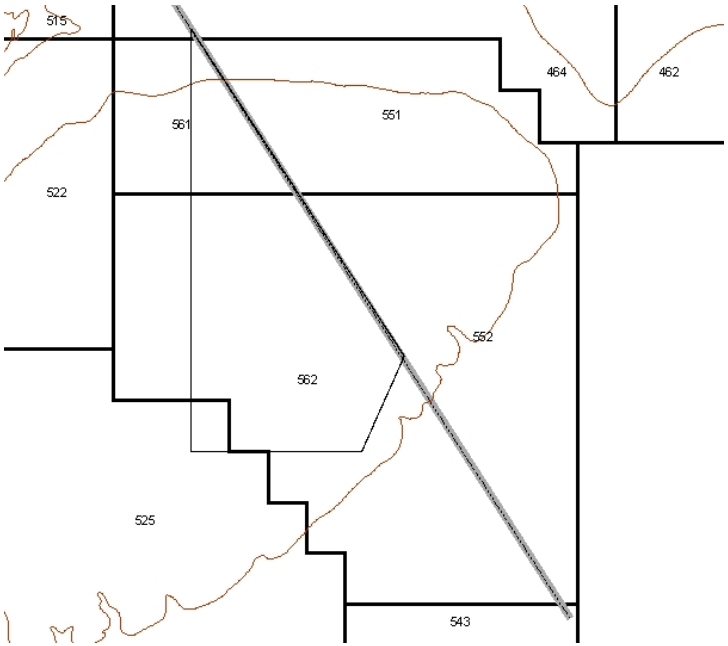
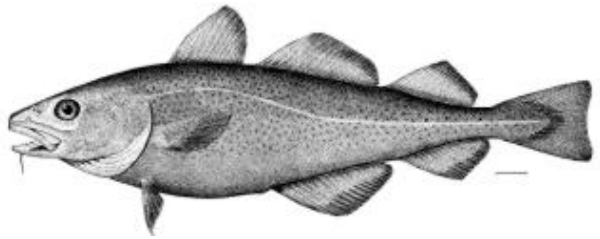
Eastern Georges Bank Atlantic Cod





Transboundary Resources Assessment Committee
Science/ Industry Meeting
July 1 , 2015
New Bedford, Massachusetts

Loretta O'Brien
NEFSC

Assessment data: 2 major sources of data

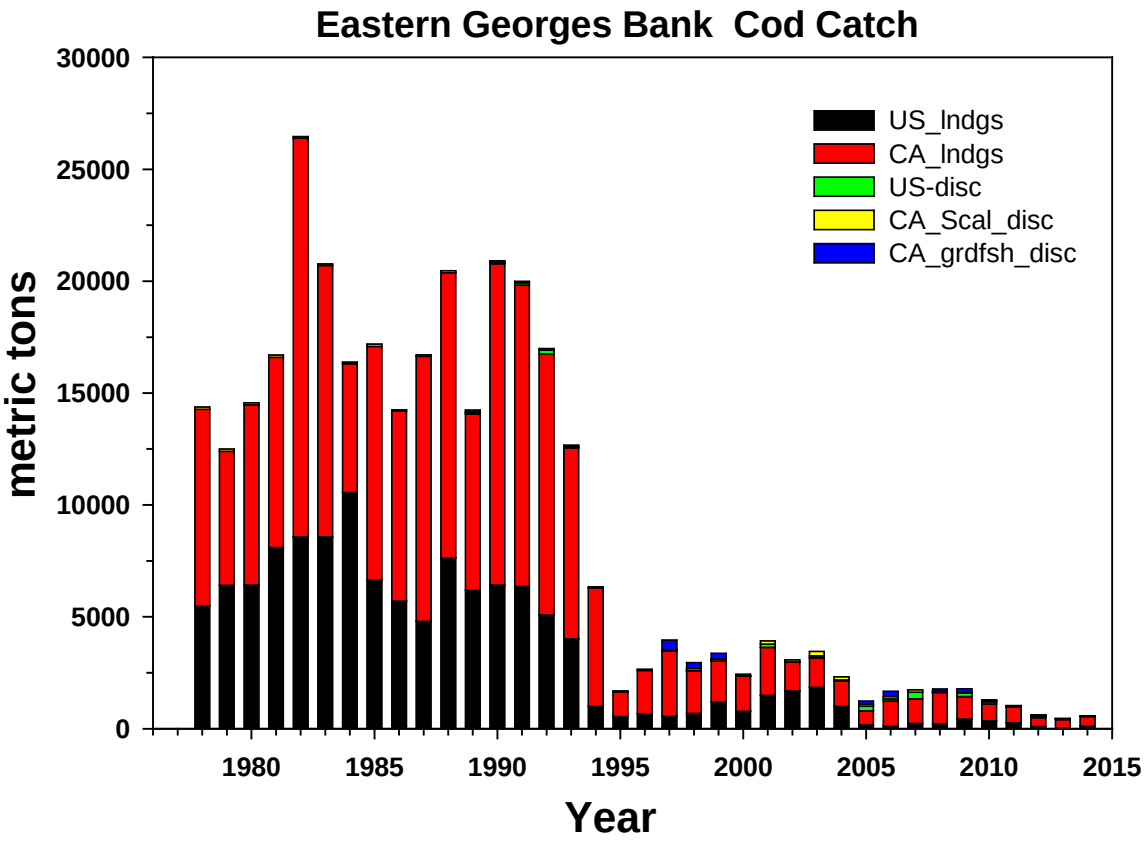
Fishery-dependent :

- Landings
- Discards/VMS/Observer Data
- Catch at age

Fishery-independent

- Research survey CAA
  - DFO, NEFSC – spring and autumn
  - Distribution
  - Abundance indices
  - Weights at age

Landings <- allocated to stock area ←Dealer data ←VTR

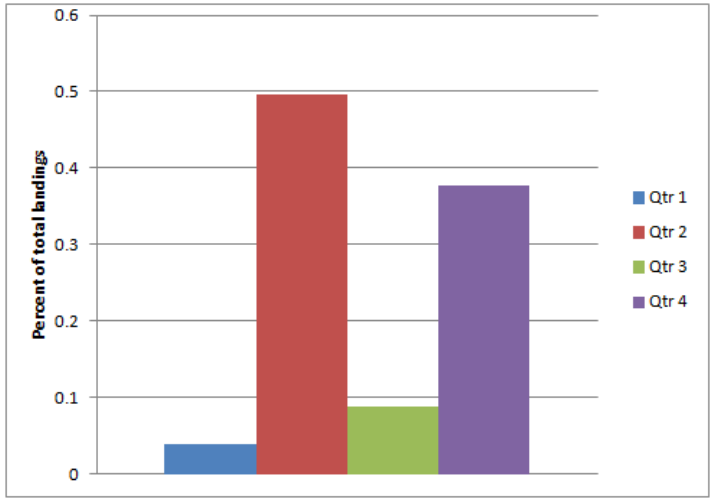


- **Total 2014 EGB cod catch: 574 mt**

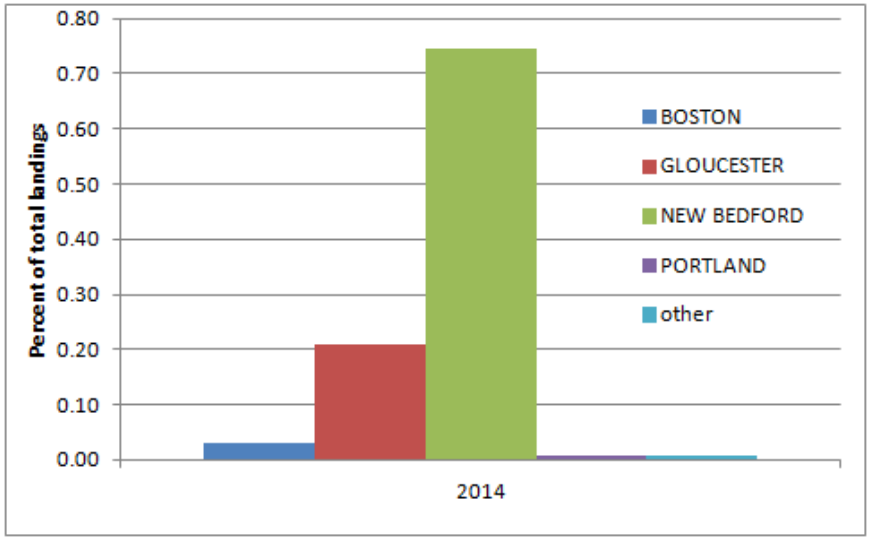
- **USA 2014 landings: 114 mt ; discards 2 mt**
- **CDN 2014 landings: 430 mt ; discards: scallop - 15 mt , grdfsh – 13 mt**

USA 2014 EGB cod landings

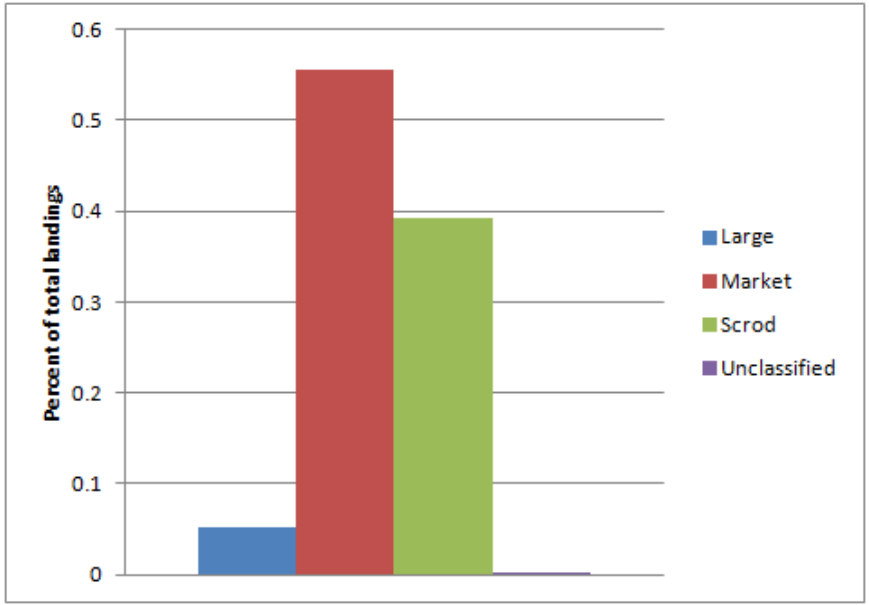
By Quarter



By Port

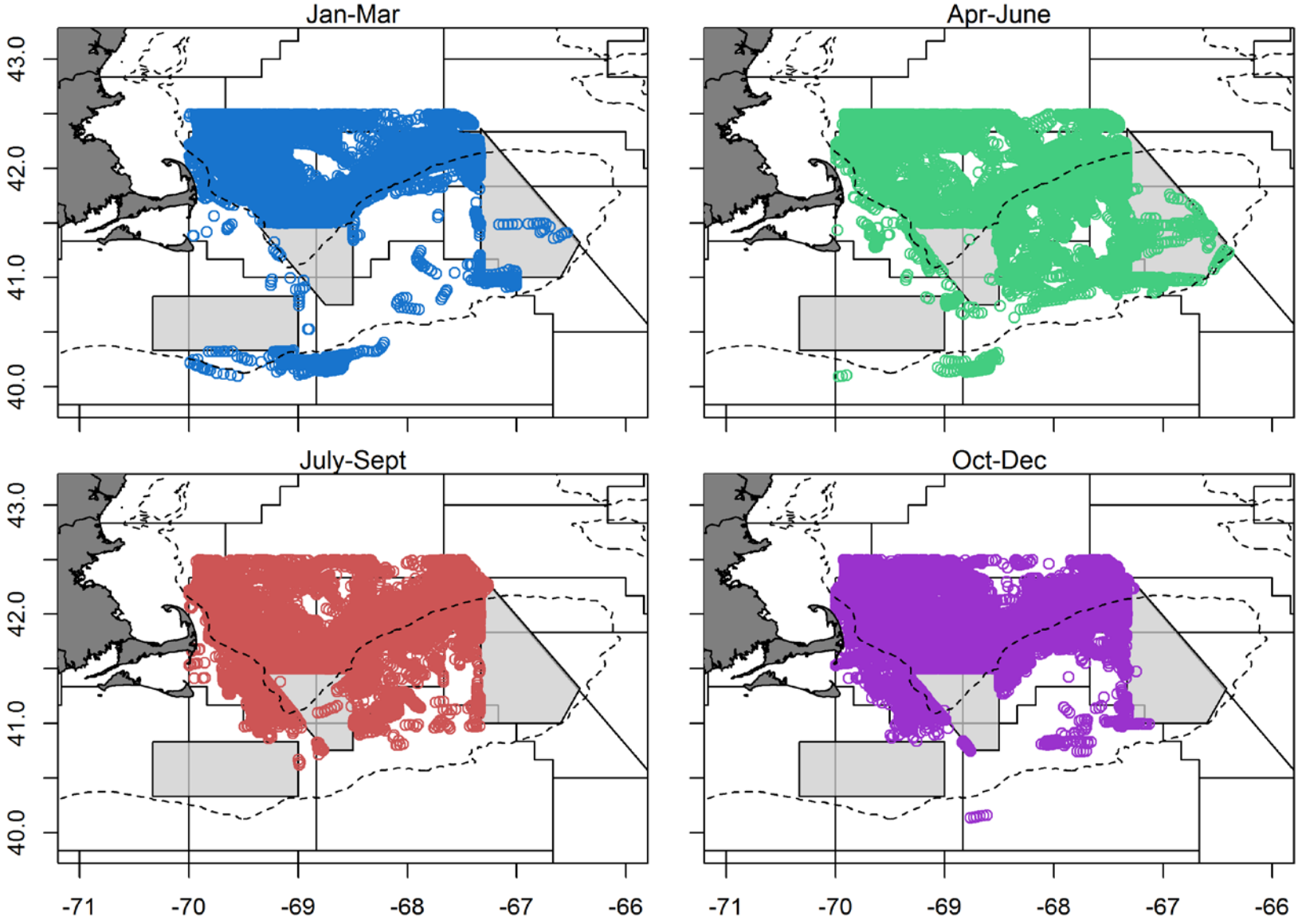


By Market Category



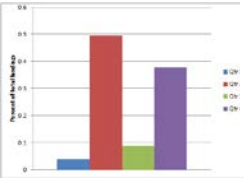
95% EGB cod caught by otter trawl gear

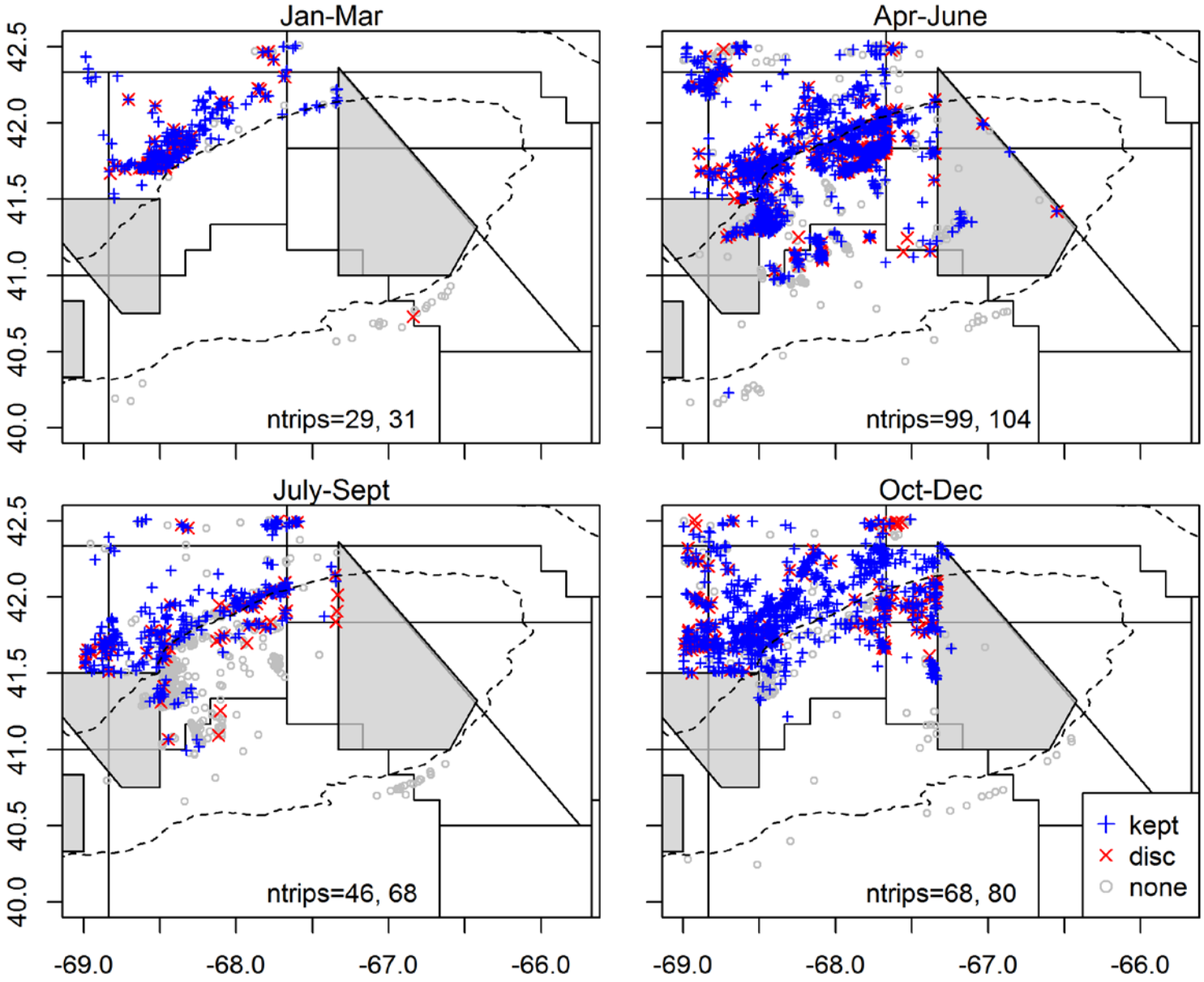
ATLANTIC COD
otter trawl



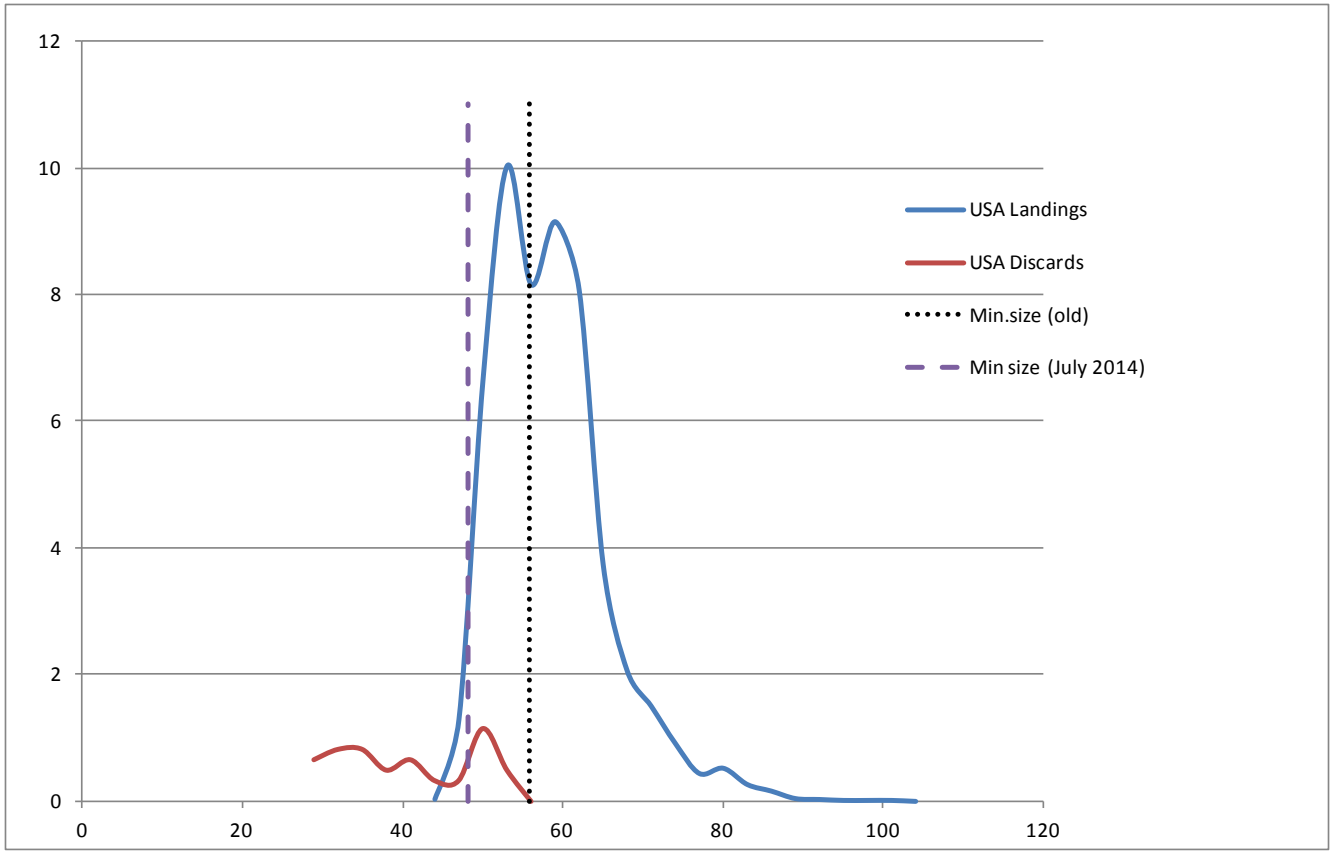
ATLANTIC COD

NEFOP; Observed Trips

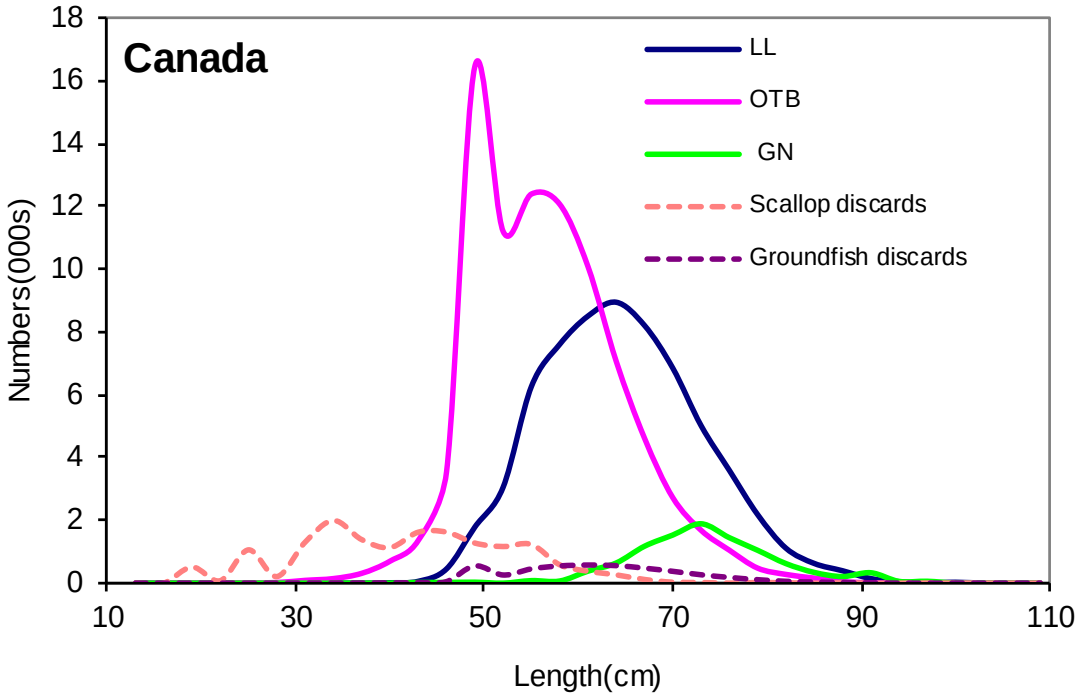




US Catch

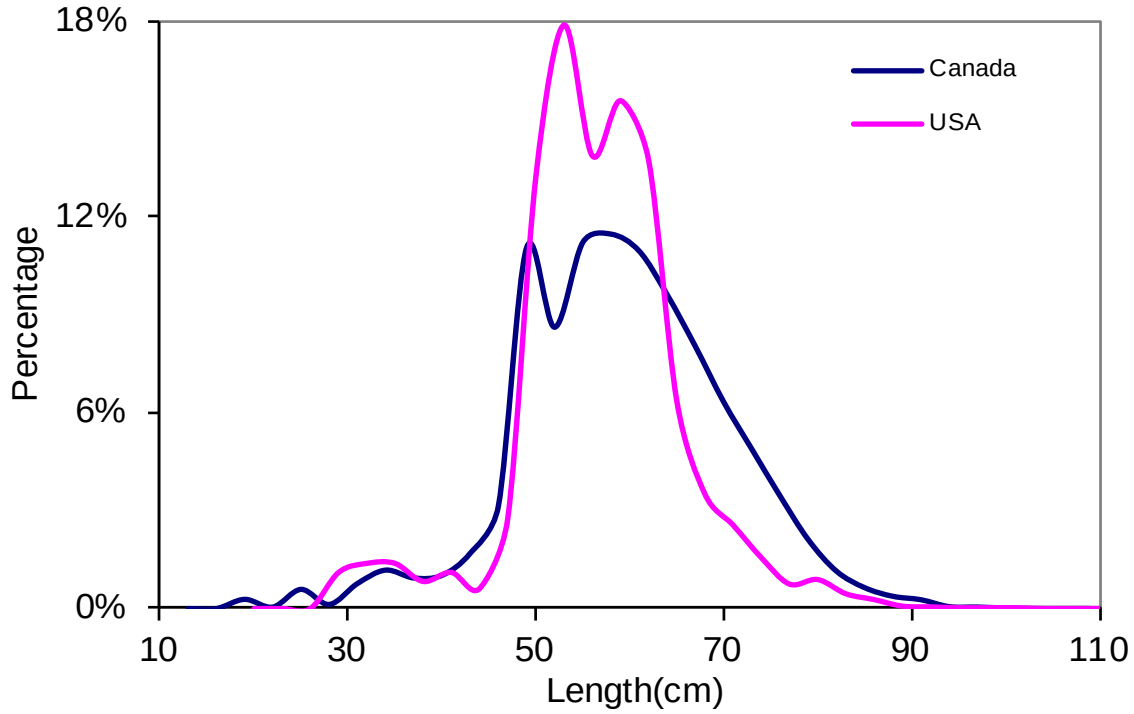


- **2014 US landings – 53 (21 in.), 59 cm (23 in) ; Discards – 41 cm (16 in.)**
- **USA catches peak – 53 cm (21 in)**
- **Previous Min. size : 22 inches ~ 56 cm; July 2014→ 19 in. (48.3 cm)**



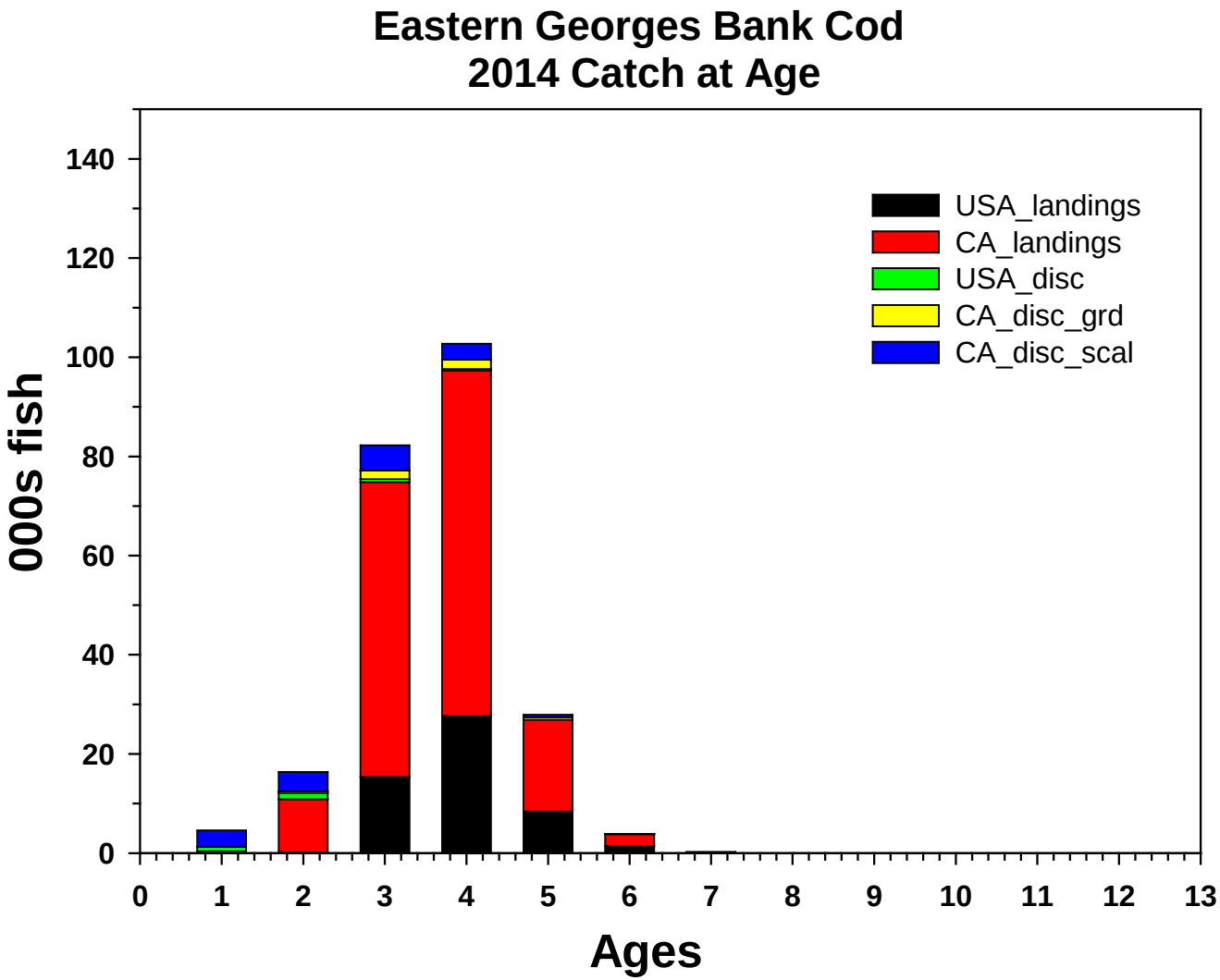
Gear	cm	inches
LL Lndgs	64	25
OT Lndgs	49	19
GN Lndgs	73	29
Grdf Disc	~~49	19
Scal Disc	34	13

Total Length Frequency

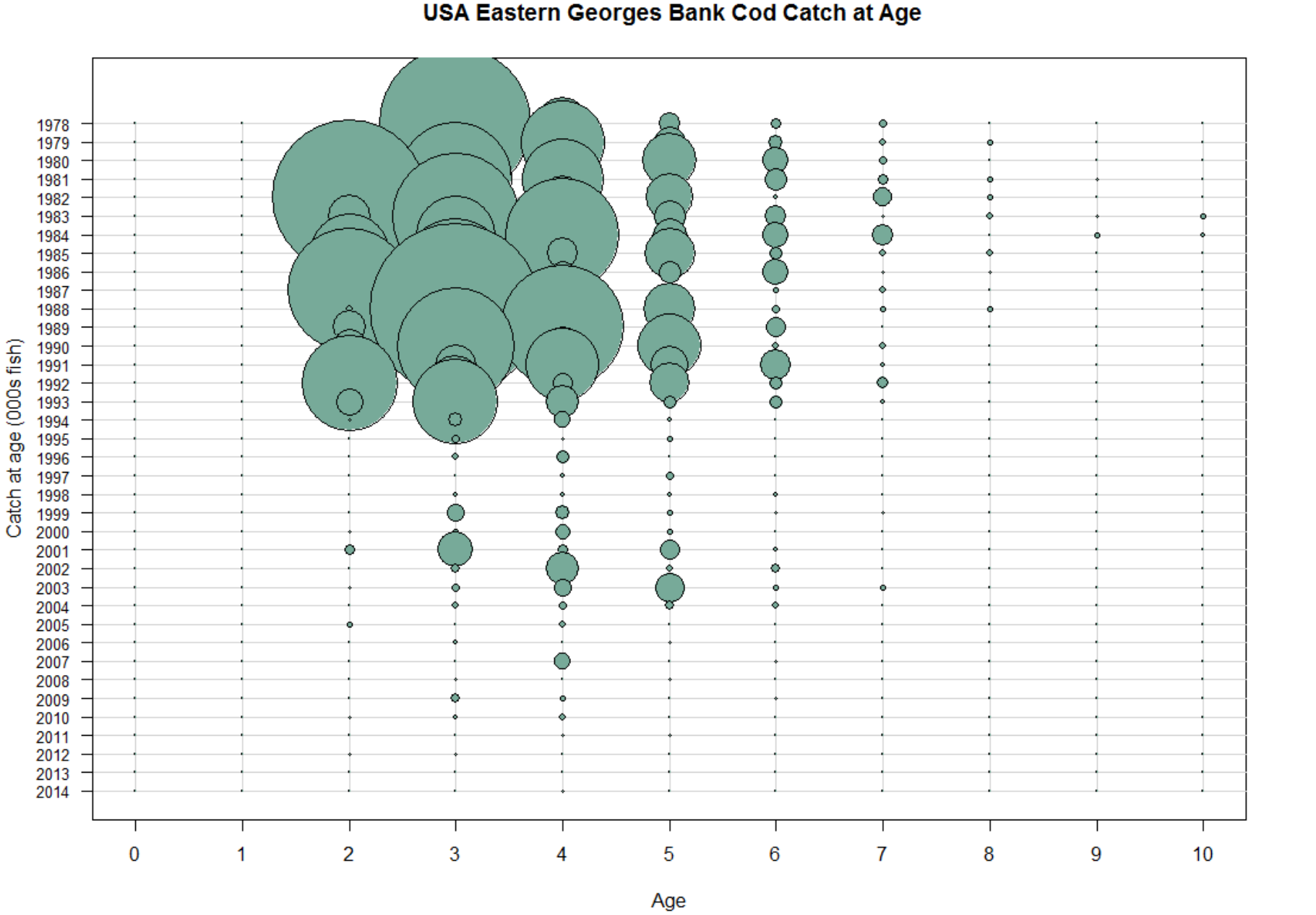


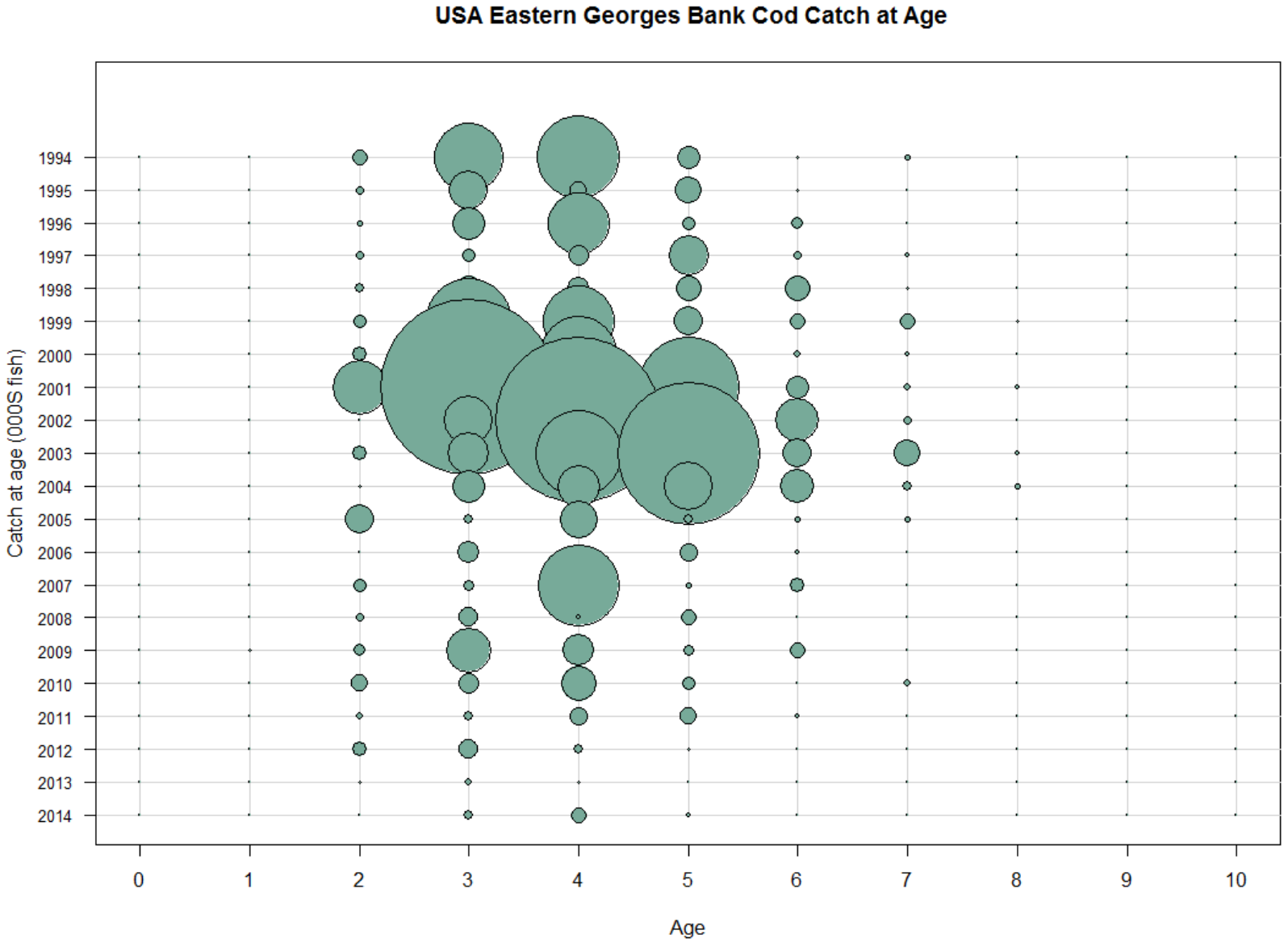
USA catch LF - 53-59 cm (21-23 in)

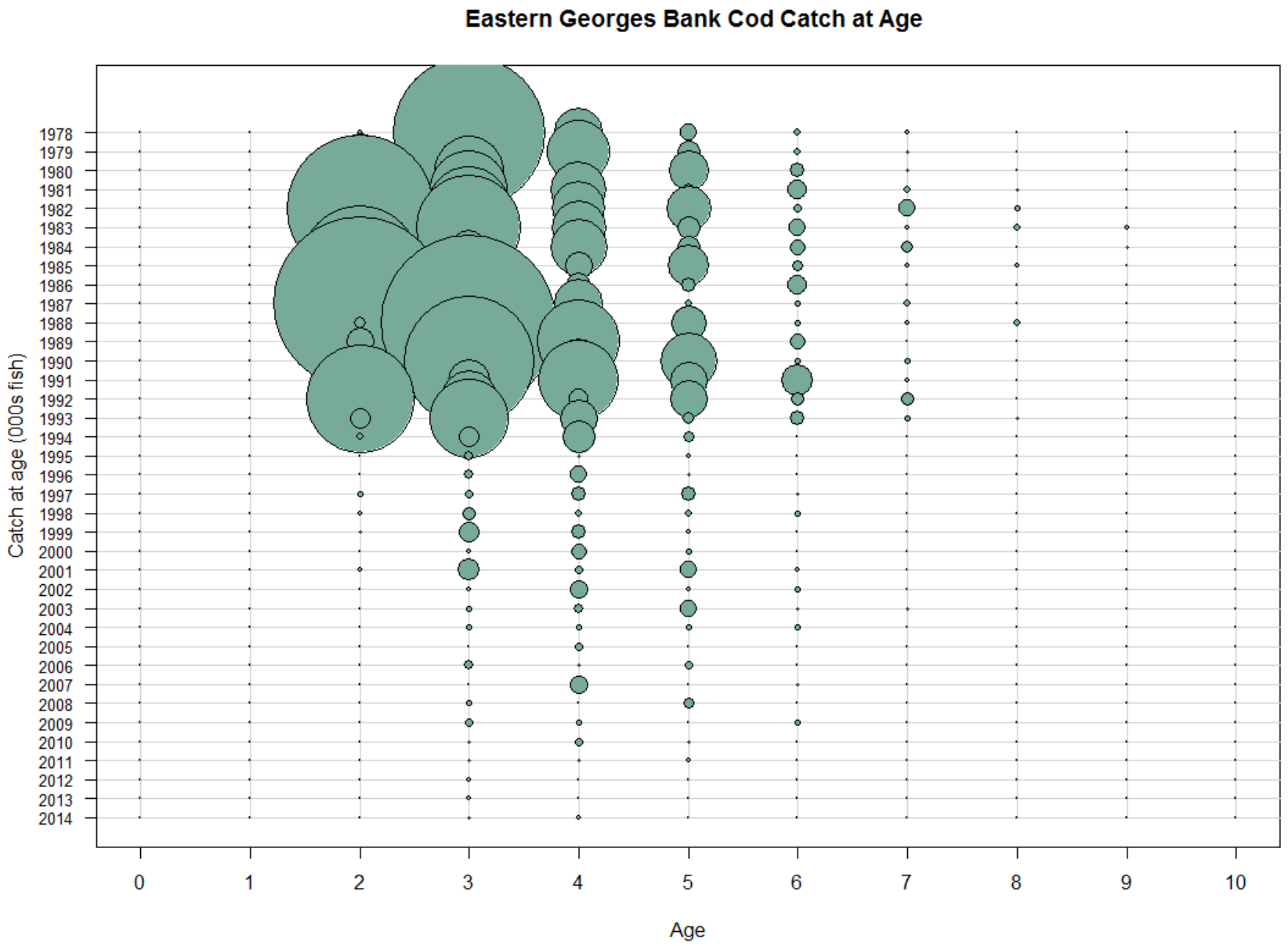
CDN catch LF - 49-61 cm (19-24 in)



2010 year class dominates catch at age 4 & the 2009 yc at age 3

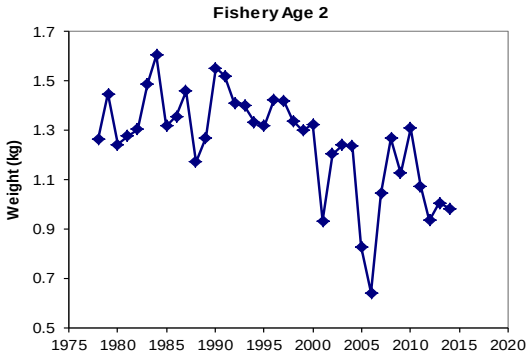

USA Eastern Georges Bank Cod Catch at Age
Catch at age (000s fish)
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
0
1
2
3
4
5
6
7
8
9
10
Age

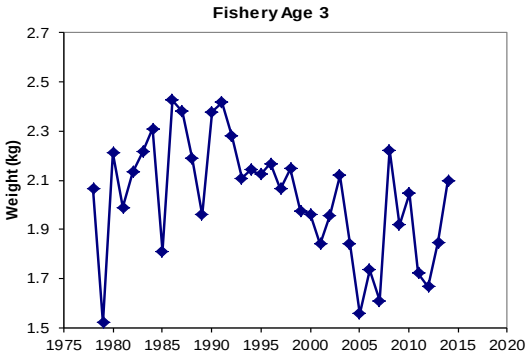

USA Eastern Georges Bank Cod Catch at Age
Catch at age (000S fish)
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
0
1
2
3
4
5
6
7
8
9
10
Age

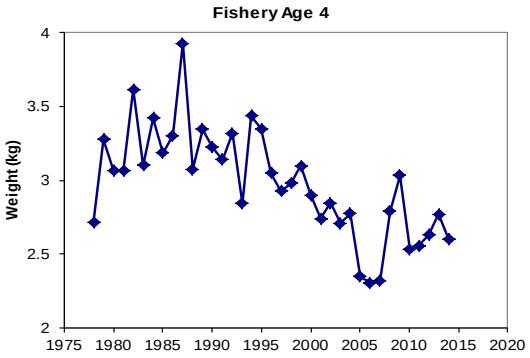


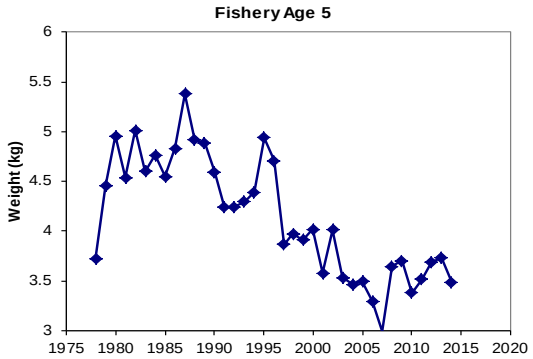
First year in time series(2014) that no age 9 or 10+ fish were caught

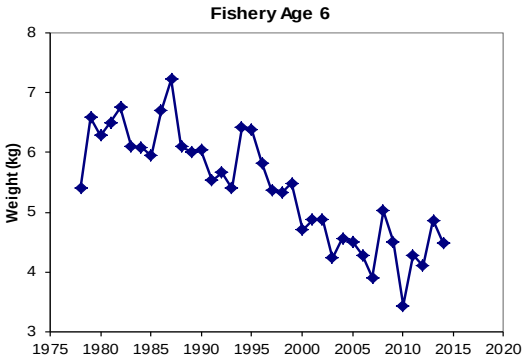
Fishery Weight-at-age

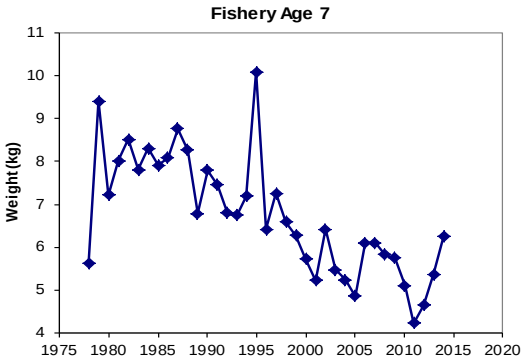


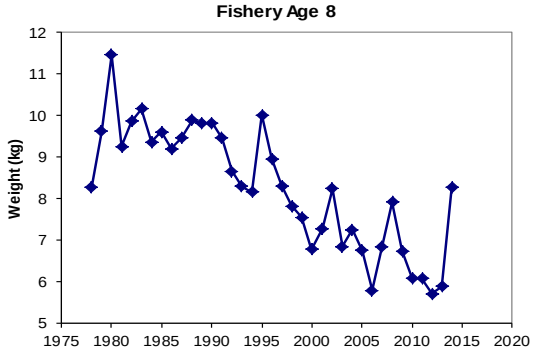


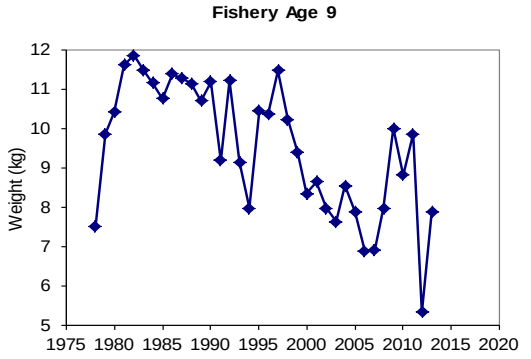












Assessment data:

Fishery Dependent :

- Landings
- Discards/VMS/Observer Data
- Catch distribution
- Catch at age

Fishery independent

- Research survey CAA
  - DFO, NEFSC – spring and autumn
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  - Abundance indices
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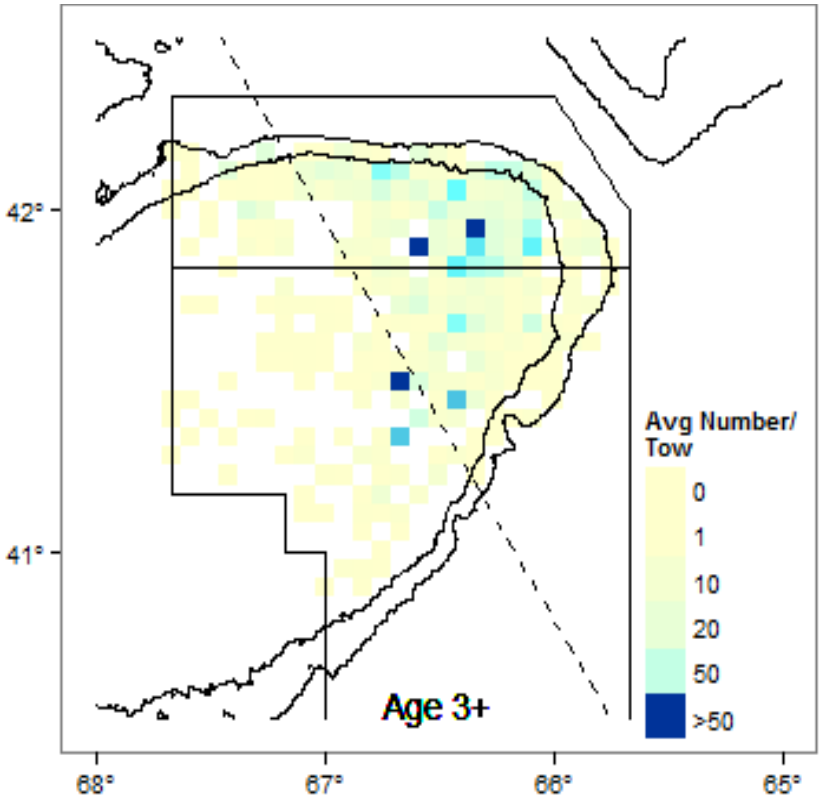
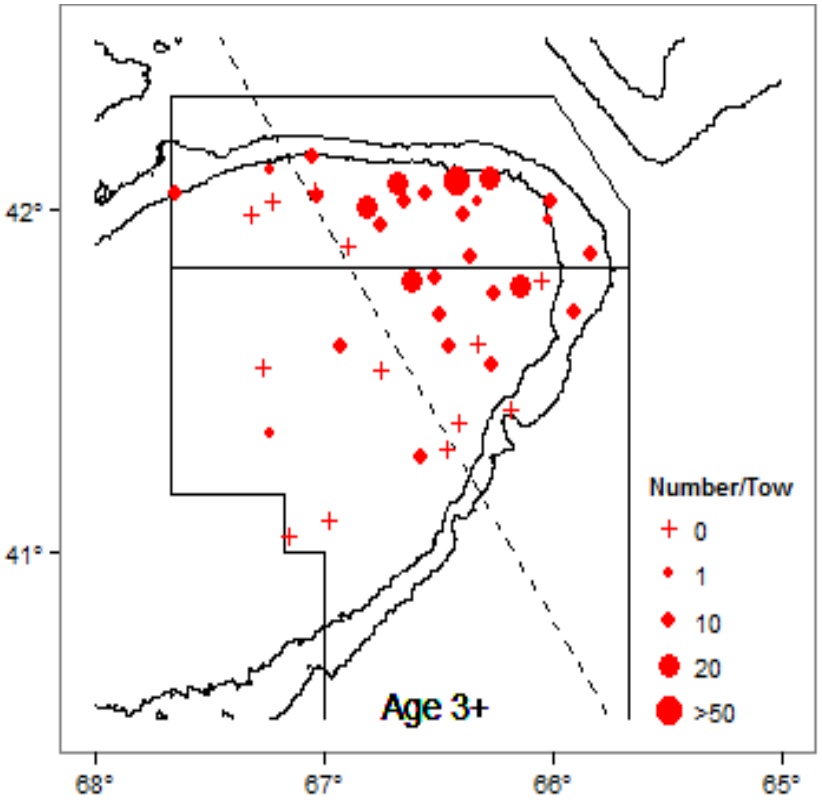
DFO Survey

2005-2014

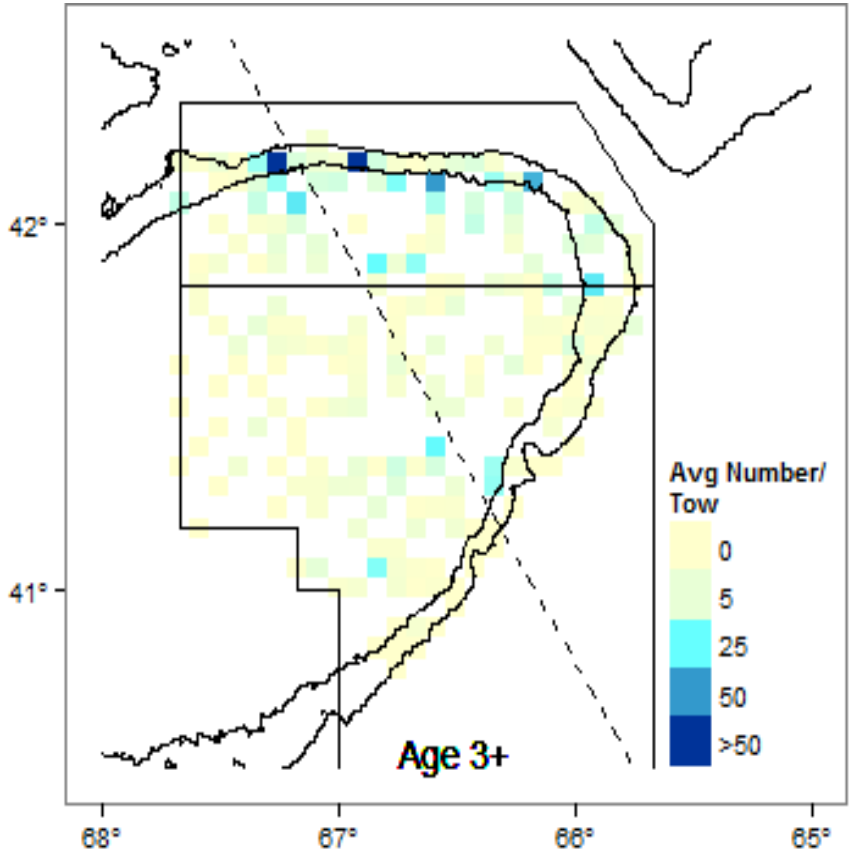


2015

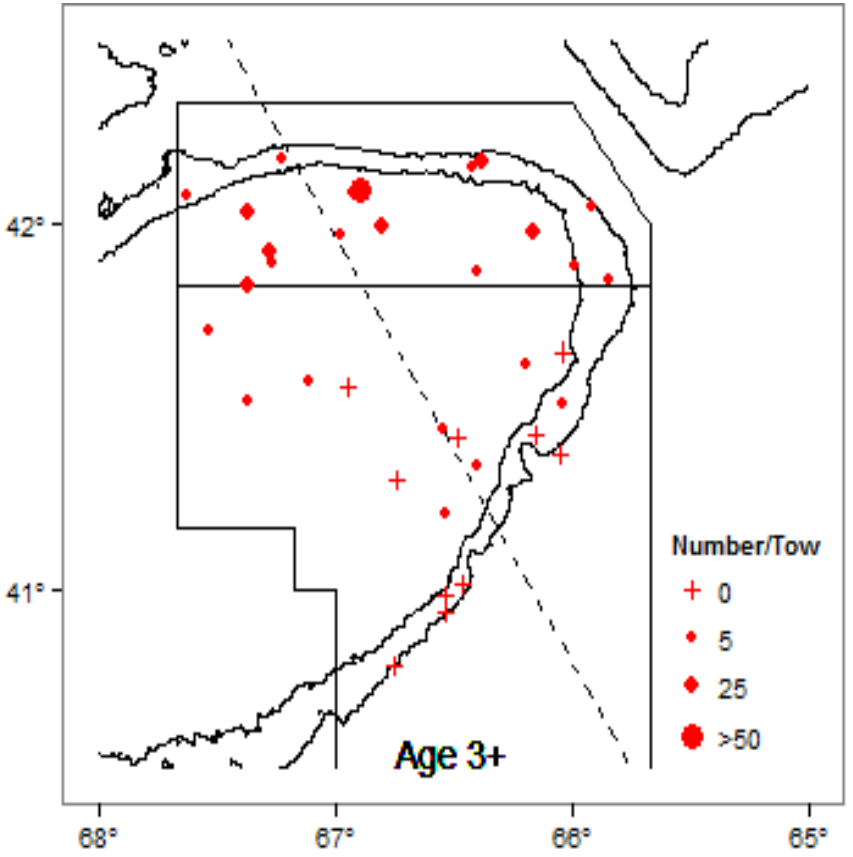


NEFSC Spring

2005-2014

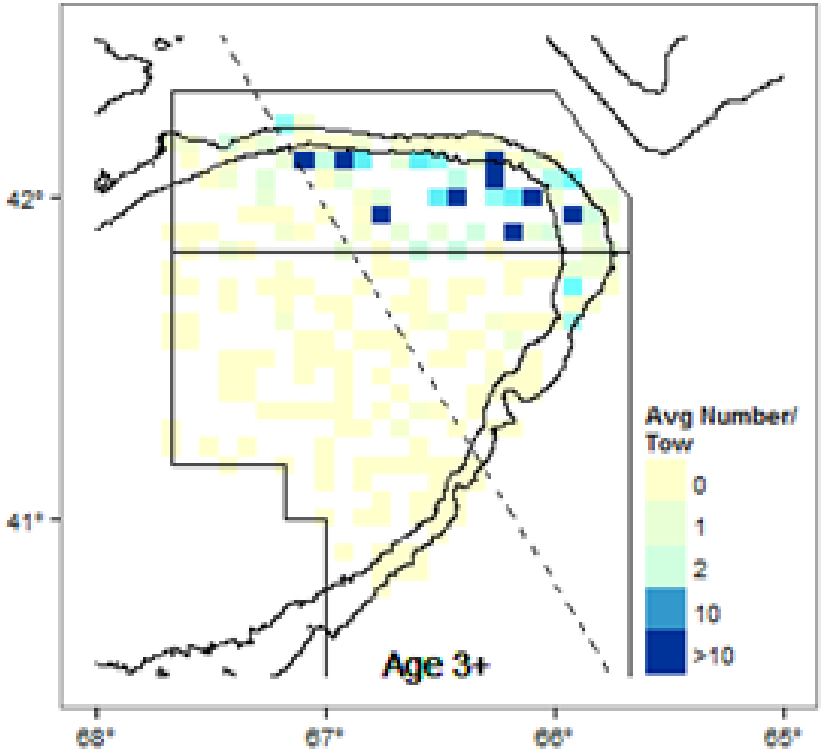


2015

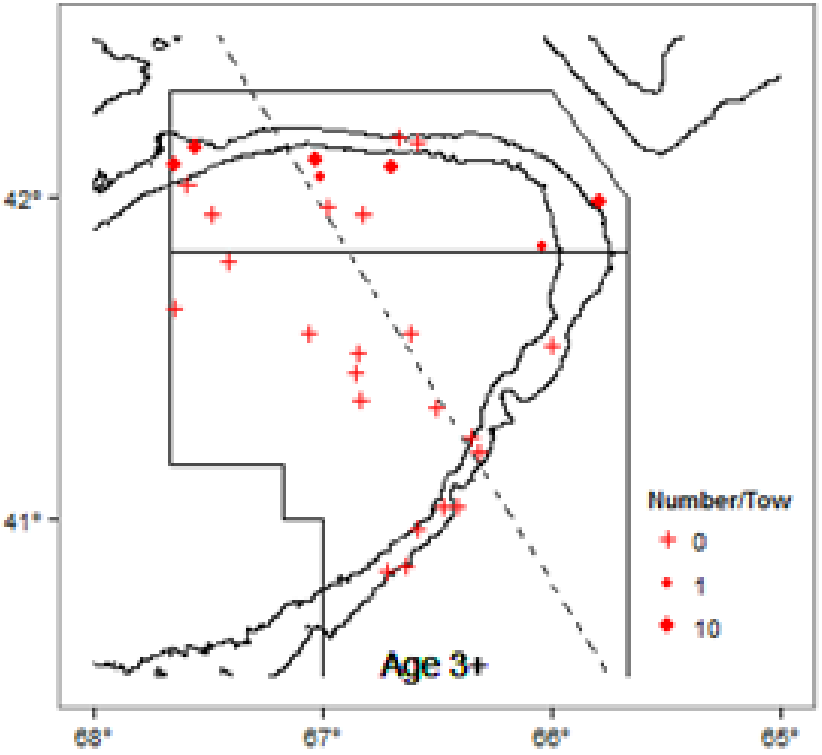


NEFSC Autumn

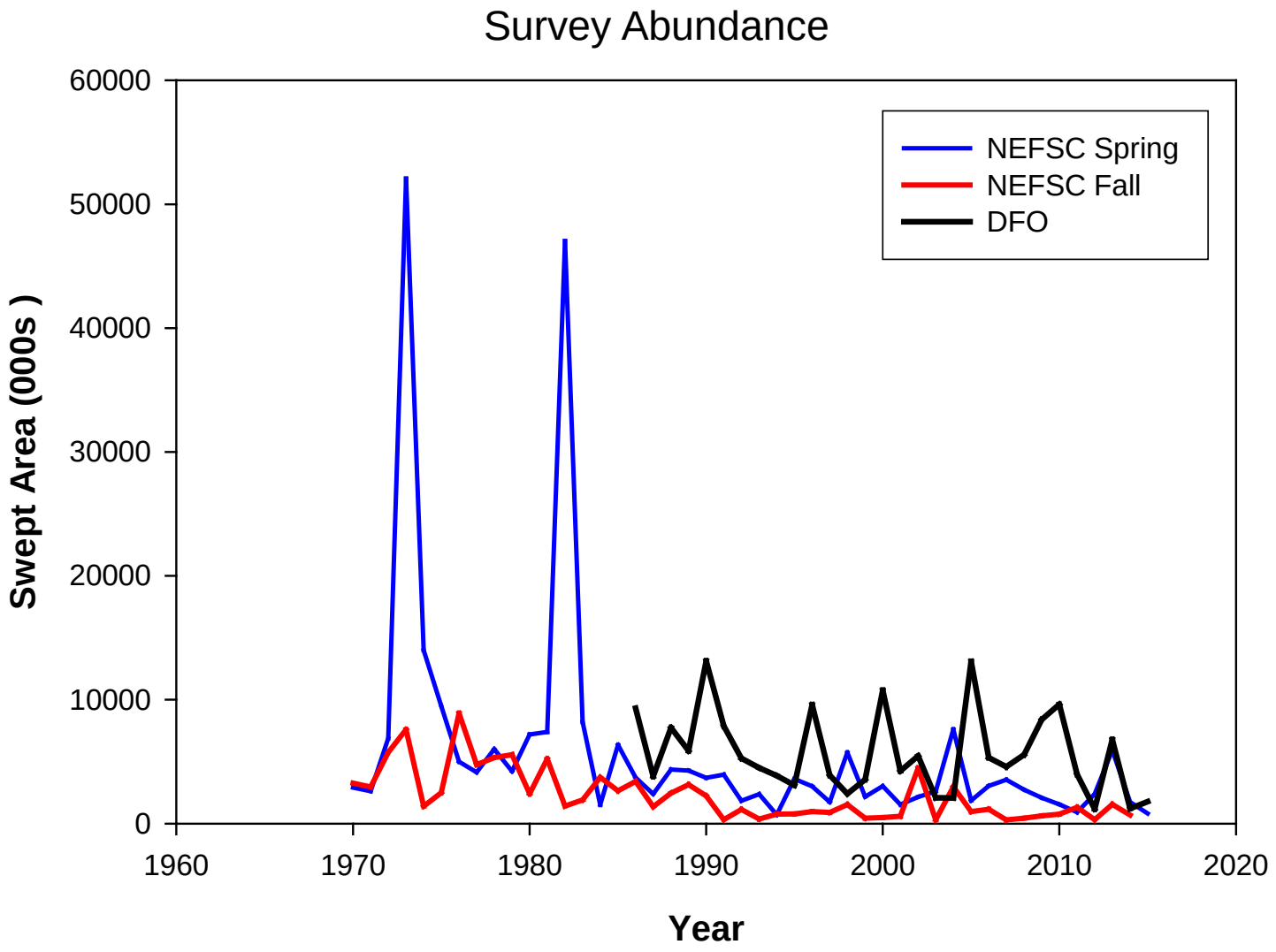
2004-2013



2014



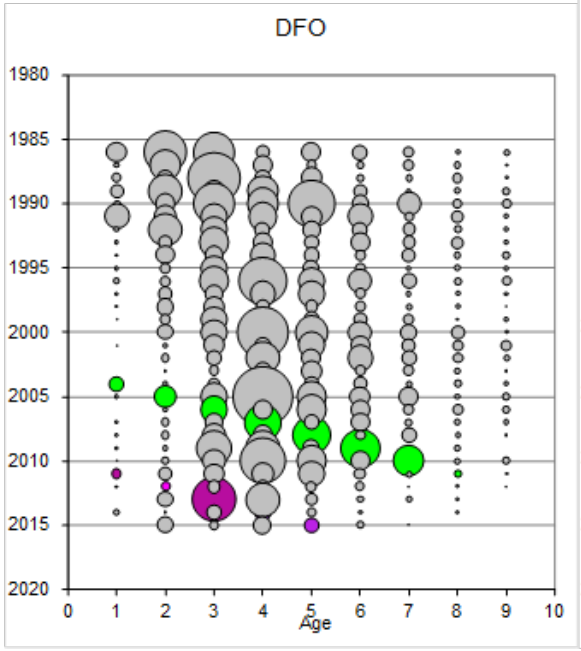
From 1970-2015

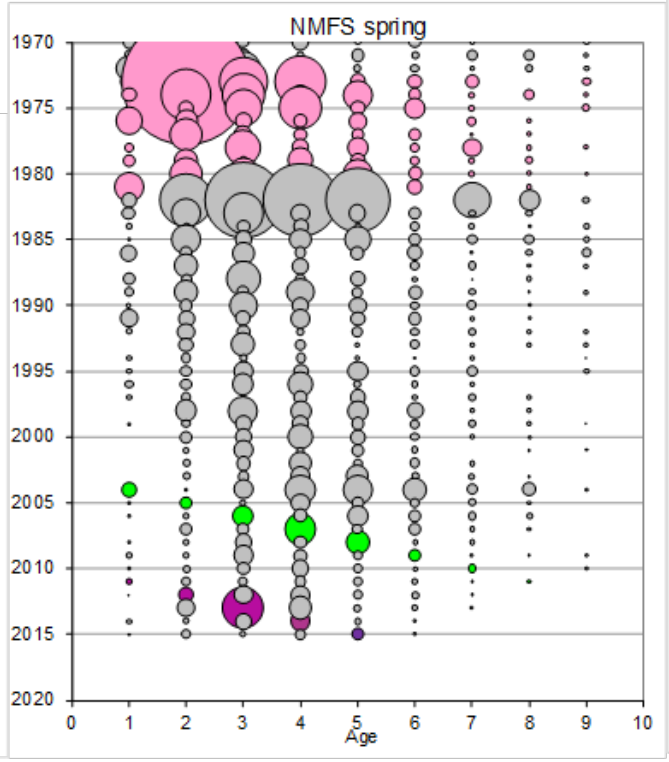


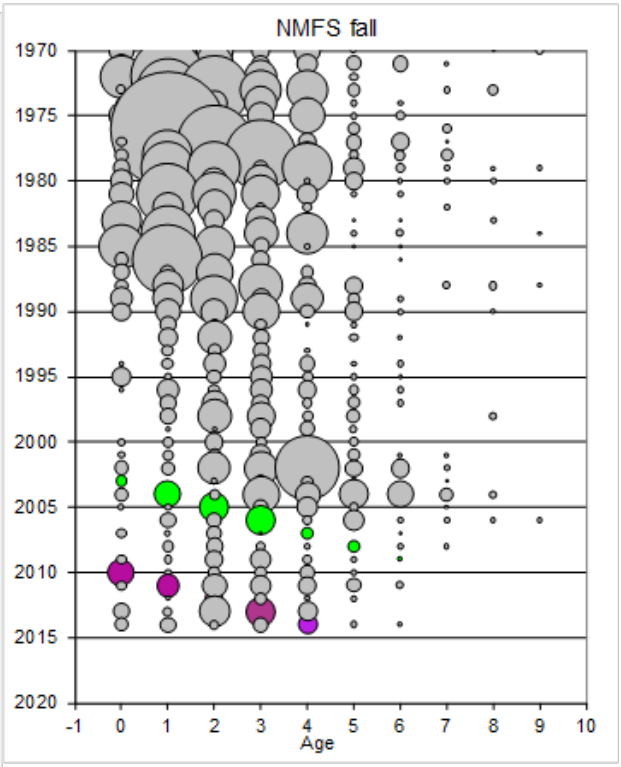
1973: spring NEFSC, large 1971 yc ;large tow of age 2 fish

1982: spring NEFSC, year effect

Surveys: Abundance at age

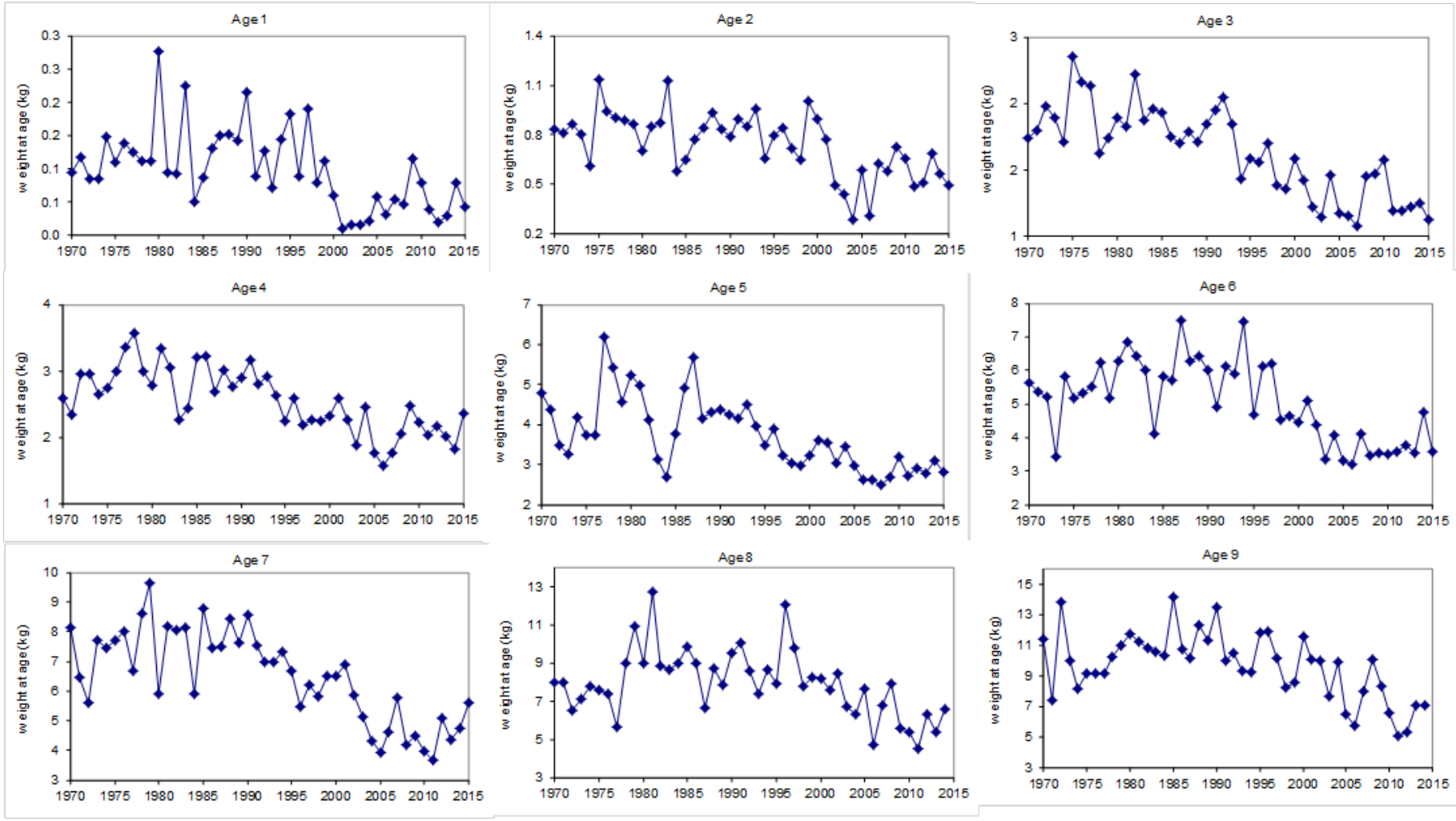






Green: 2003 YC
Purple: 2010 YC

Beginning year weight-at-age from DFO and NEFSC spring survey average



EGB Cod Summary

- EGB cod 2014 total catch , 574 mt , 2nd lowest in time series
- Majority of landings: 2nd quarter, otter trawl, ‘market’ mktcat, in New.B
- 2010 year class continues to dominate the 2014 catch
- Fishery mean wts variable but low

- Survey abundance indices, biomass, mean weight remains low
- No significant incoming recruitment
- Age structure truncated
    - 1st year fishery did not catch any age 9 or 10+ fish

Questions ?

Comments?