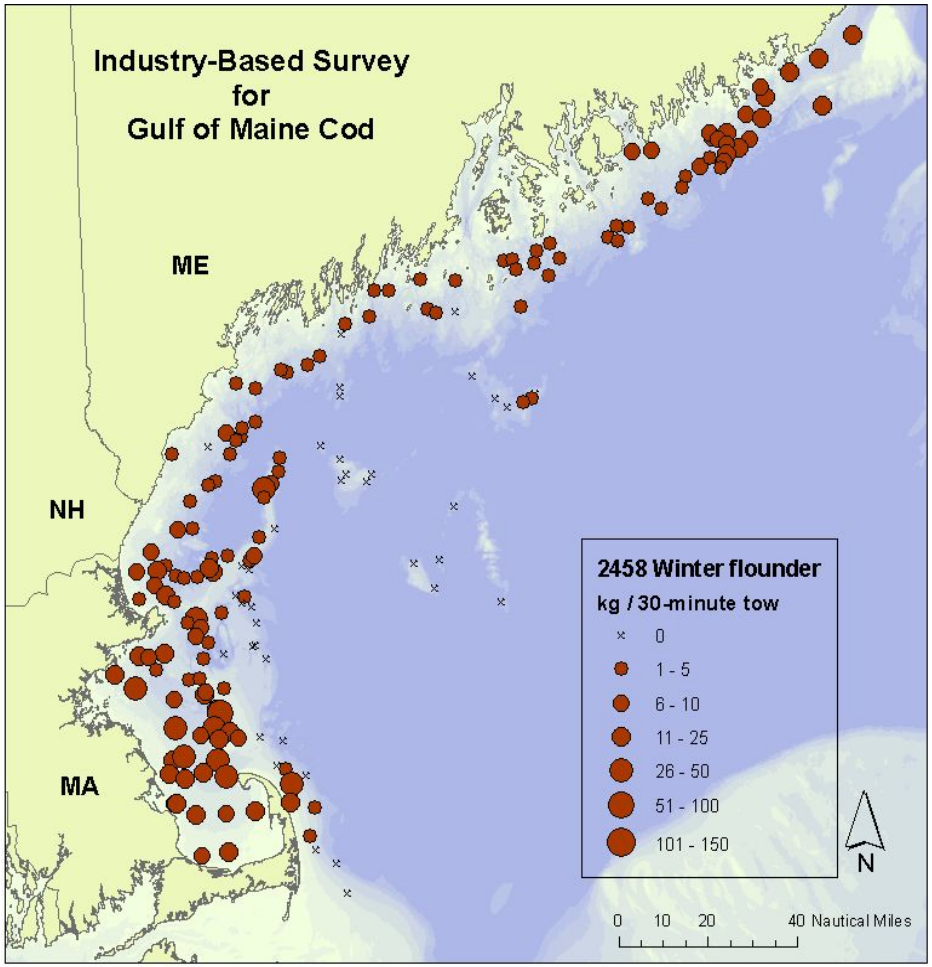


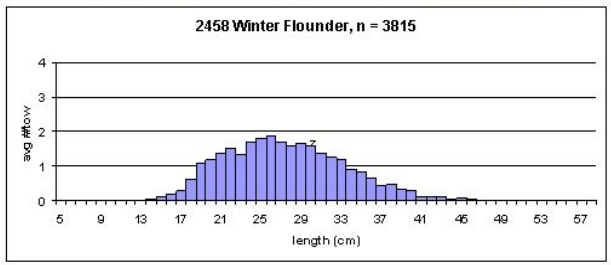
Winter Flounder
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



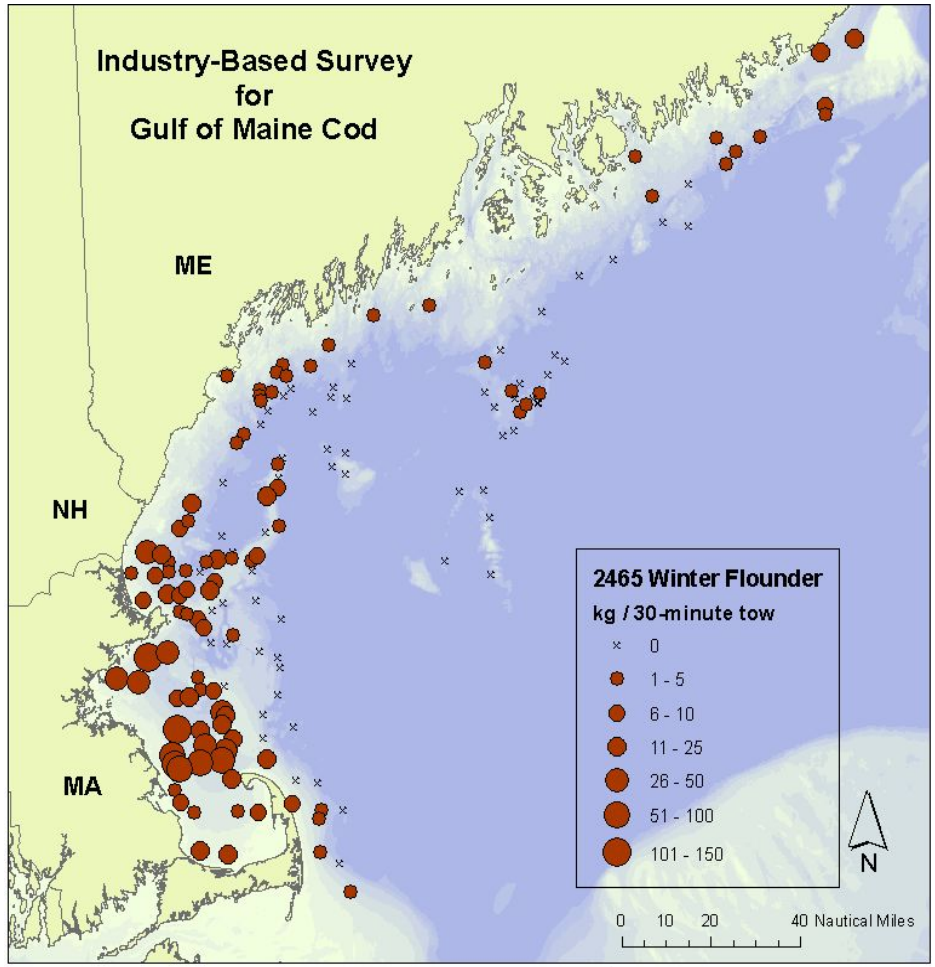


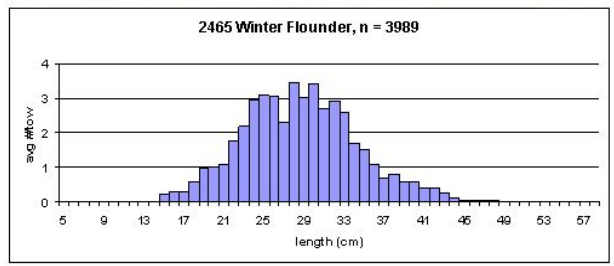
Winter Flounder
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



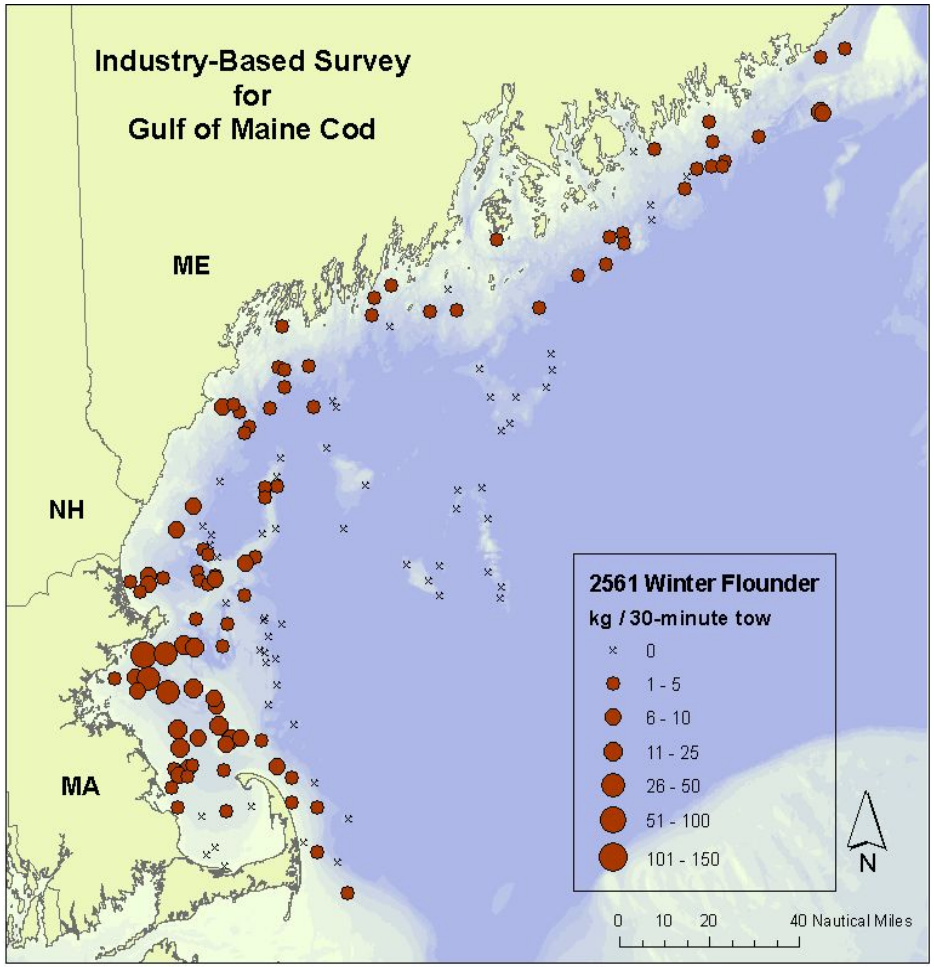


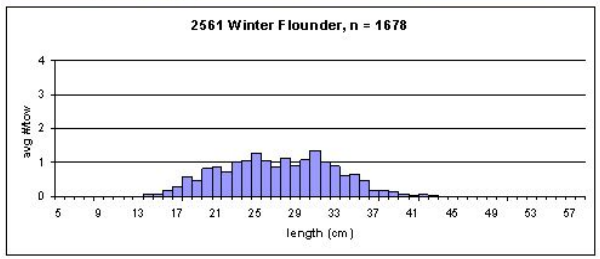
Winter Flounder
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



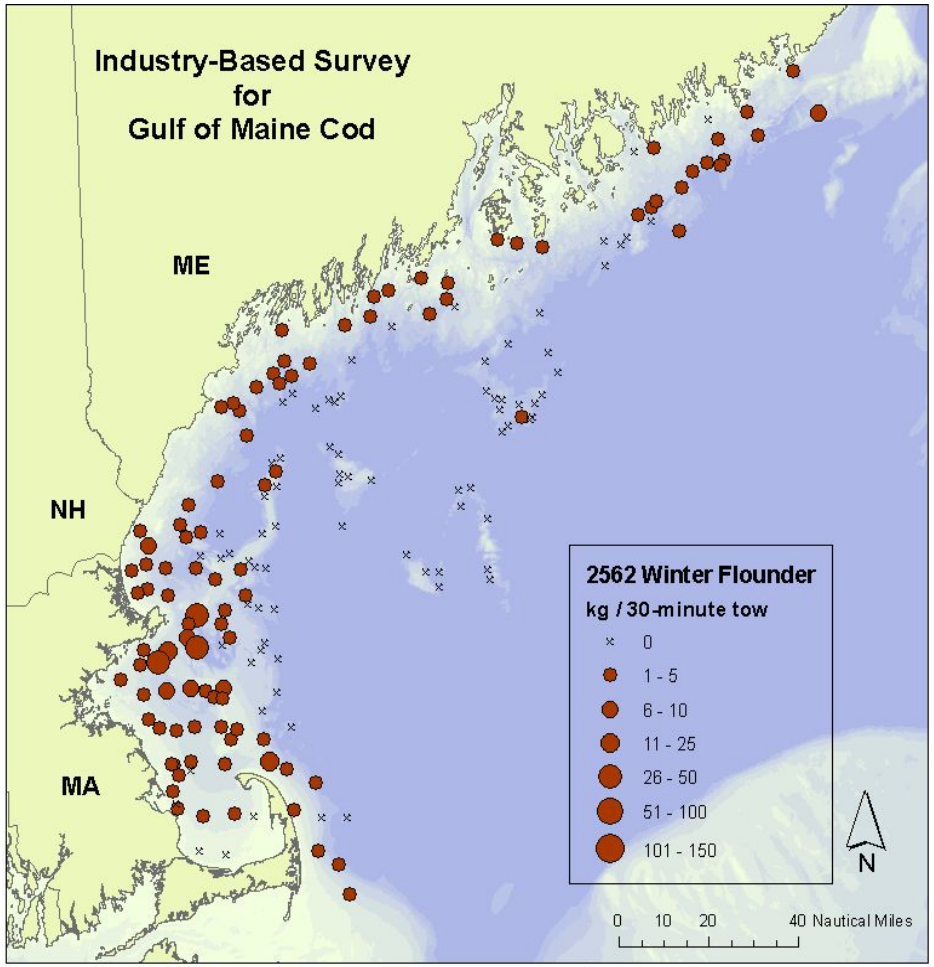


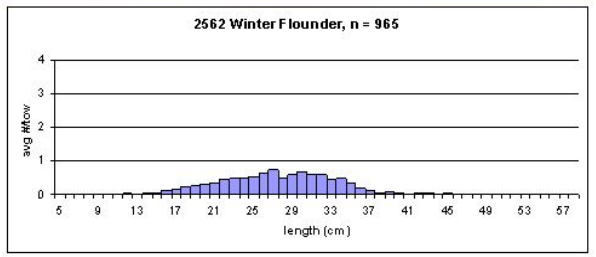
Winter Flounder
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured





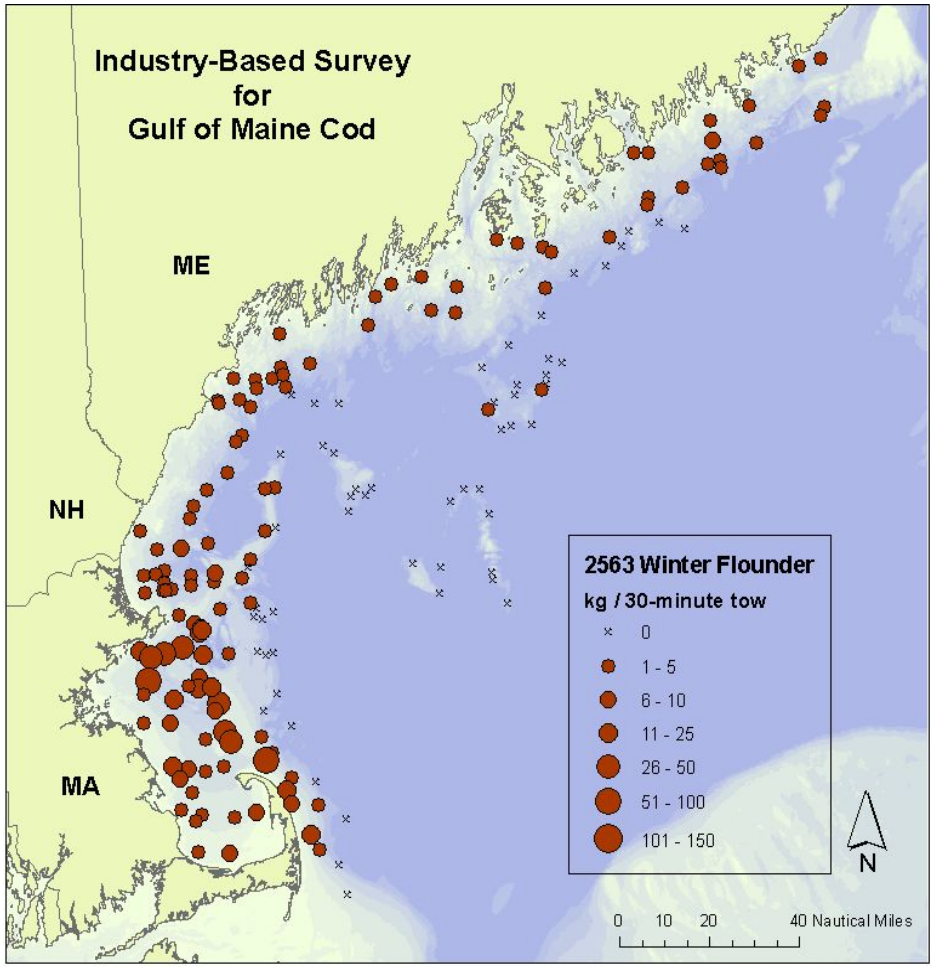
Winter Flounder
caught during the IBS for GOM cod survey

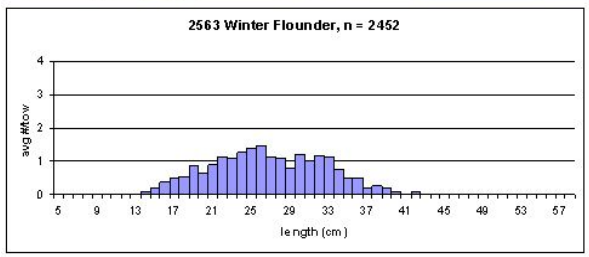
mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured

Appendix G. Winter Flounder



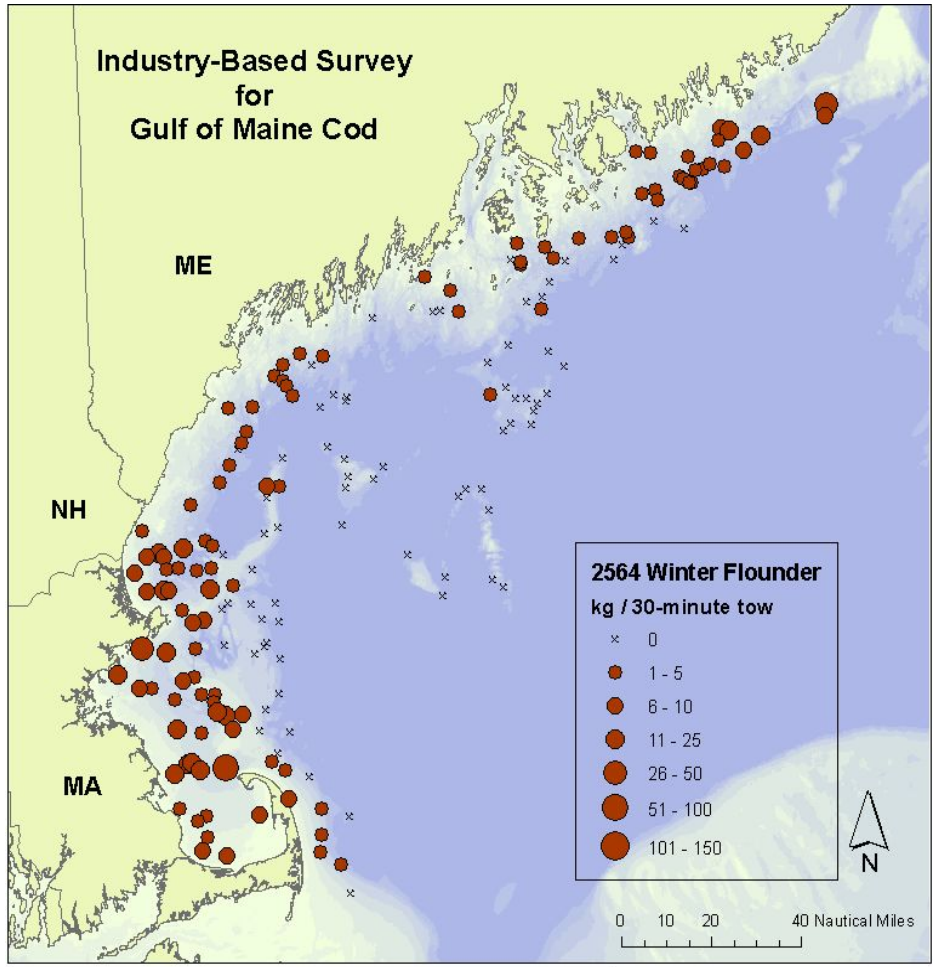


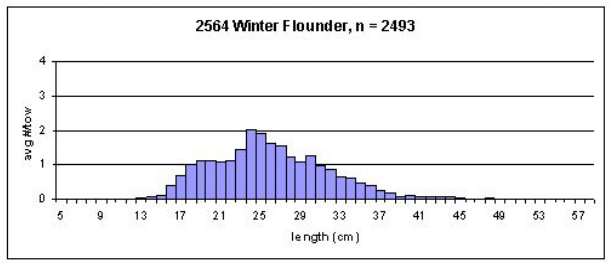
Winter Flounder
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured





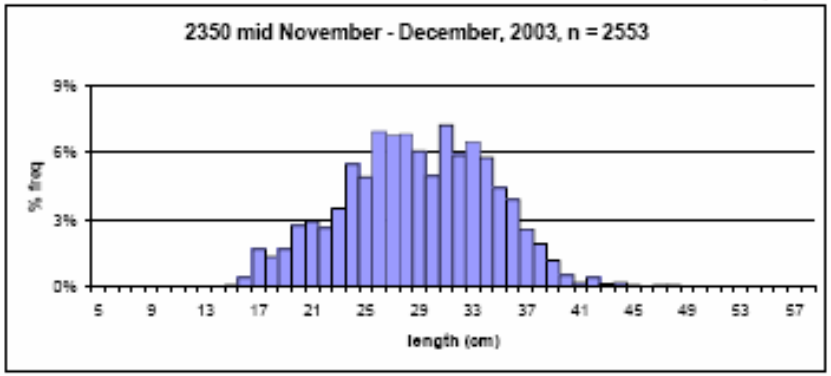
Winter Flounder
caught during the IBS for GOM cod survey

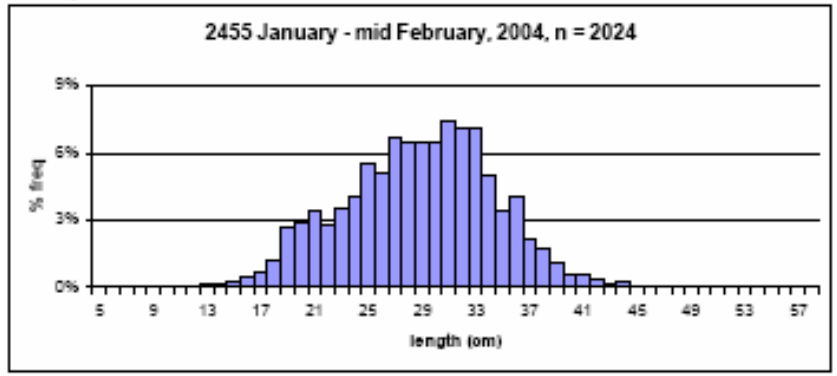
mid April - May
Year: 2005
Cruise: 2564

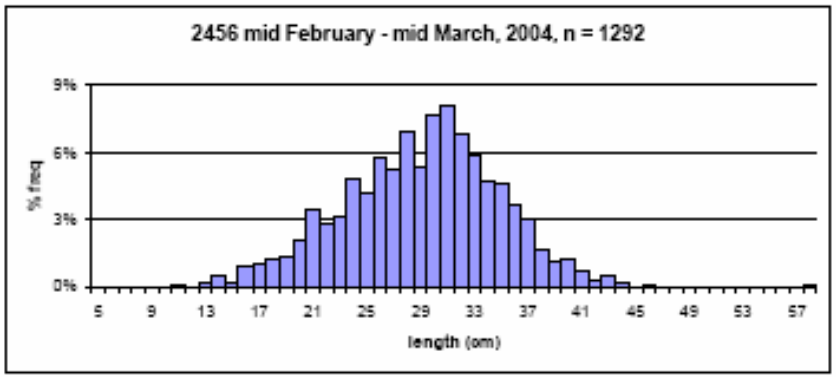
MarineFisheries

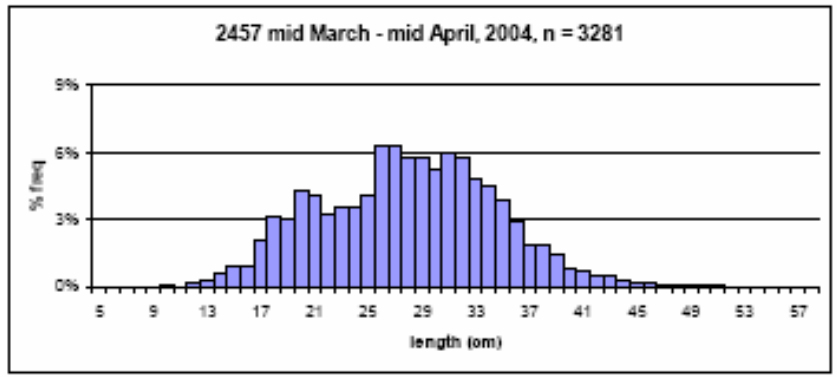
**Average number of fish at length for all tows where species were caught.
n= number of fish measured

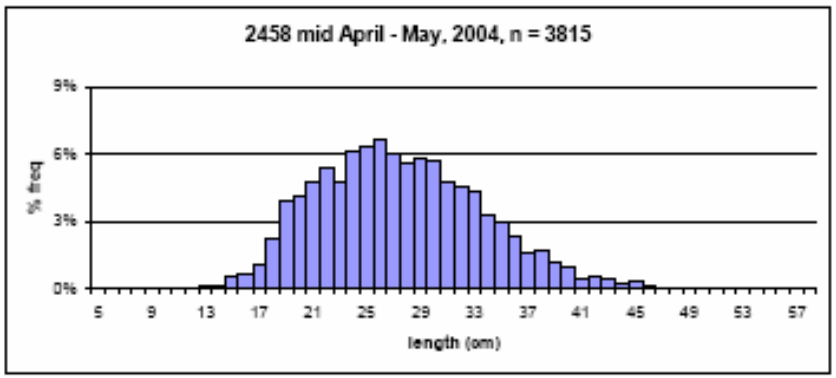
Winter Flounder
(2003 – 2004)



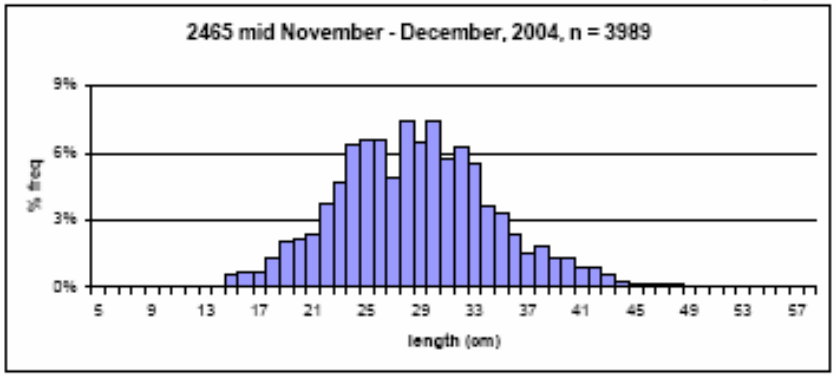


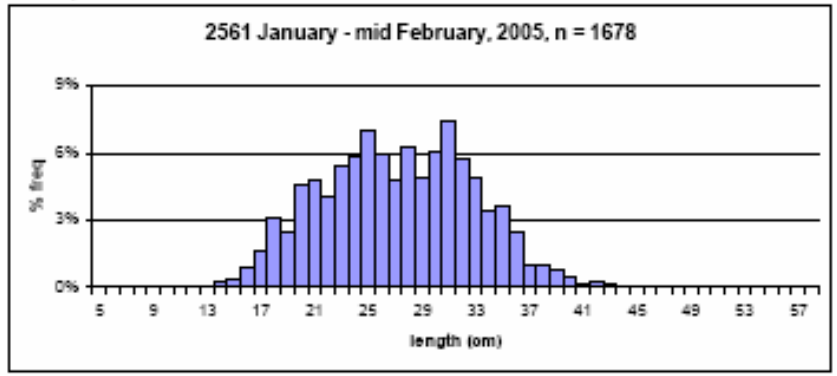


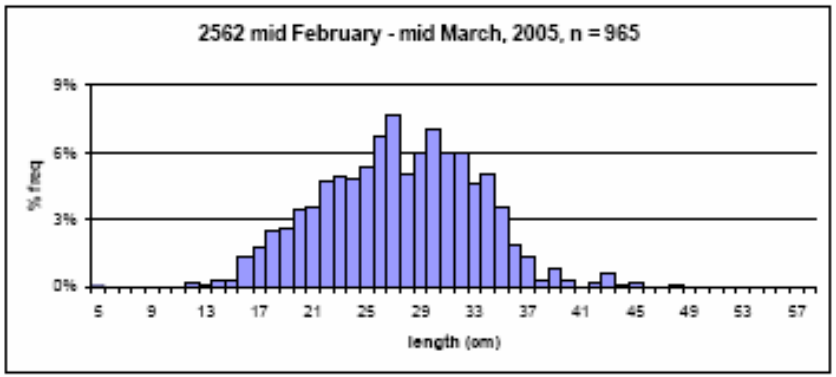


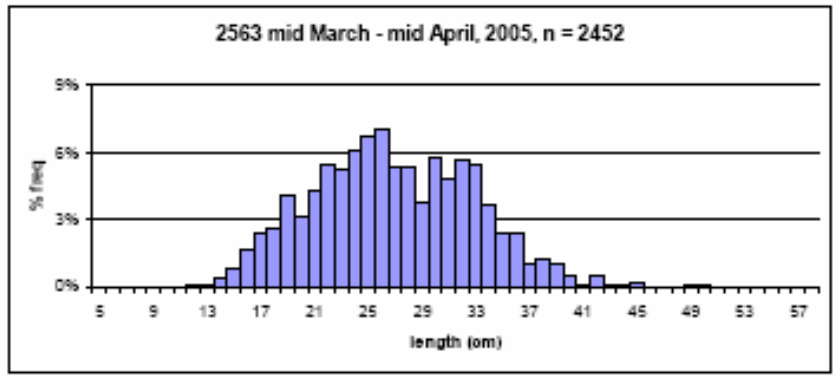


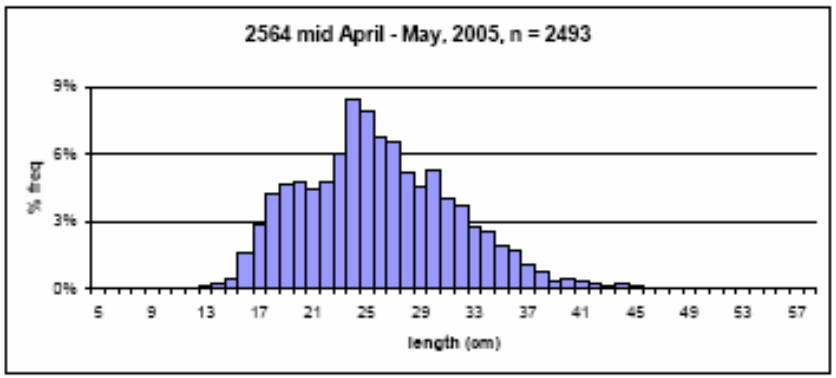
Winter Flounder
(2004 – 2005)









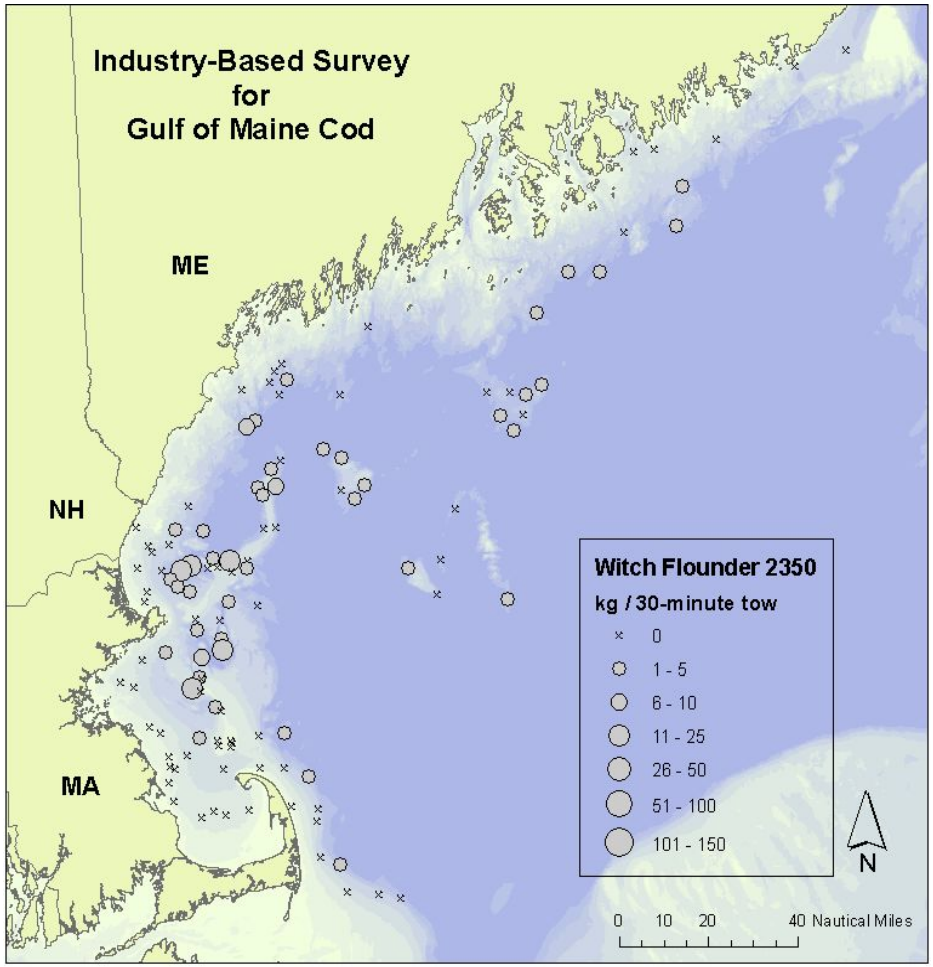


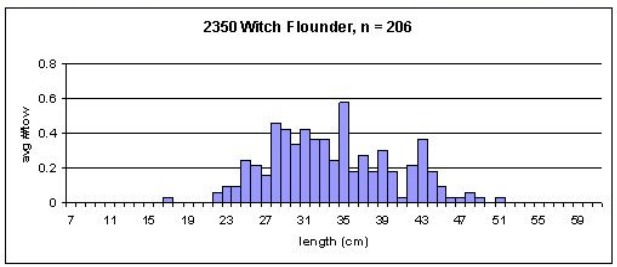
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

Witch Flounder

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise



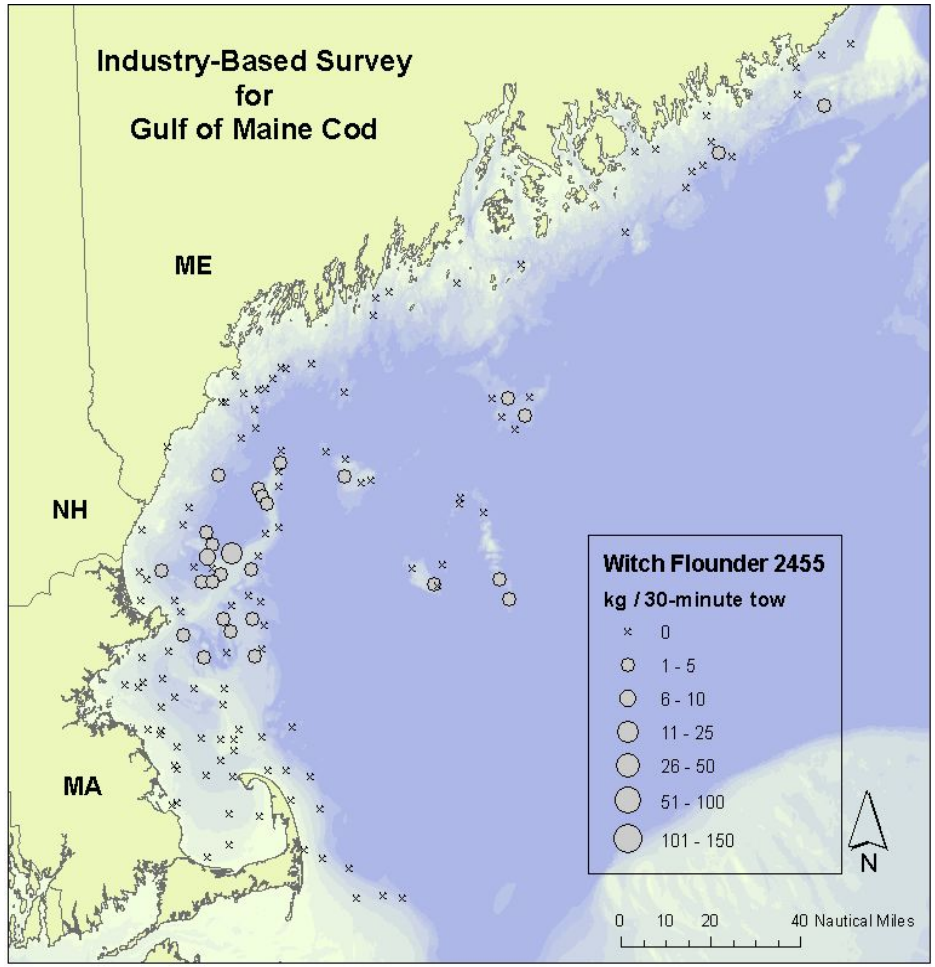


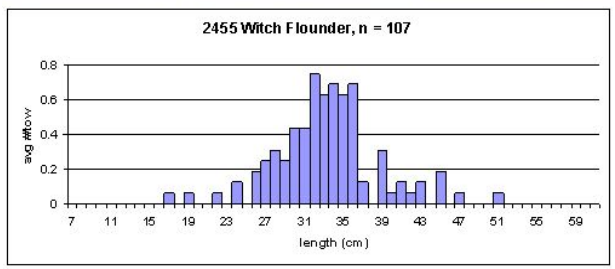
Witch Flounder
caught during the IBS for GOM cod survey

Mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

**Average number of fish at length for all tows where species were caught



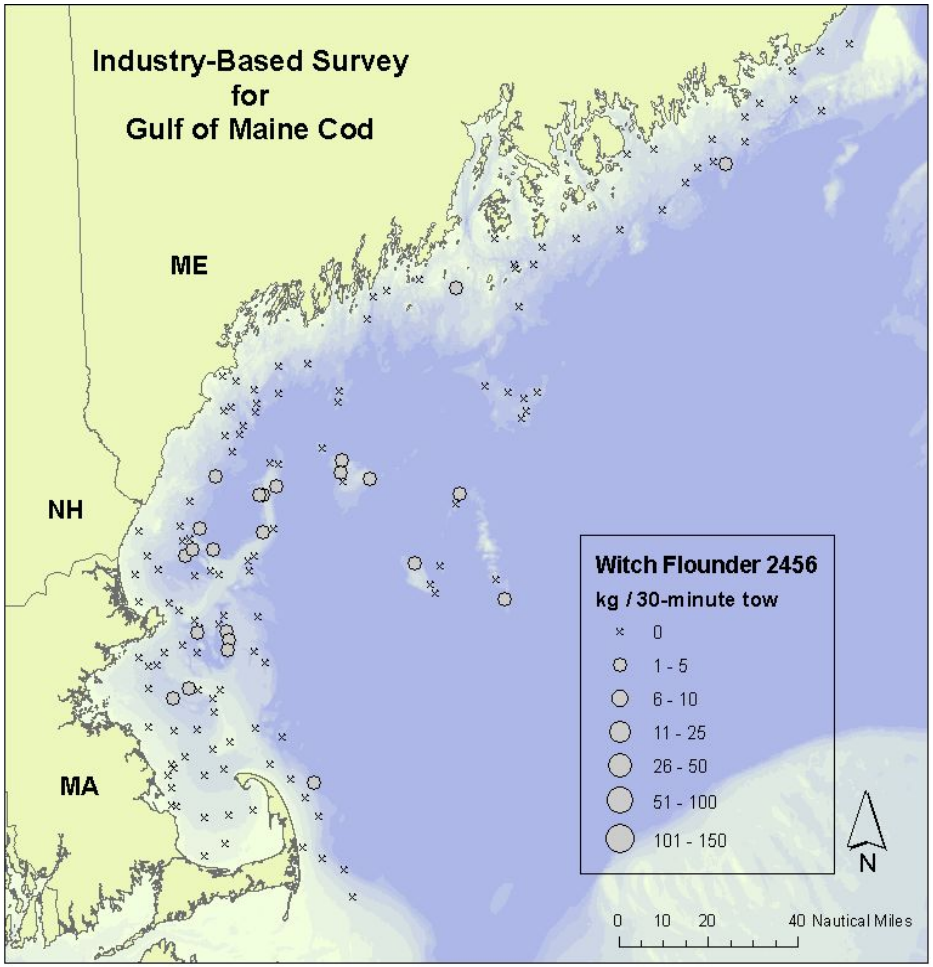


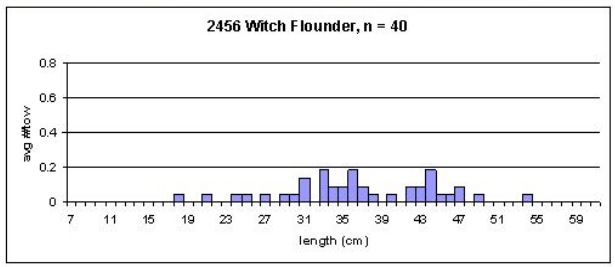
Witch Flounder
caught during the IBS for GOM cod survey

January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

**Average number of fish at length for all tows where species were caught



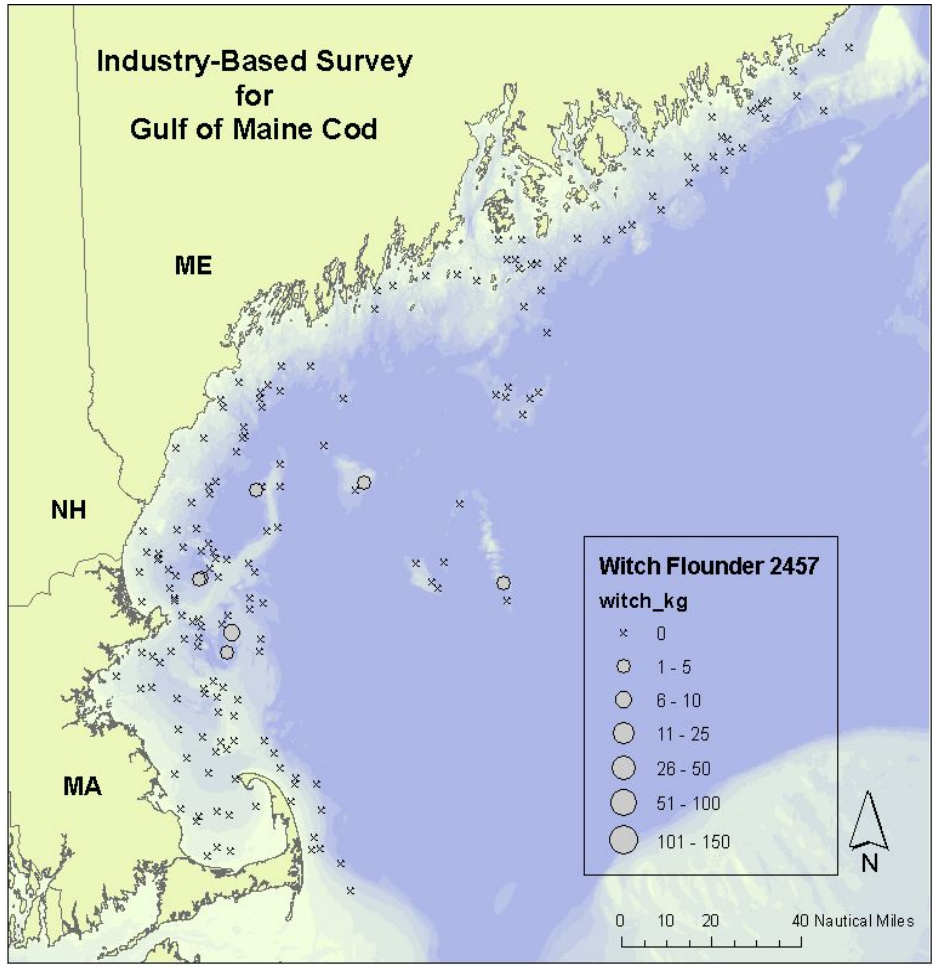


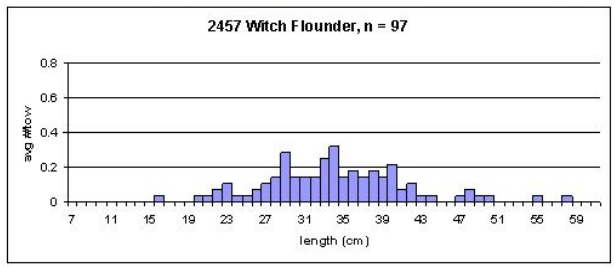
Witch Flounder
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

**Average number of fish at length for all tows where species were caught



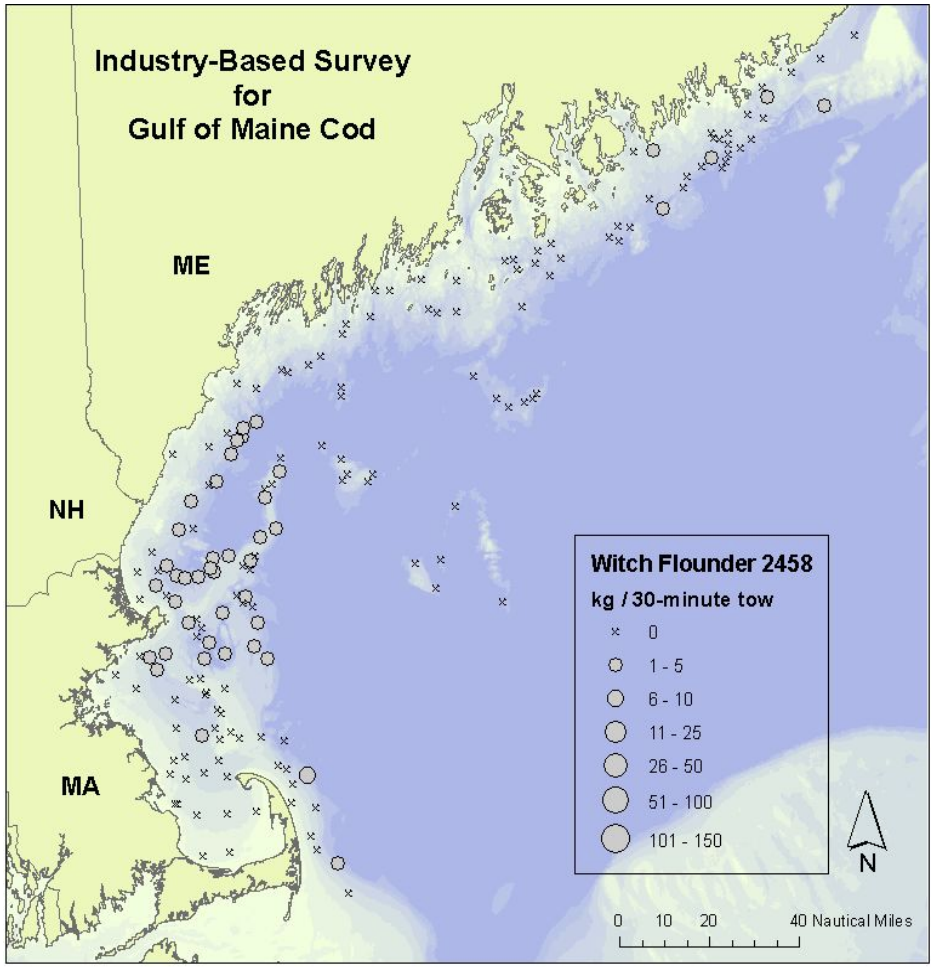


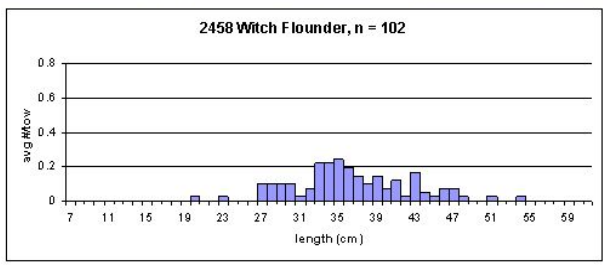
Witch Flounder
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

**Average number of fish at length for all tows where species were caught



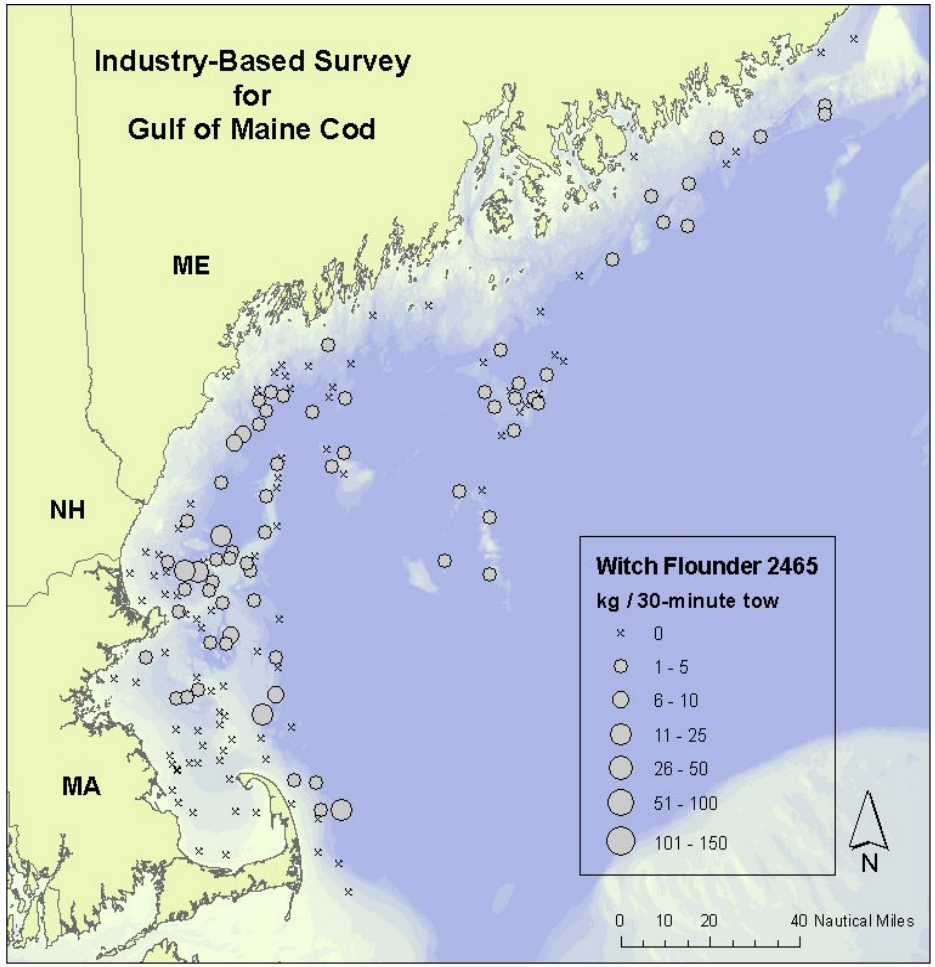


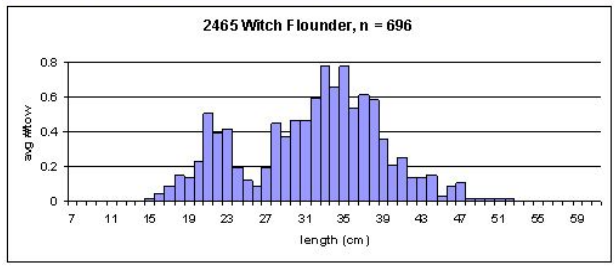
Witch Flounder
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

MarineFisheries

**Average number of fish at length for all tows where species were caught



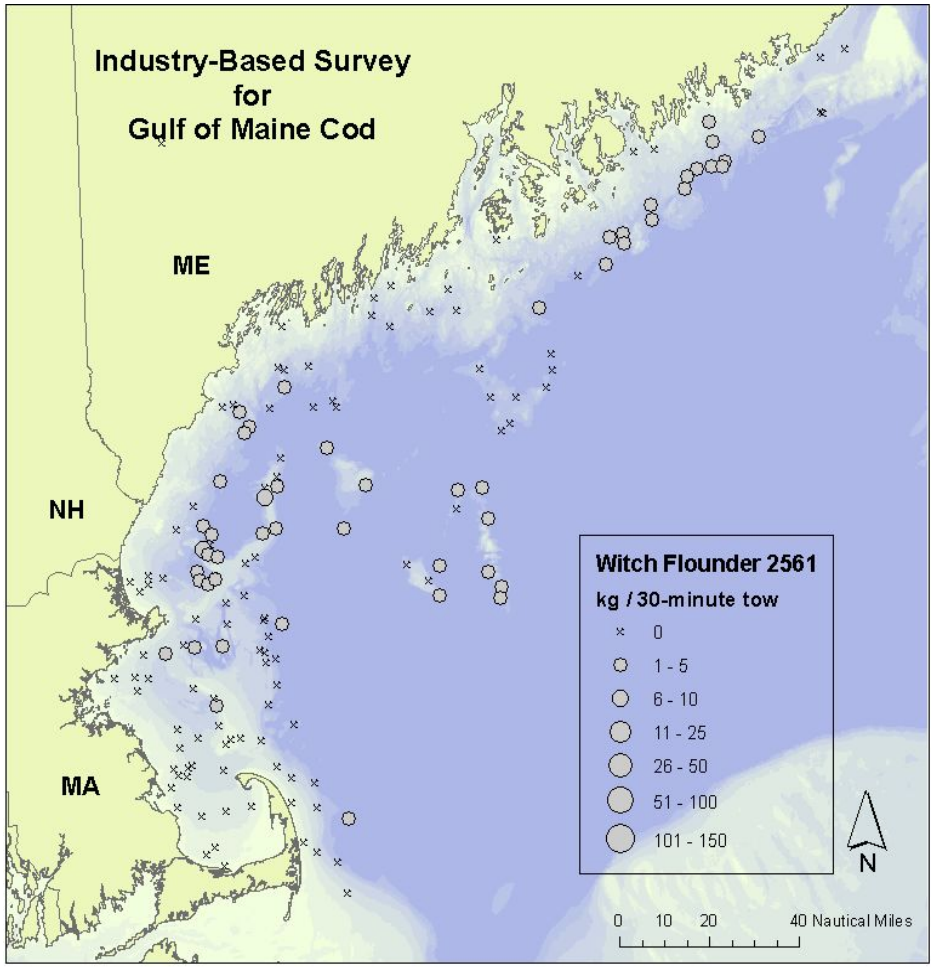


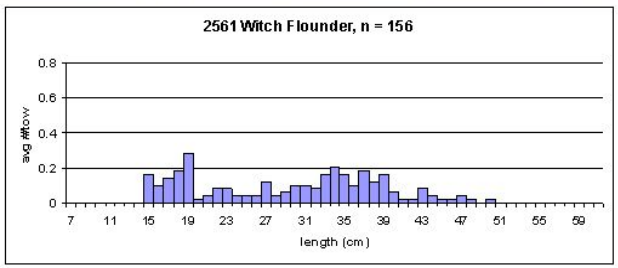
Witch Flounder
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

MarineFisheries

**Average number of fish at length for all tows where species were caught



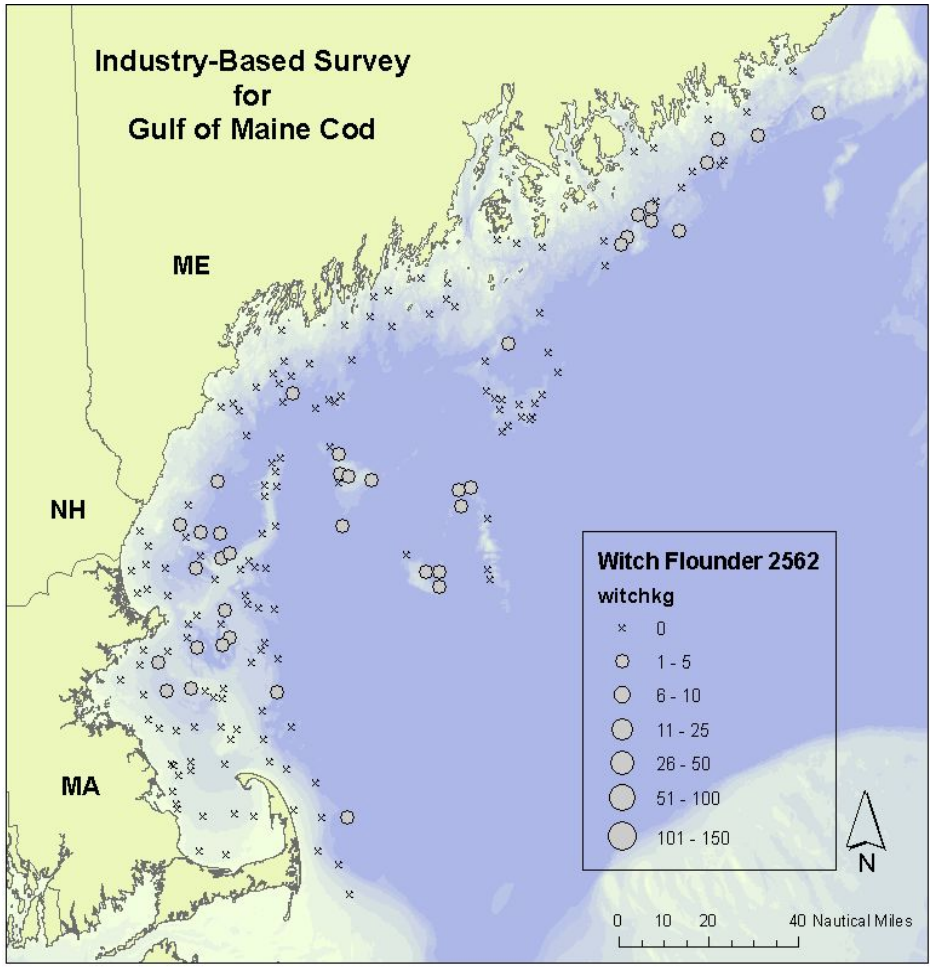


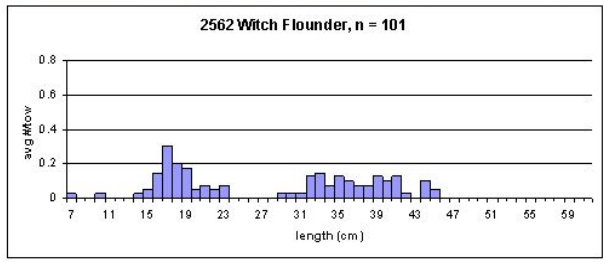
Witch Flounder
caught during the IBS for GOM cod survey

January - mid February
Year: 2005
Cruise: 2561

MarineFisheries

**Average number of fish at length for all tows where species were caught



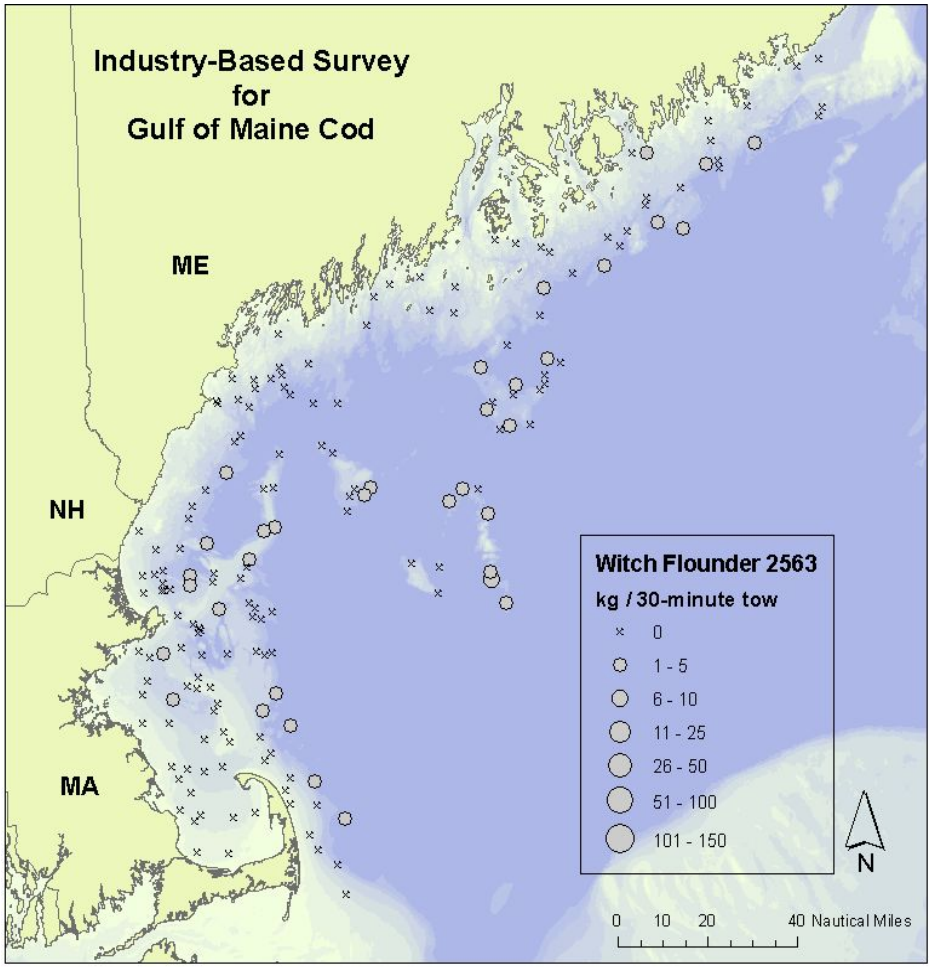


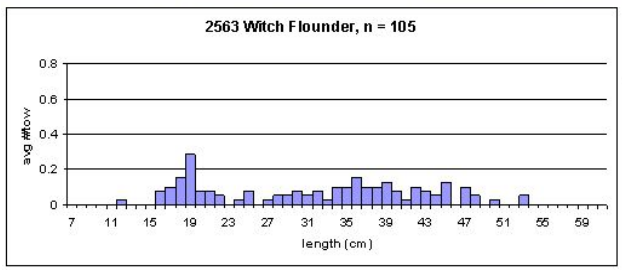
Witch Flounder
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2005
Cruise: 2562

MarineFisheries

**Average number of fish at length for all tows where species were caught



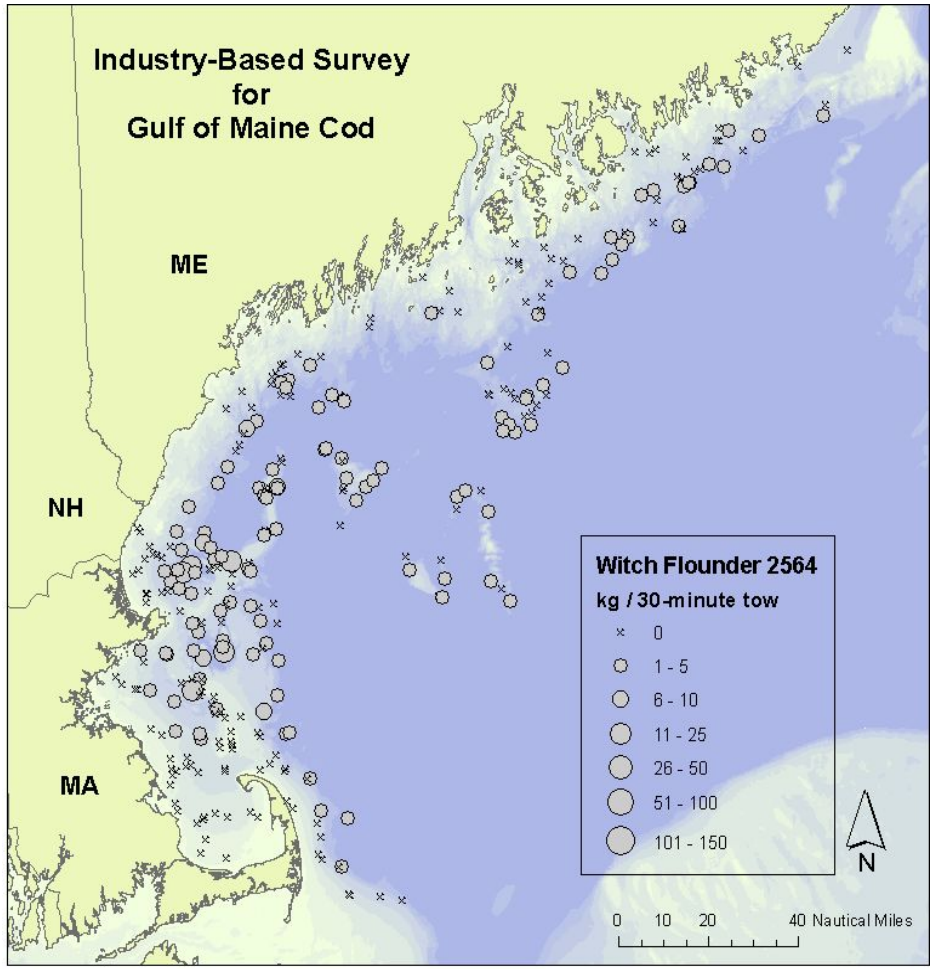


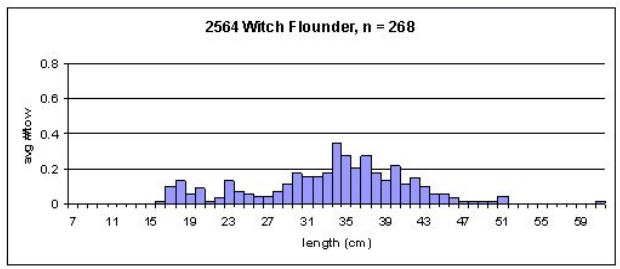
Witch Flounder
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

**Average number of fish at length for all tows where species were caught





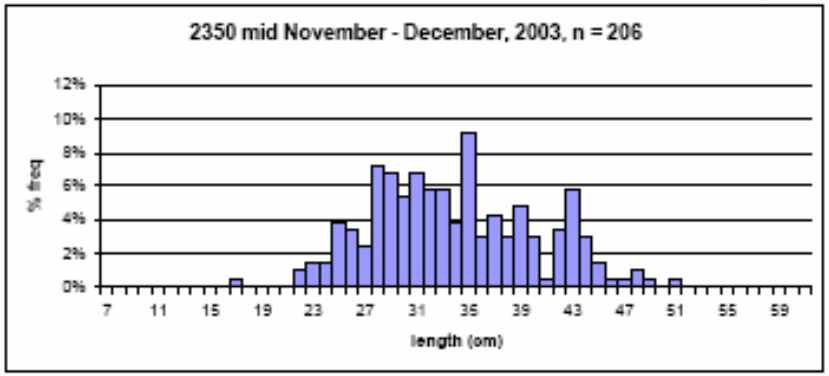
Witch Flounder
caught during the IBS for GOM cod survey

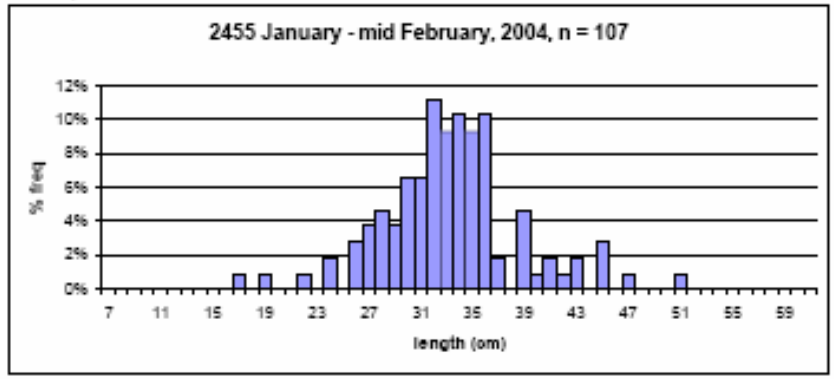
mid April - May
Year: 2005
Cruise: 2564

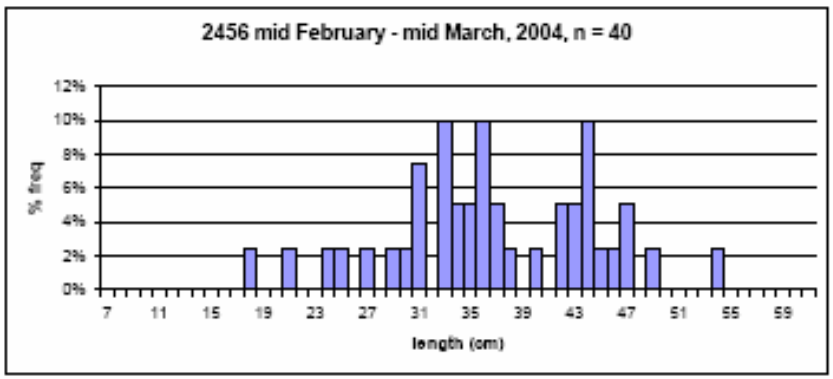
MarineFisheries

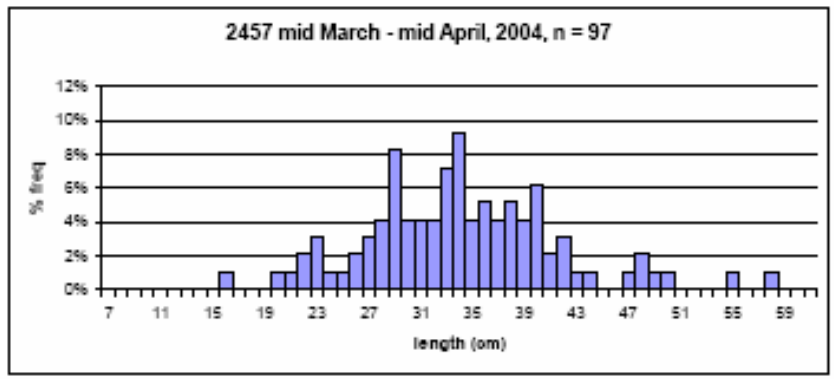
**Average number of fish at length for all tows where species were caught

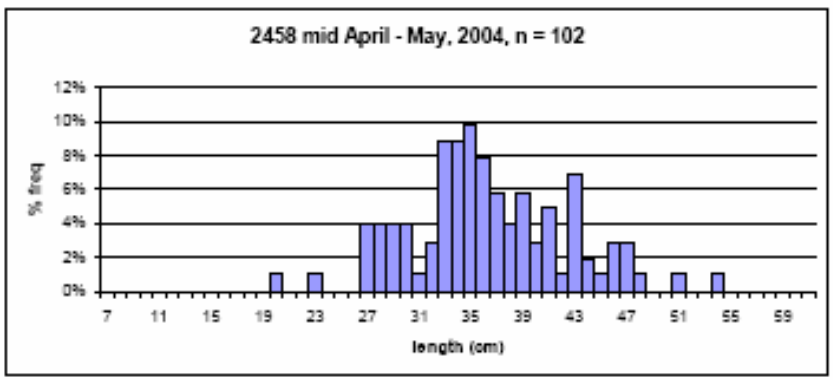
Witch Flounder
(2003 – 2004)



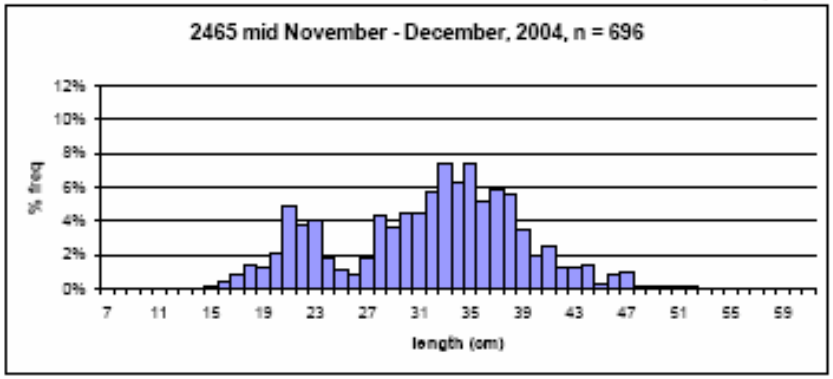


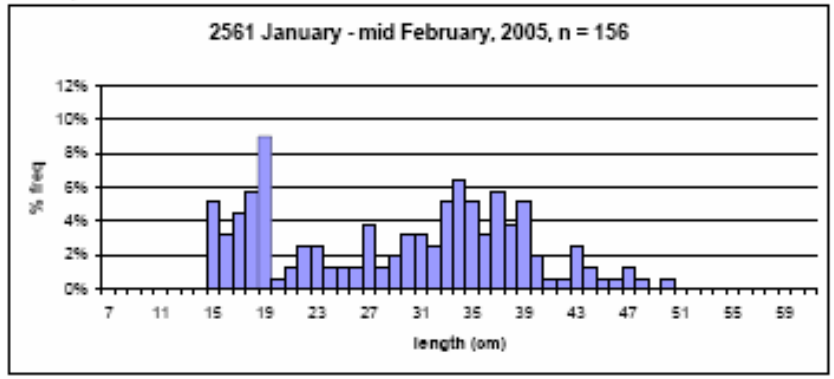


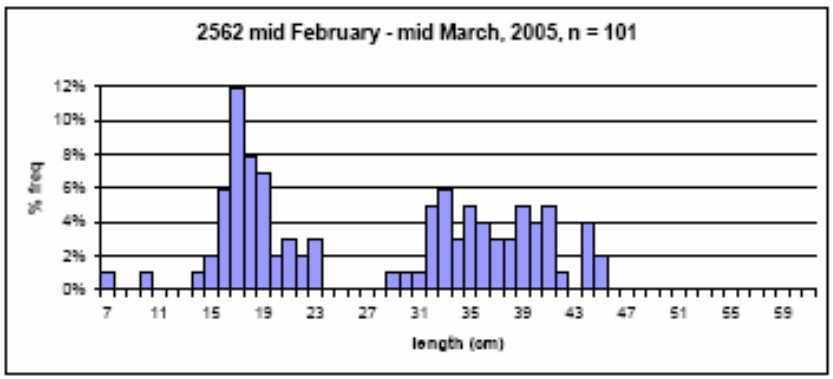


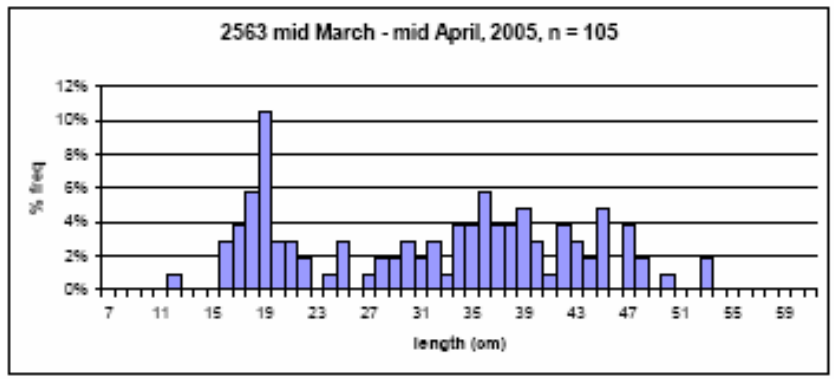


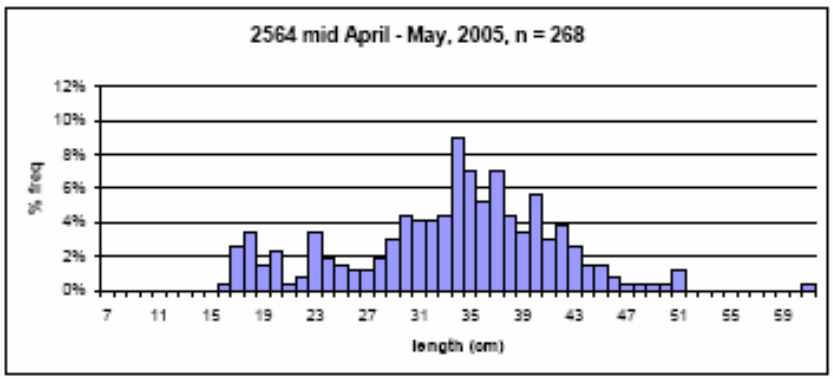
Witch Flounder
(2004 – 2005)









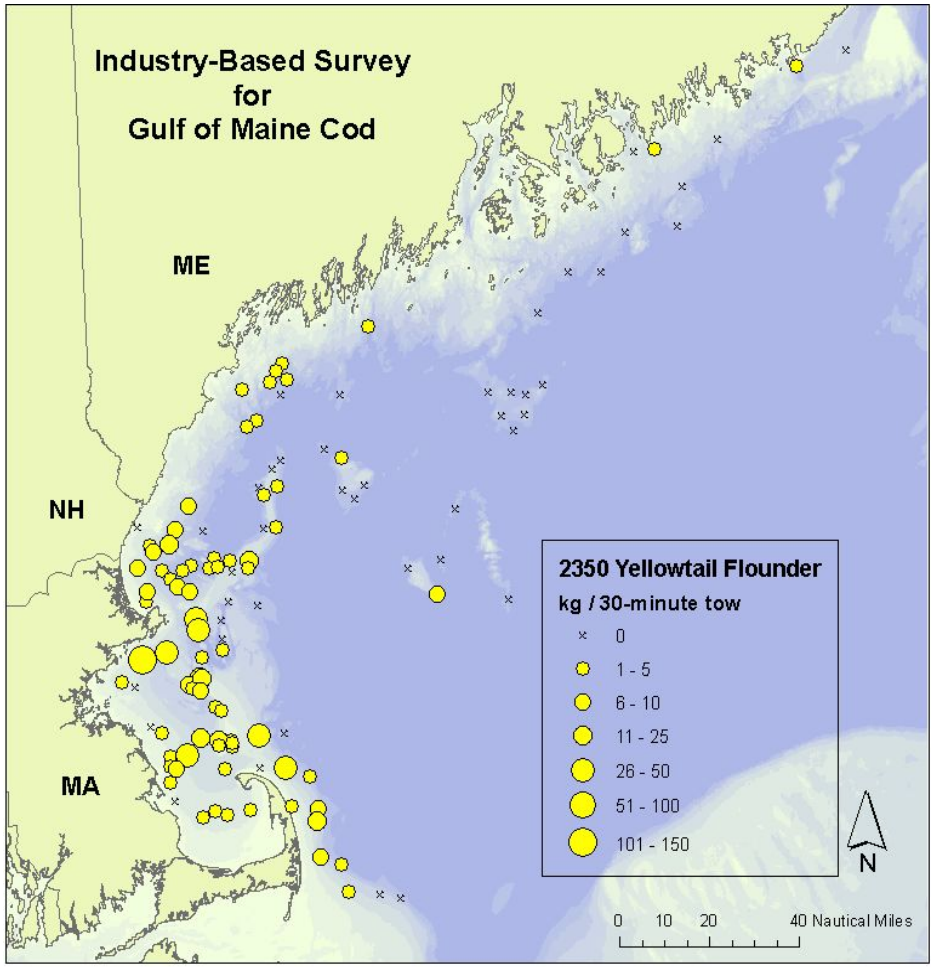


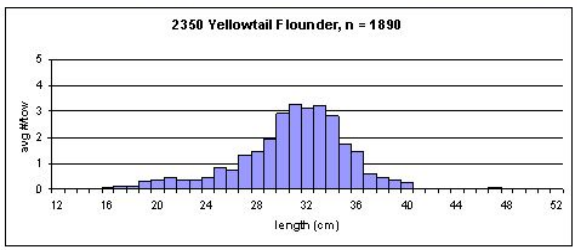
Industry-Based Survey for Gulf of Maine Cod

03/04 & 04/05 Survey Results

Yellowtail Flounder

Spatial and temporal distribution by cruise, average number of fish at length where species were caught by cruise, and percent frequency at length by cruise



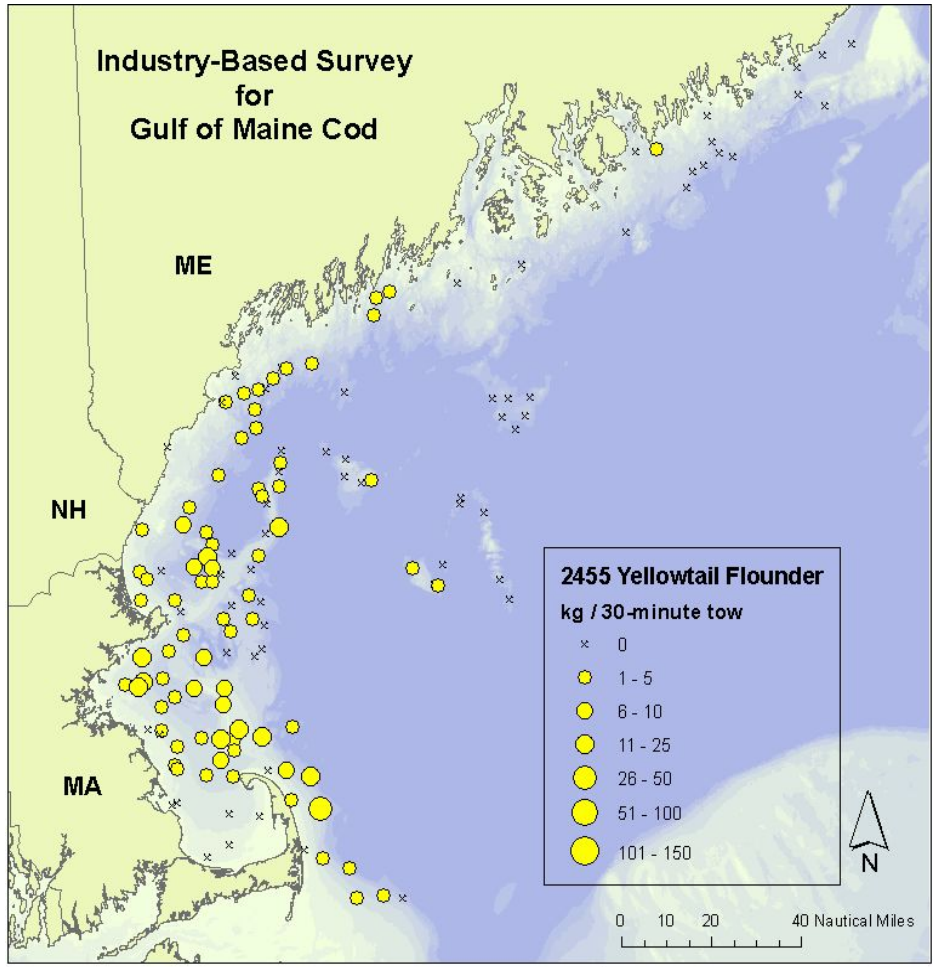


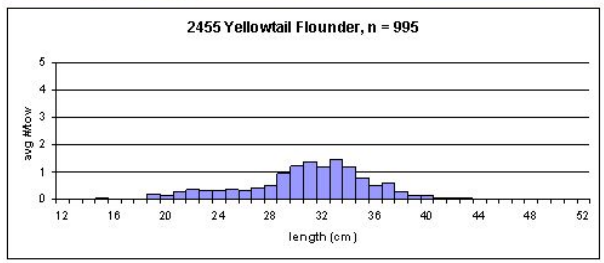
Yellowtail Flounder
caught during the IBS for GOM cod survey

mid November - December
Year: 2003
Cruise: 2350

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured





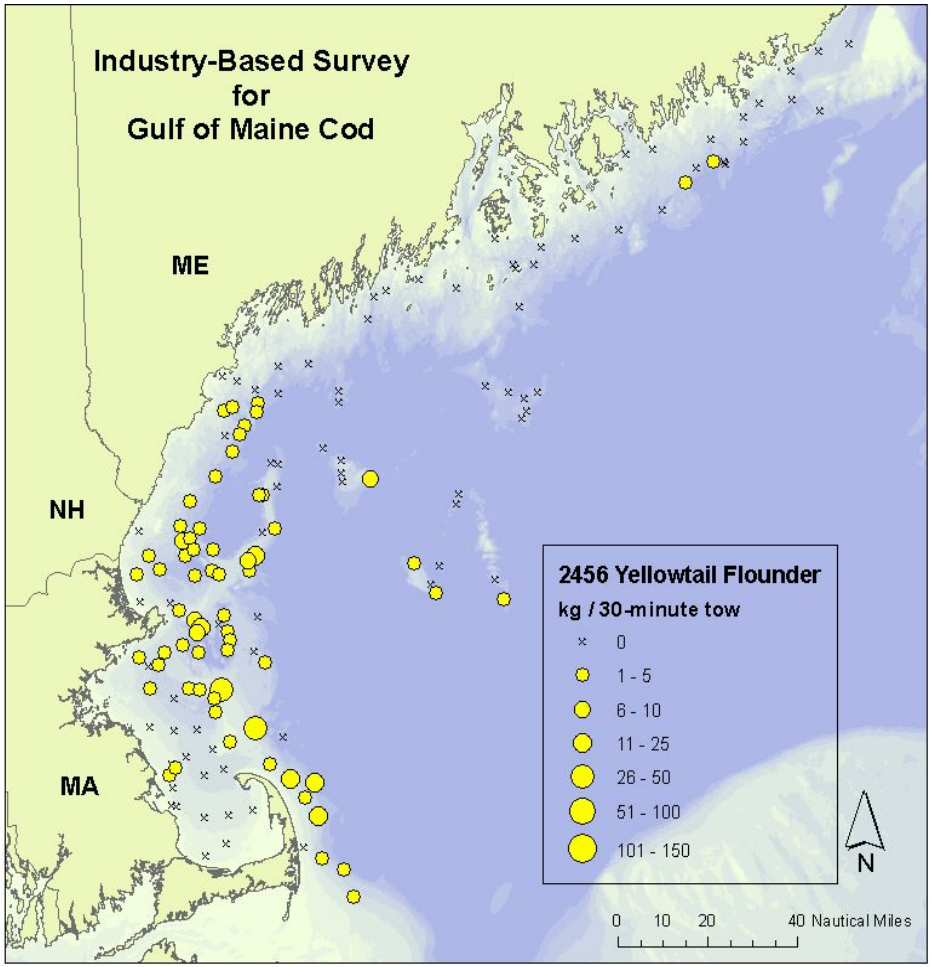
Yellowtail Flounder
caught during the IBS for GOM cod survey

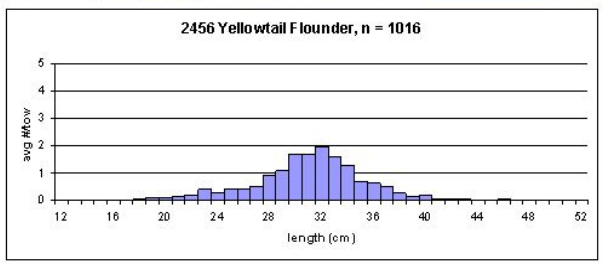
January - mid February
Year: 2004
Cruise: 2455

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured

Appendix G. Yellowtail Flounder



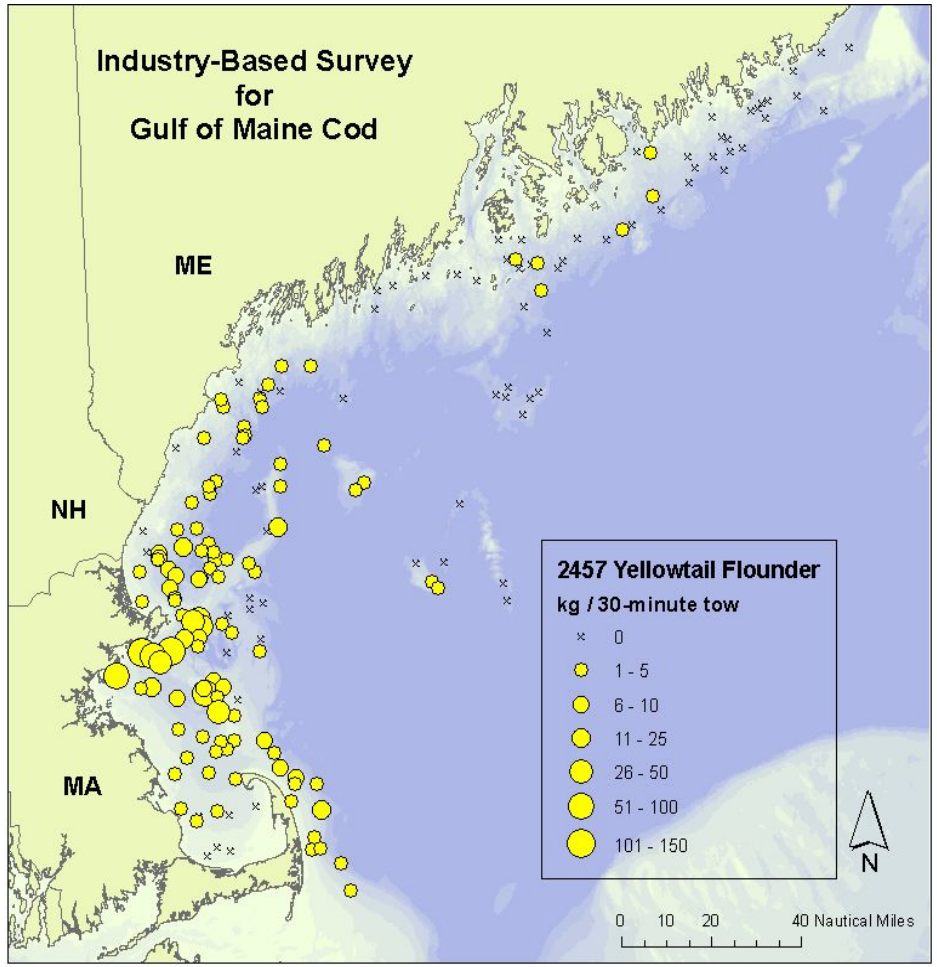


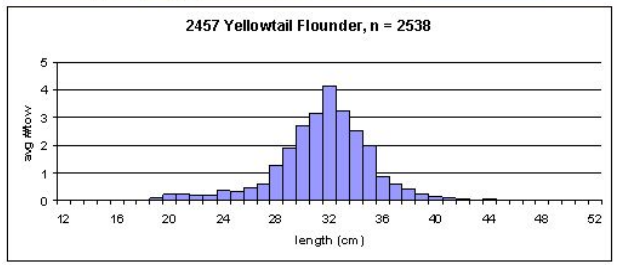
Yellowtail Flounder
caught during the IBS for GOM cod survey

mid February - mid March
Year: 2004
Cruise: 2456

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



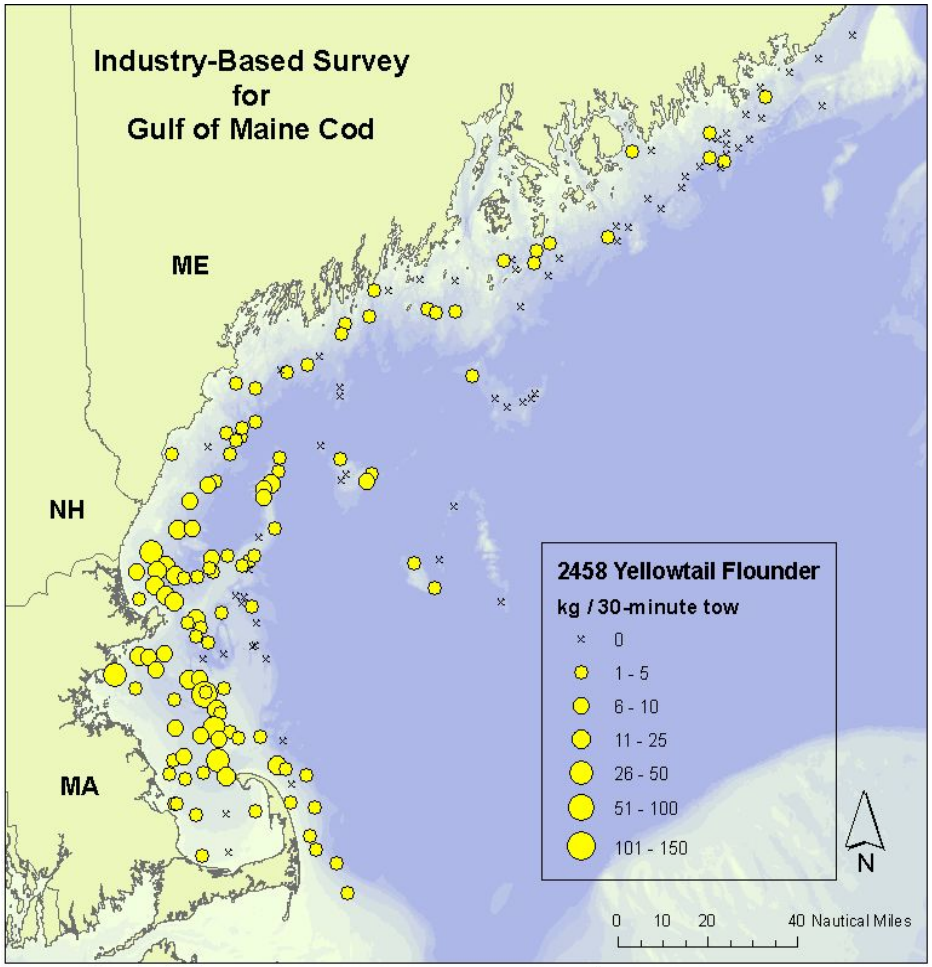


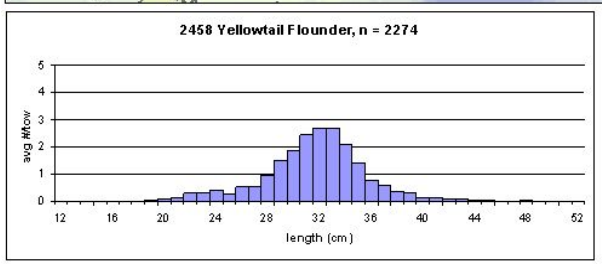
Yellowtail Flounder
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2004
Cruise: 2457

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



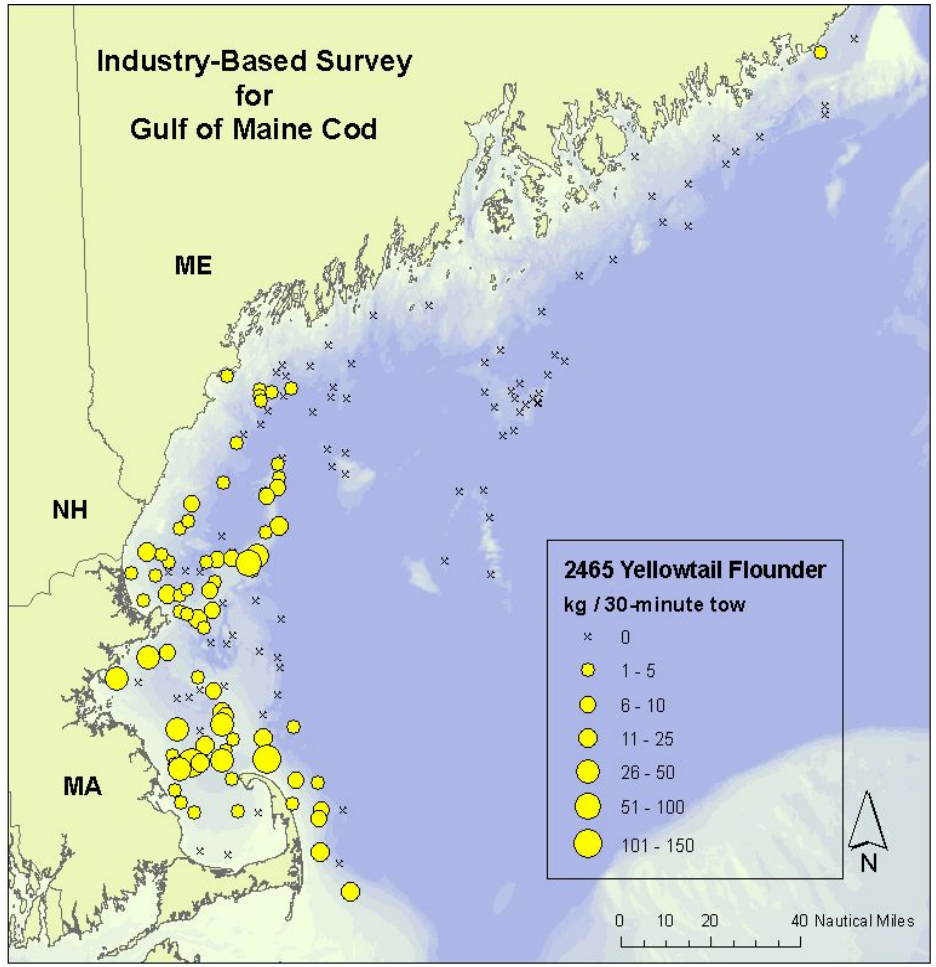


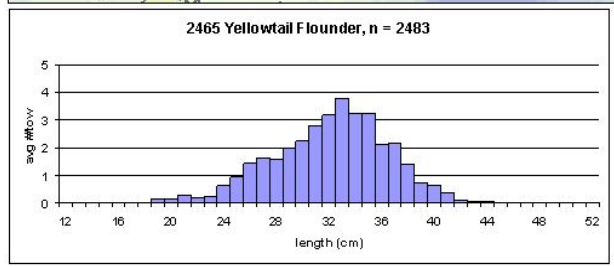
Yellowtail Flounder
caught during the IBS for GOM cod survey

mid April - May
Year: 2004
Cruise: 2458

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



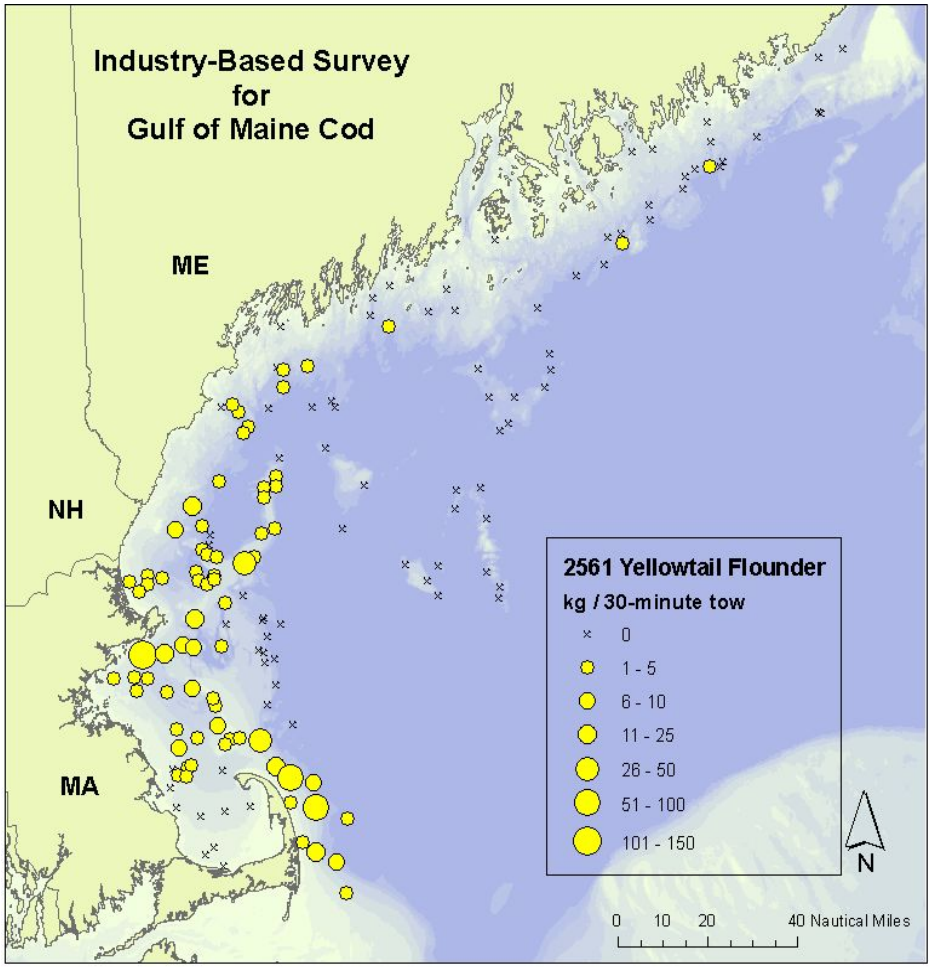


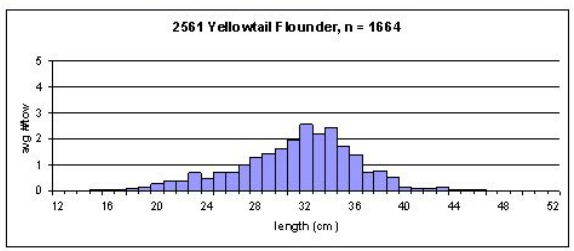
Yellowtail Flounder
caught during the IBS for GOM cod survey

mid November - December
Year: 2004
Cruise: 2465

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured



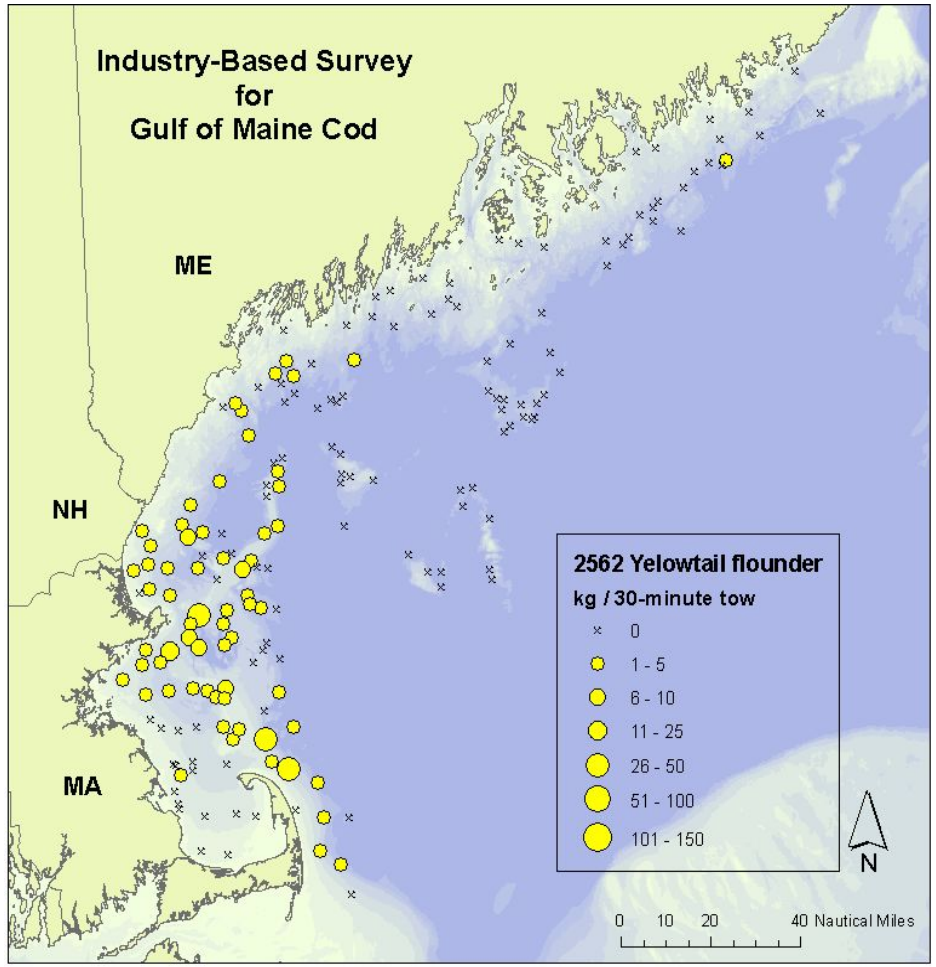


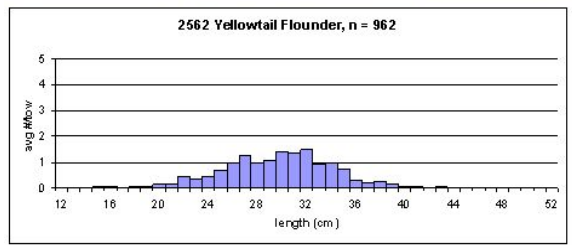
Yellowtail Flounder
caught during the IBS for GOM cod survey

January - Mid February
Year: 2005
Cruise: 2561

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured





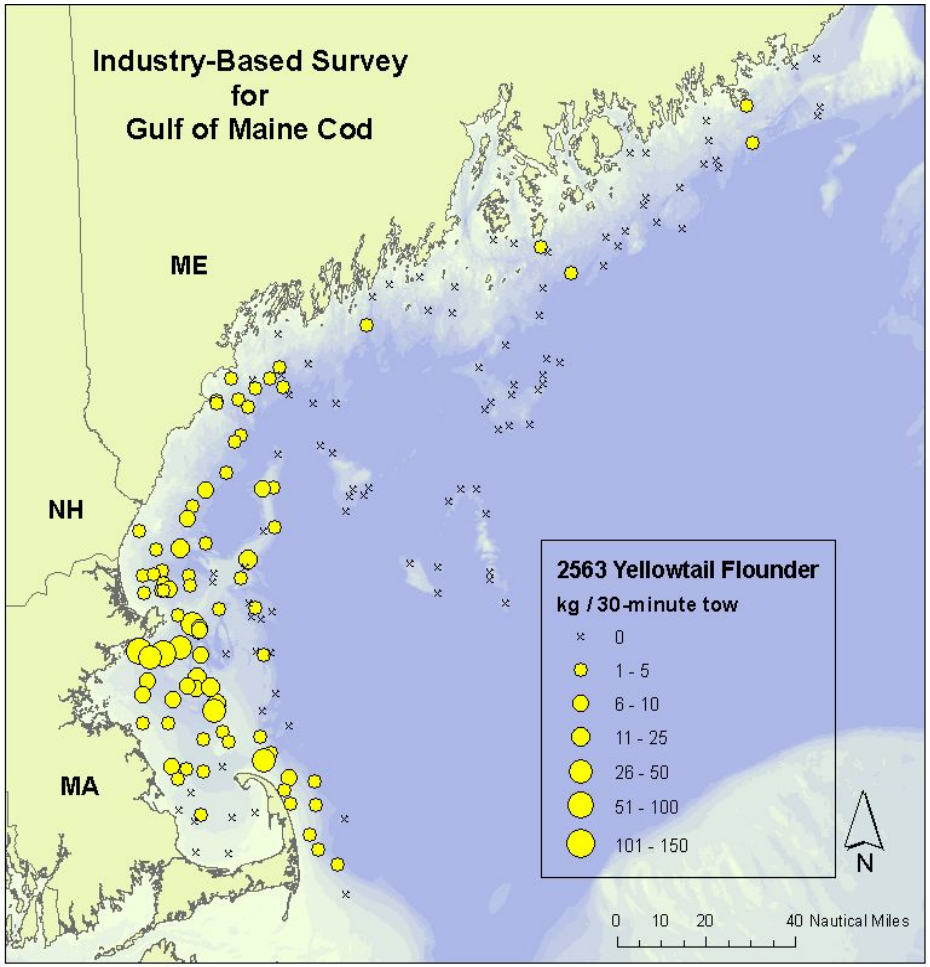
Yellowtail Flounder
caught during the IBS for GOM cod survey

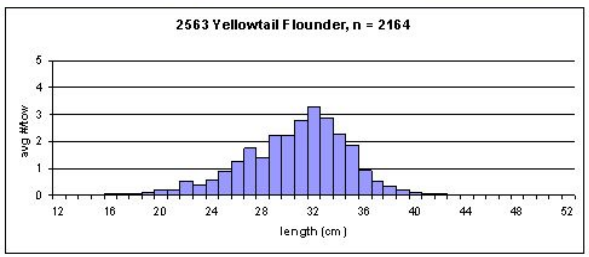
Mid February - Mid march
Year: 2005
Cruise: 2562

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured

Appendix G. Yellowtail Flounder



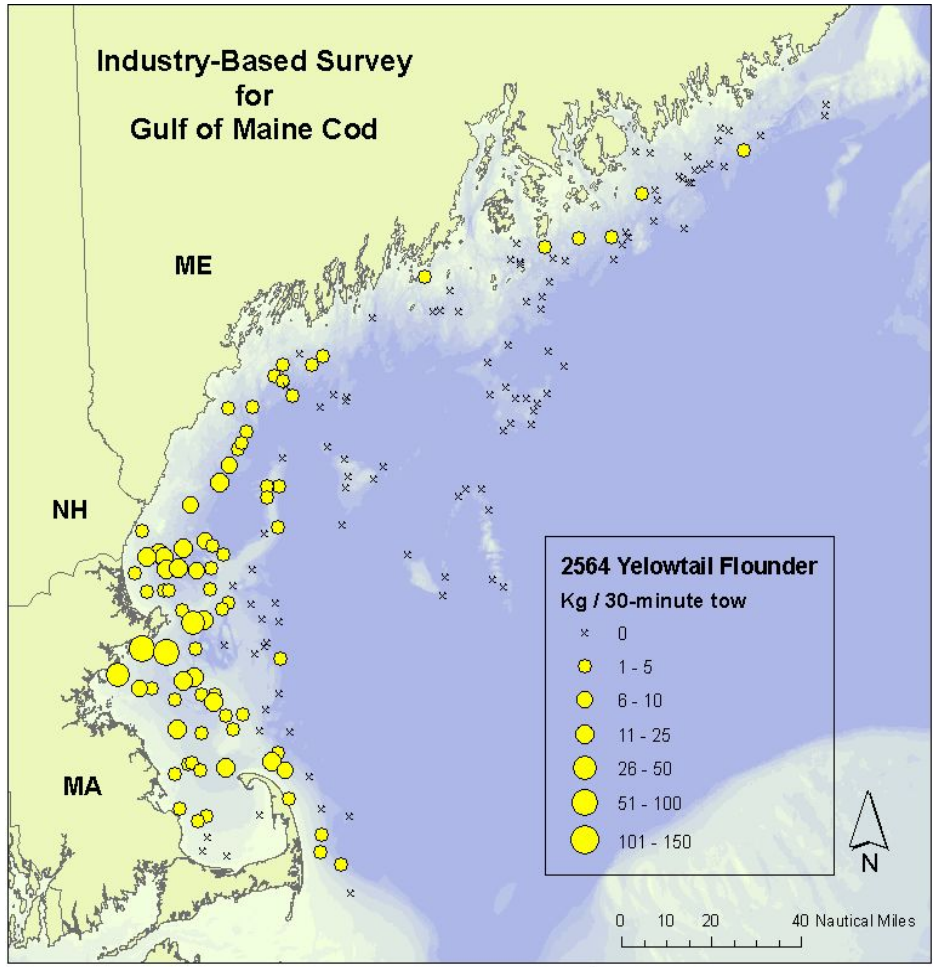


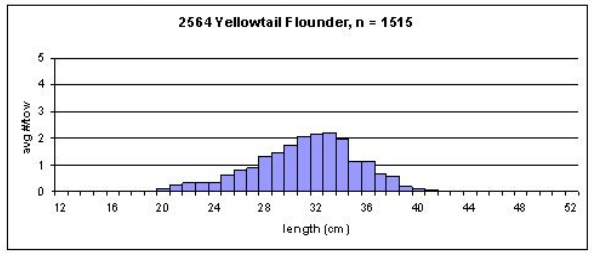
Yellowtail Flounder
caught during the IBS for GOM cod survey

mid March - mid April
Year: 2005
Cruise: 2563

MarineFisheries

**Average number of fish at length for all tows where species were caught.
n= number of fish measured





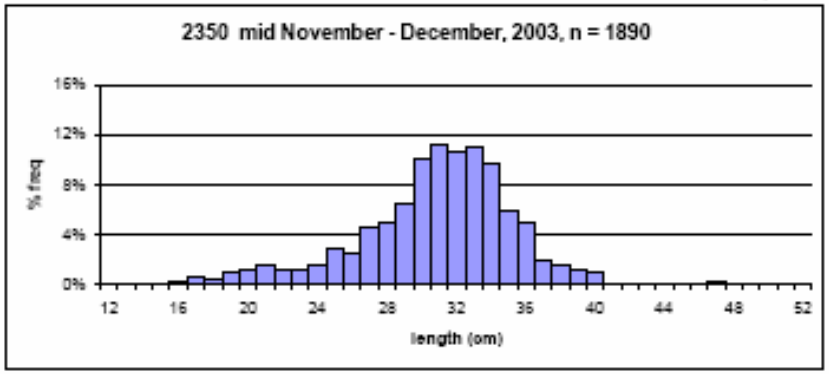
Yellowtail Flounder
caught during the IBS for GOM cod survey

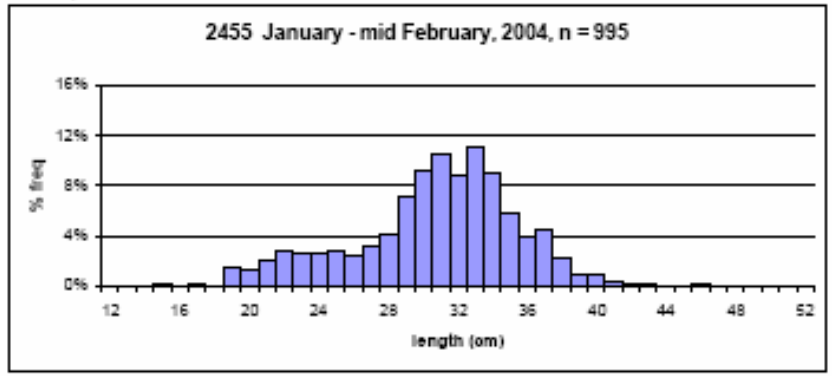
mid April - May
Year: 2005
Cruise: 2564

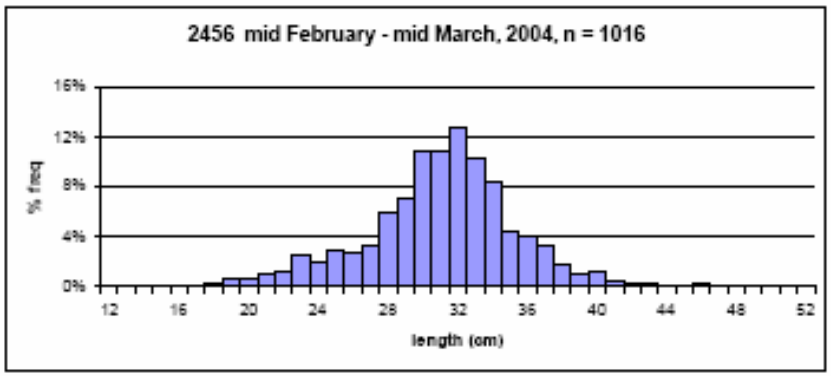
MarineFisheries

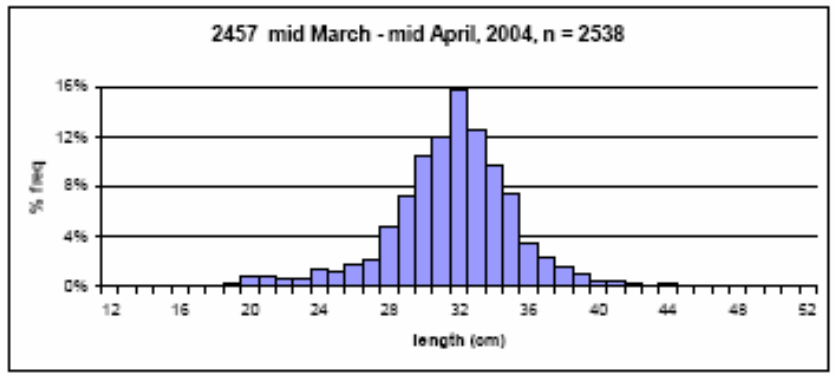
**Average number of fish at length for all tows where species were caught.
n= number of fish measured

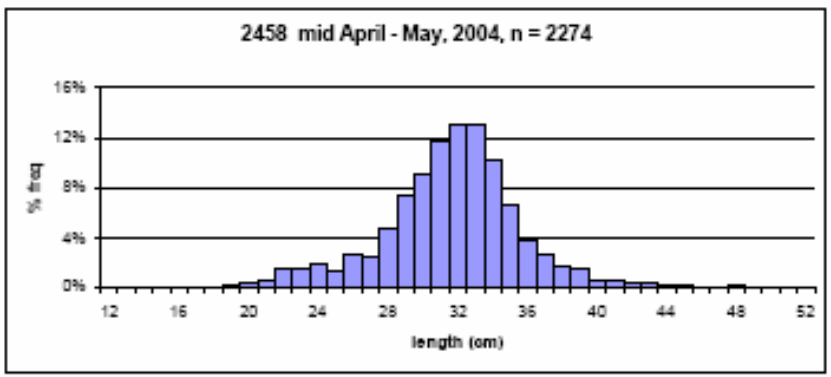
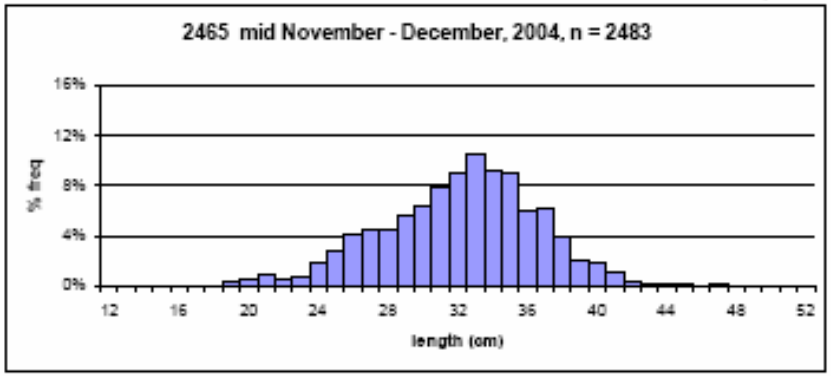
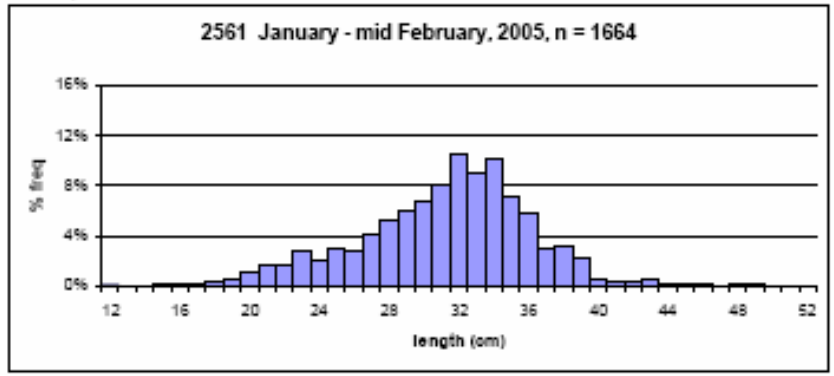
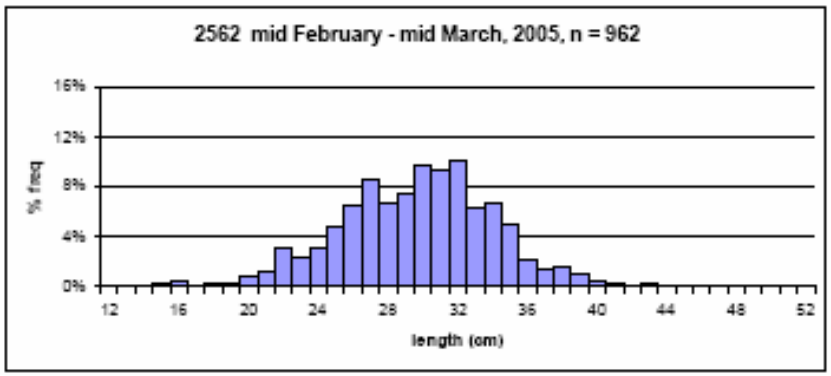
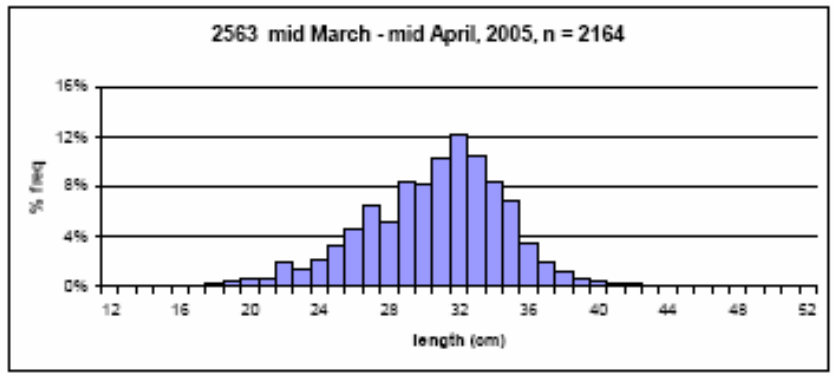
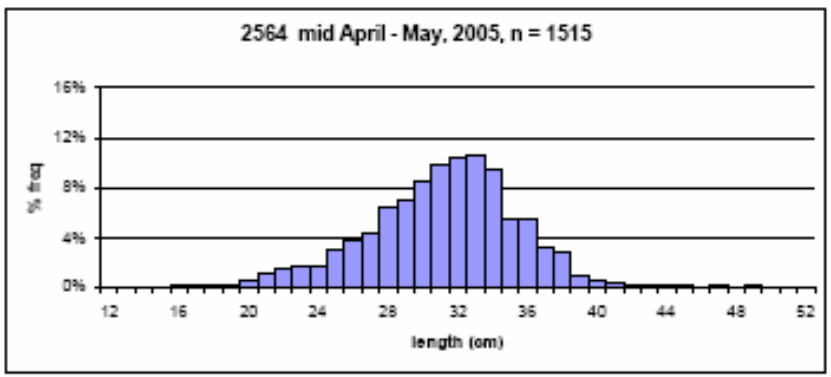
Yellowtail Flounder
(2003 – 2004)











Yellowtail Flounder
(2004 – 2005)