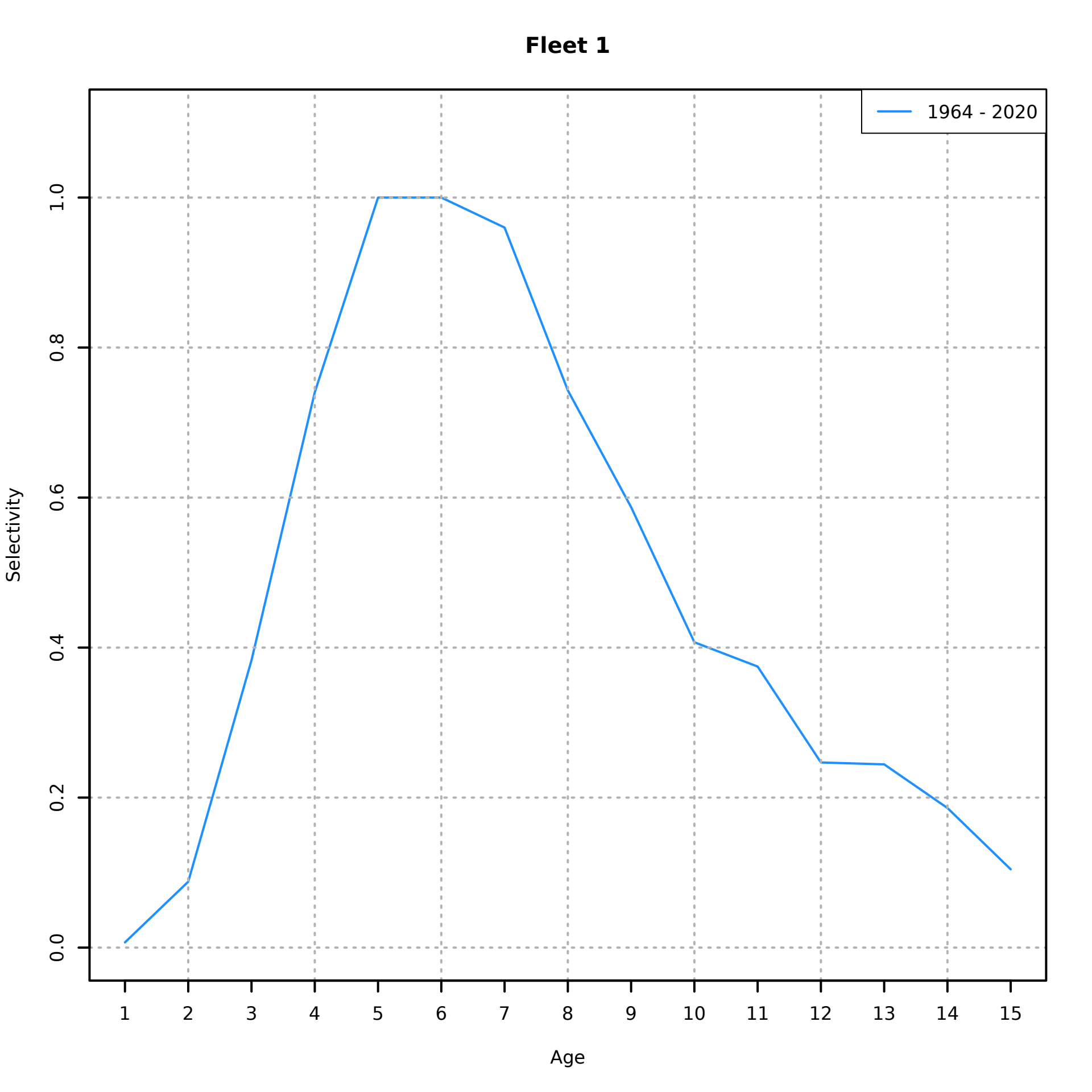
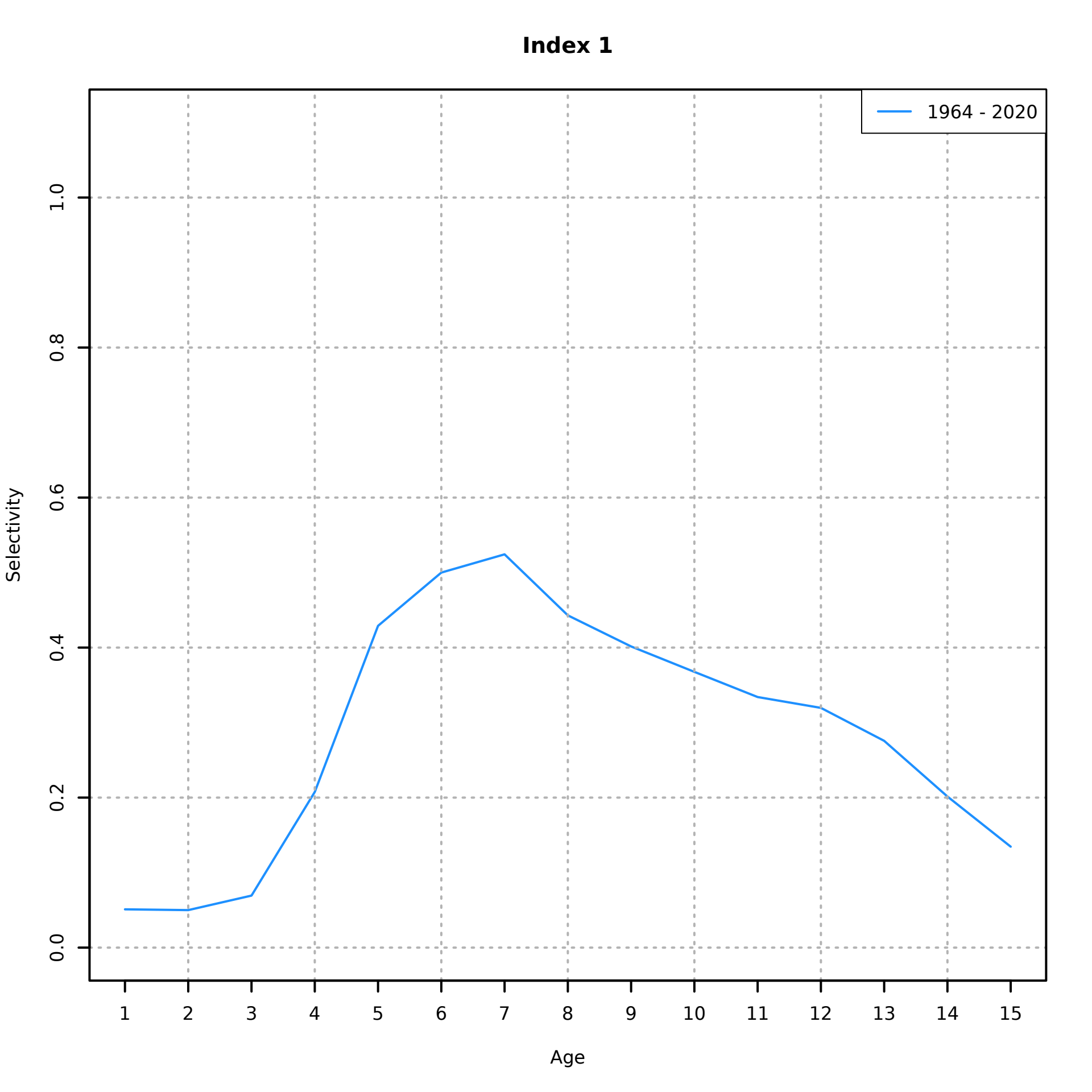
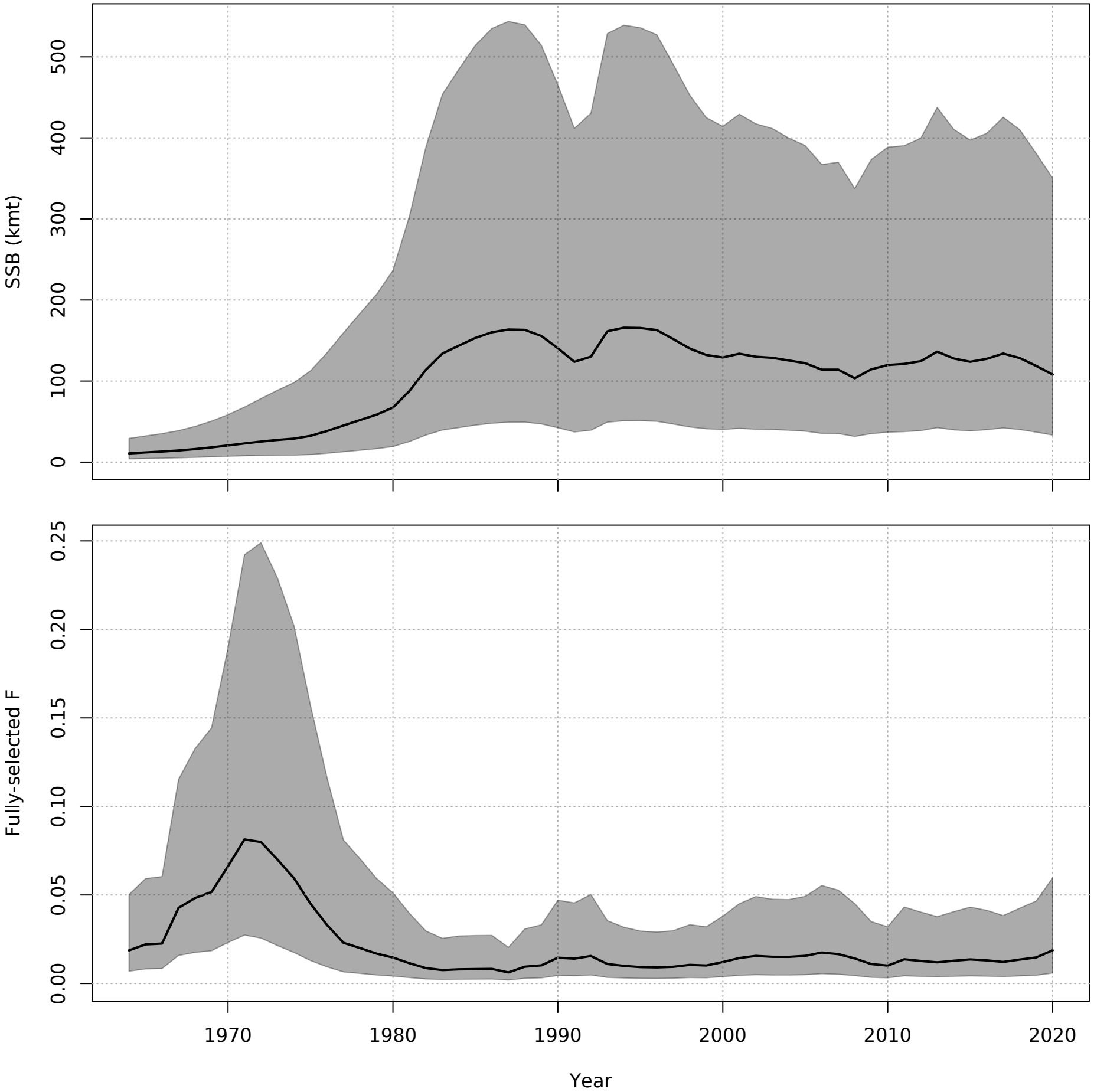
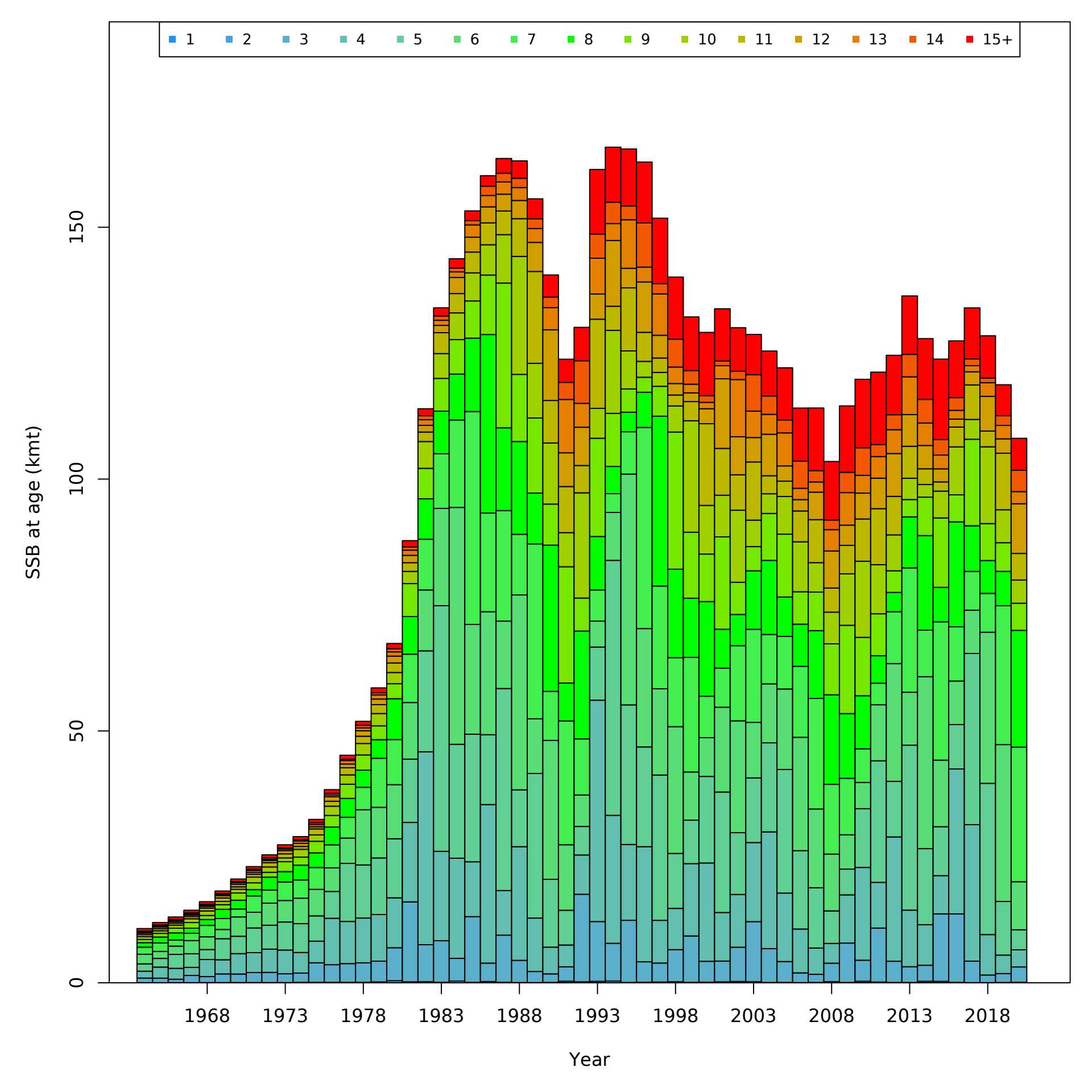
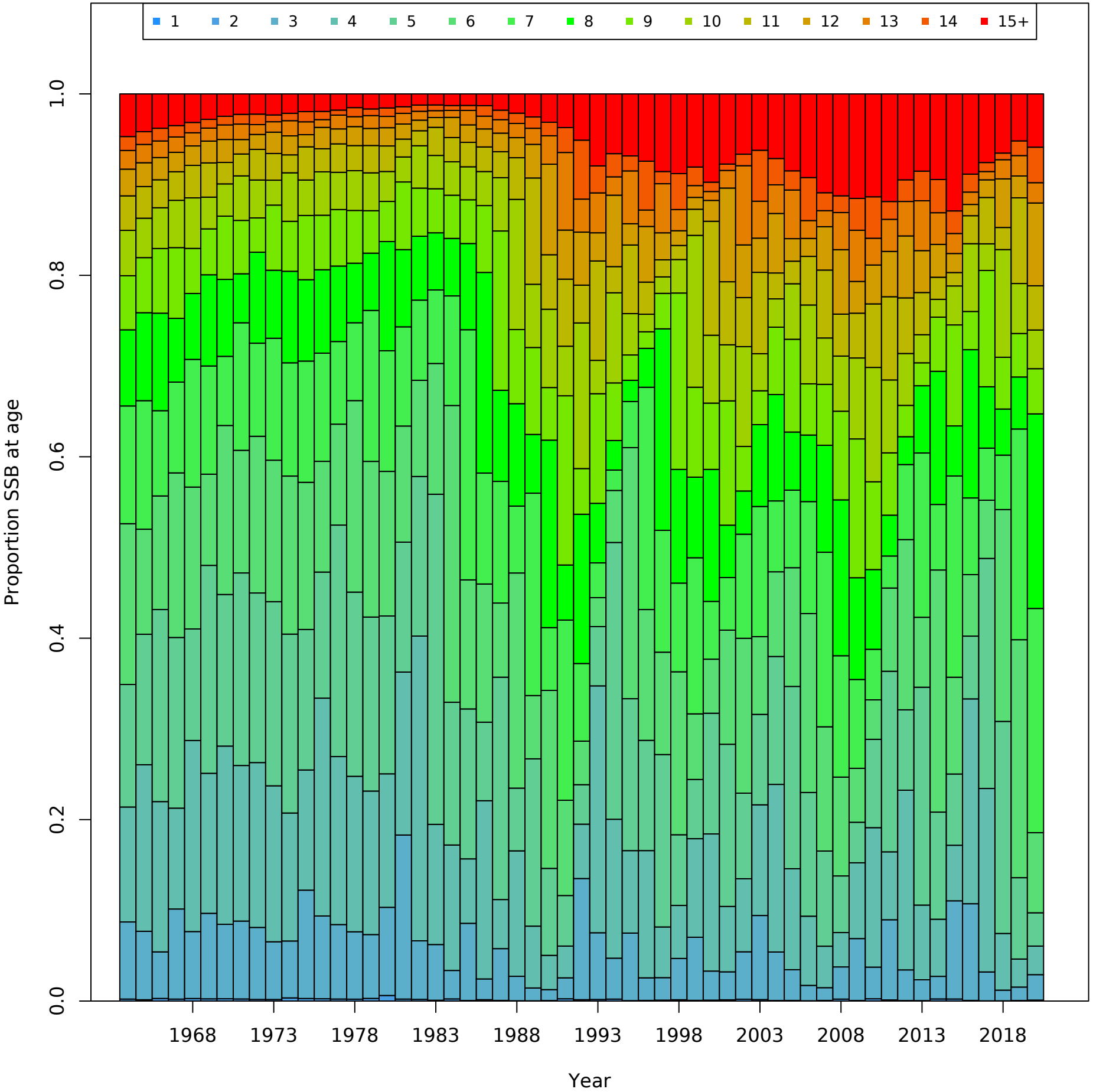
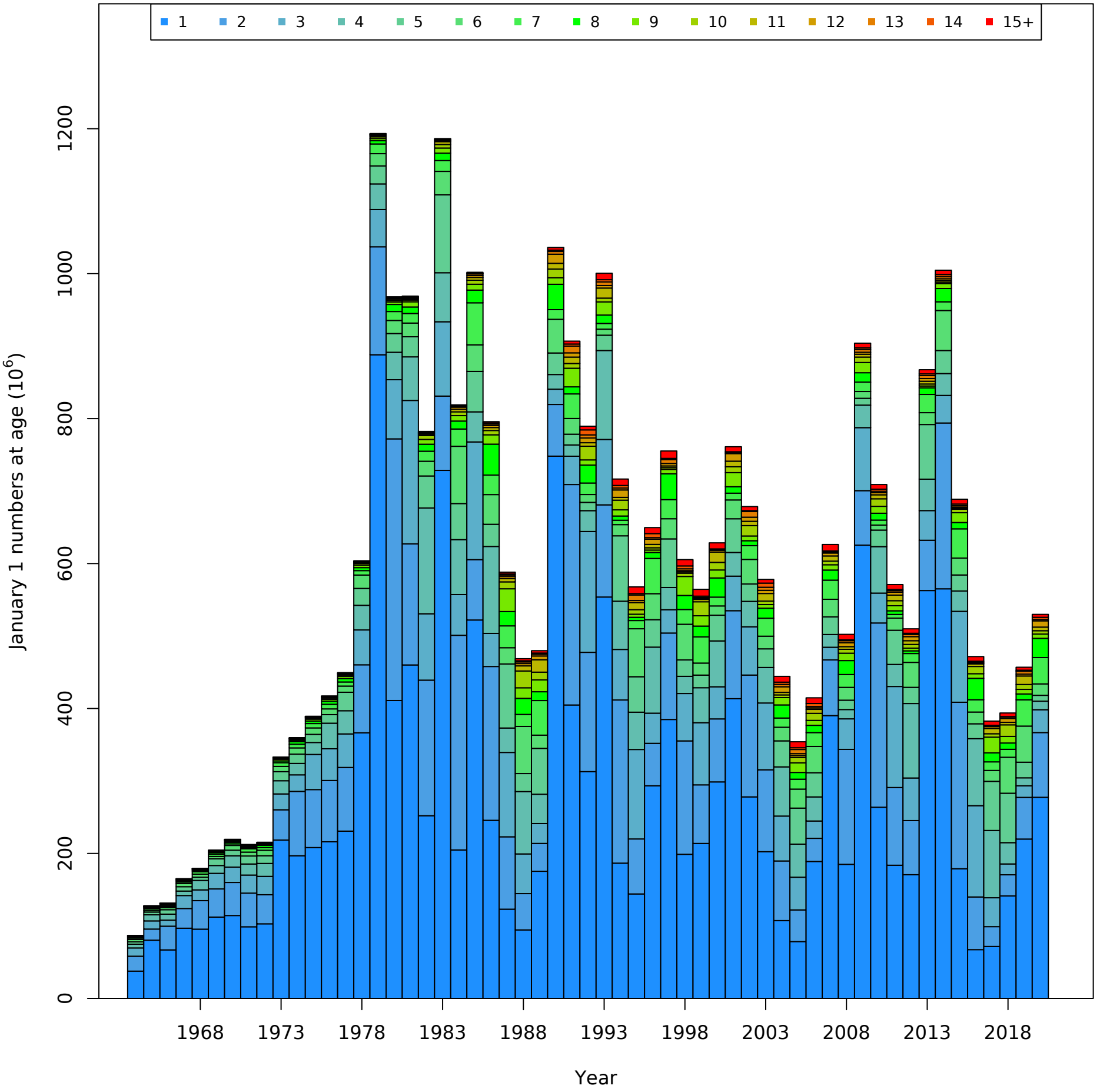

Fleet 1
1964 - 2020
Selectivity
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Age

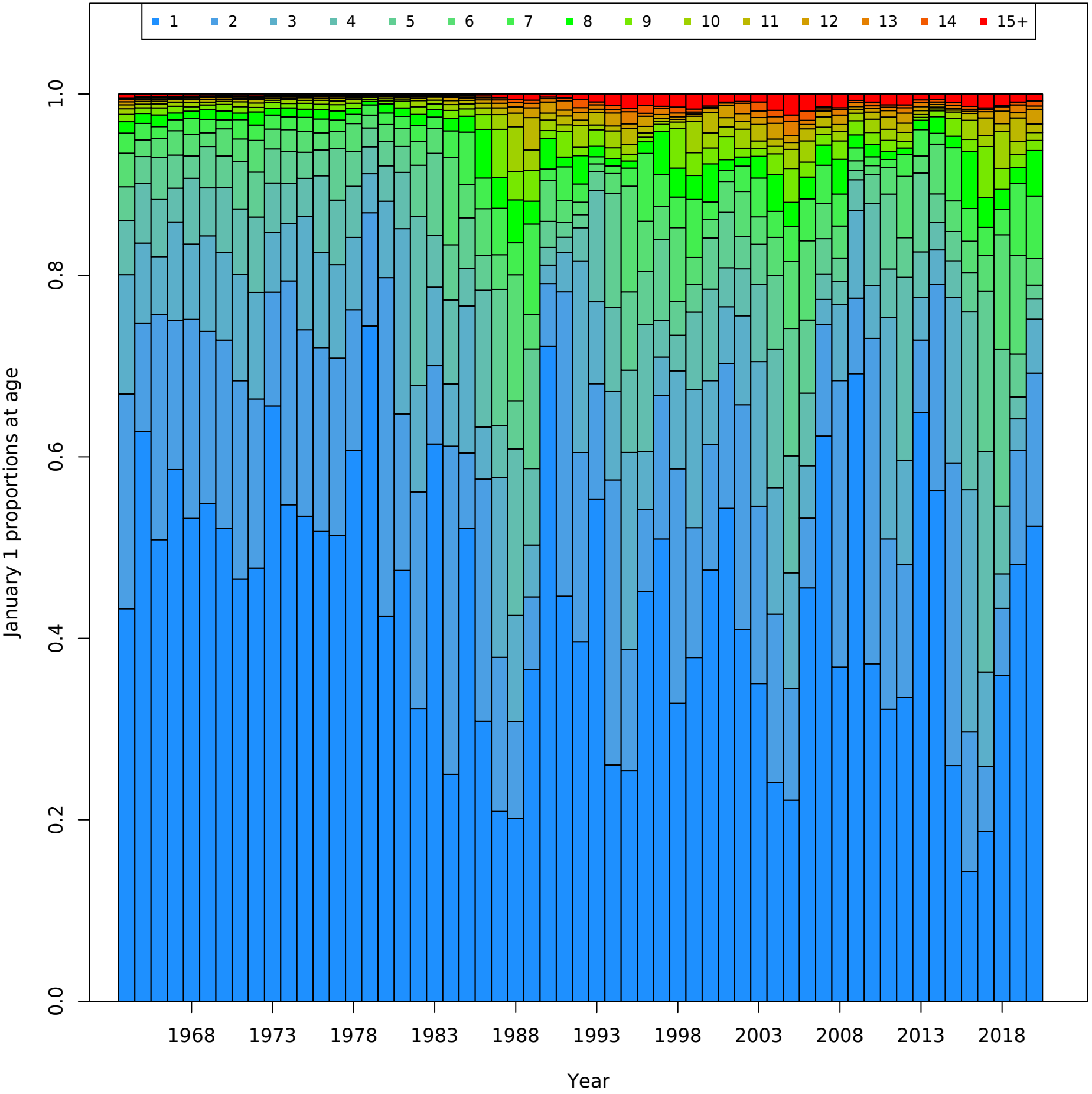

Index 1
1964 - 2020
Selectivity
0.0
0.2
0.4
0.6
0.8
1.0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Age

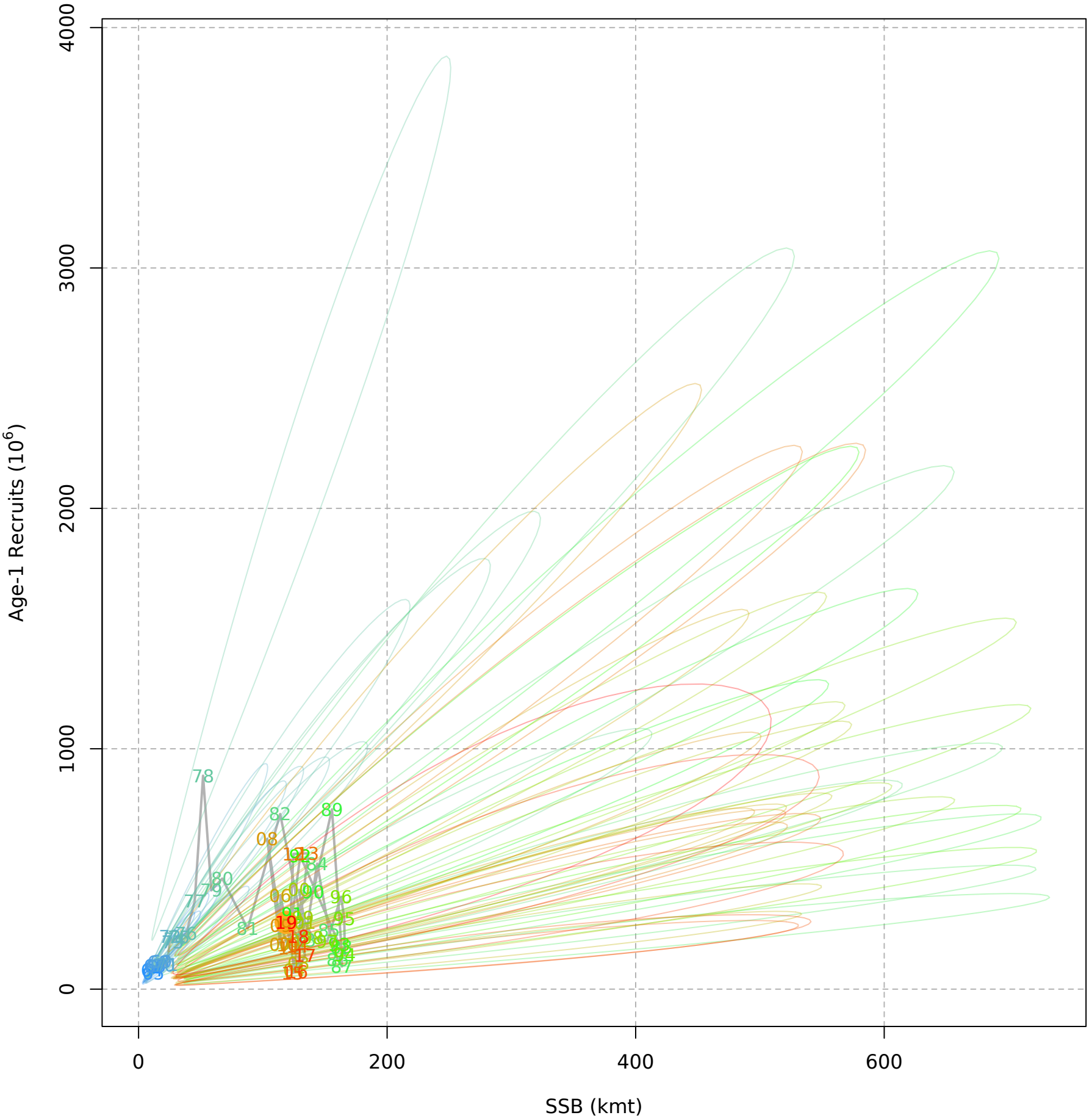

SSB (kmt)
0
100
200
300
400
500
Fully-selected F
0.00
0.05
0.10
0.15
0.20
0.25
1970
1980
1990
2000
2010
2020
Year

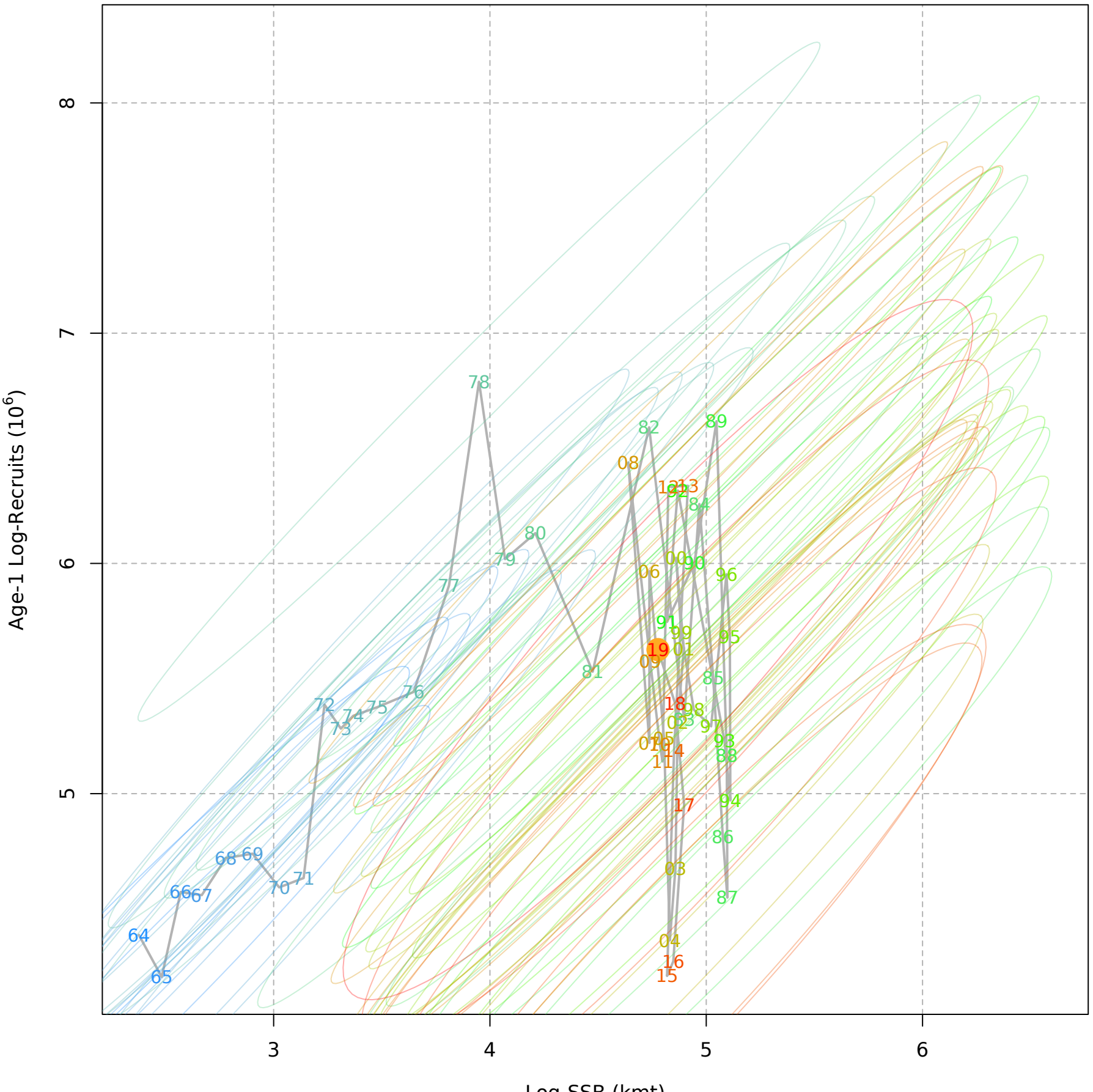

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15+
SSB at age (kmt)
0
50
100
150
1968
1973
1978
1983
1988
1993
1998
2003
2008
2013
2018
Year

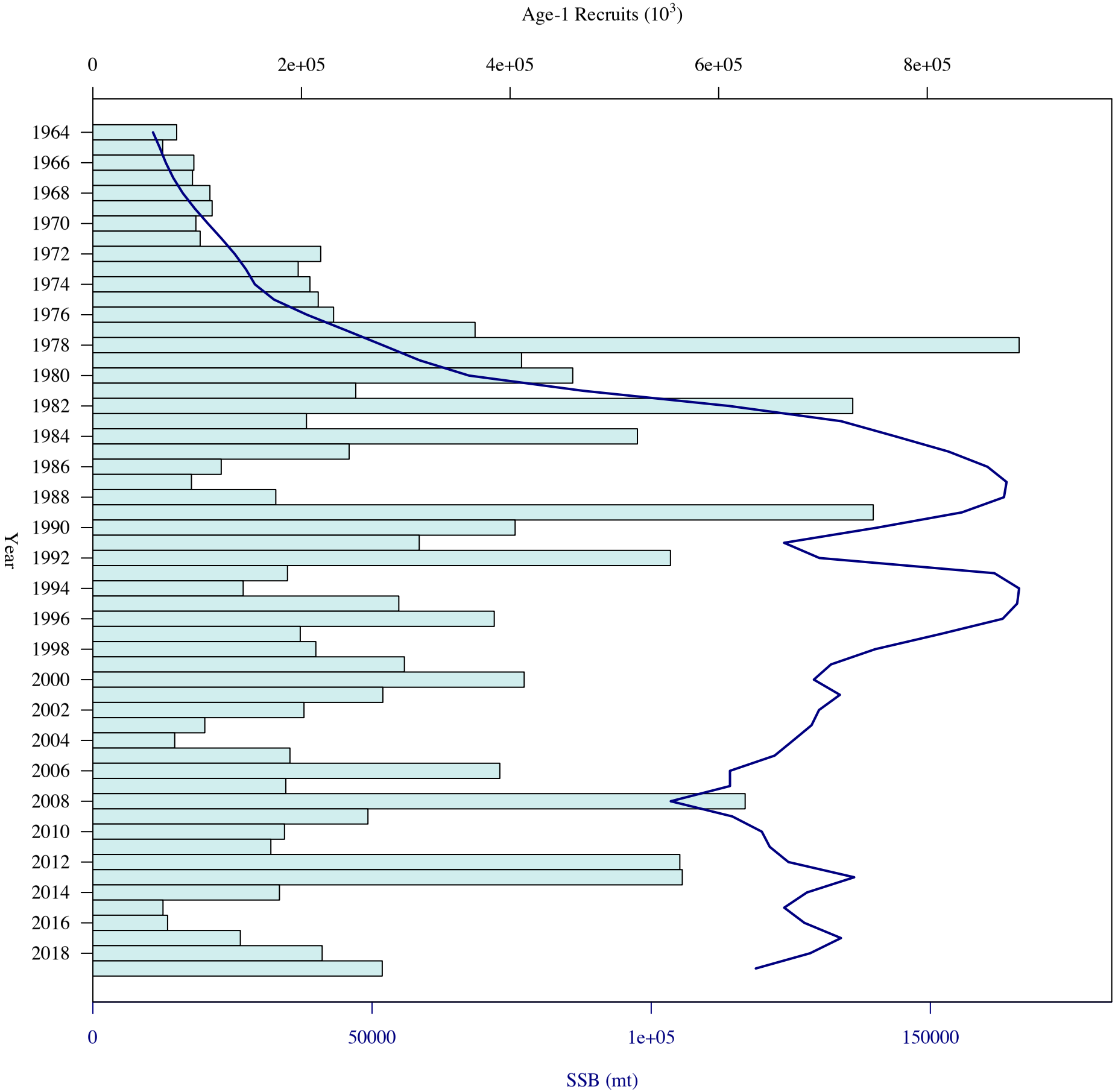

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15+
Proportion SSB at age
0.0
0.2
0.4
0.6
0.8
1.0
1968
1973
1978
1983
1988
1993
1998
2003
2008
2013
2018
Year

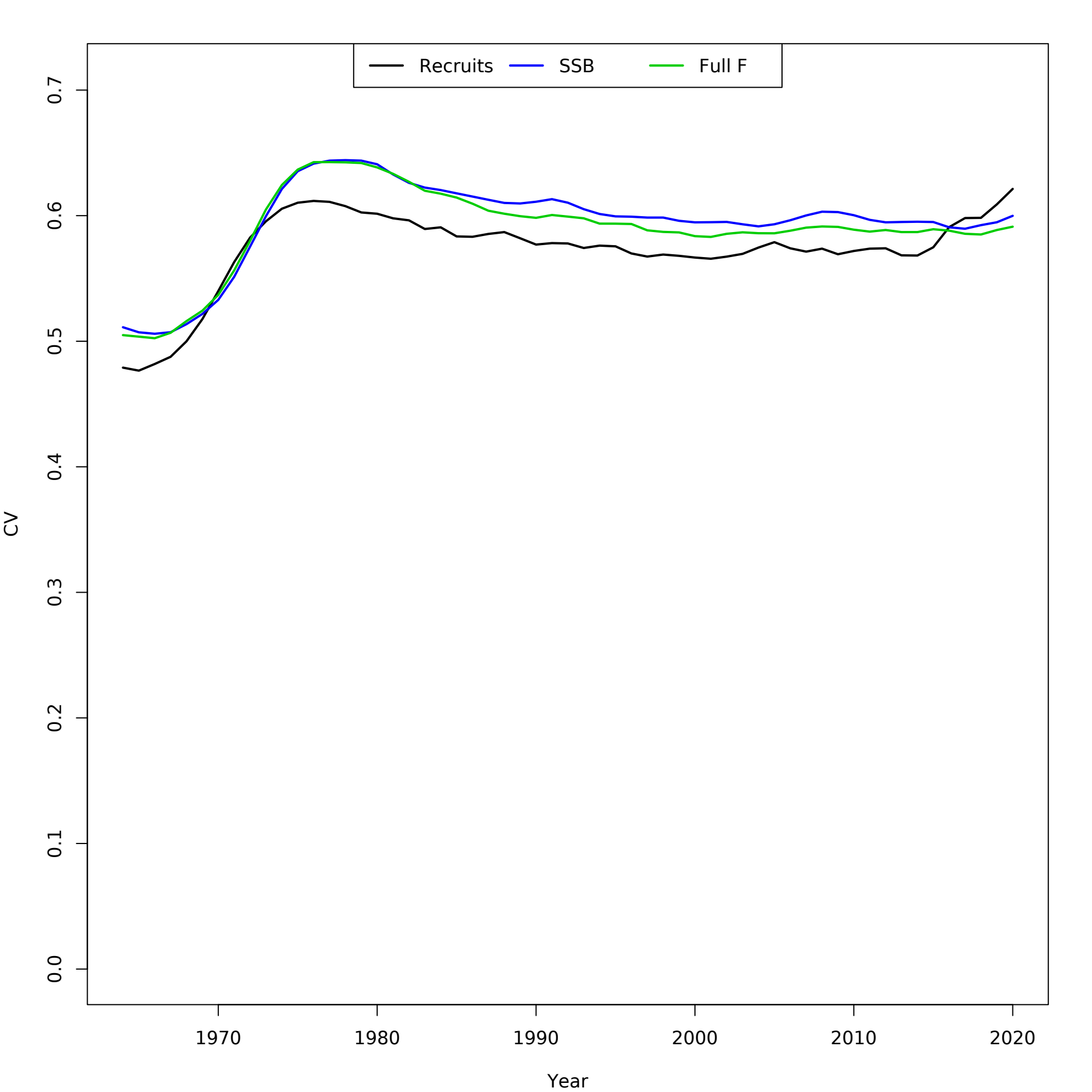

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15+
January 1 numbers at age (10^6)
0
200
400
600
800
1000
1200
1968
1973
1978
1983
1988
1993
1998
2003
2008
2013
2018
Year

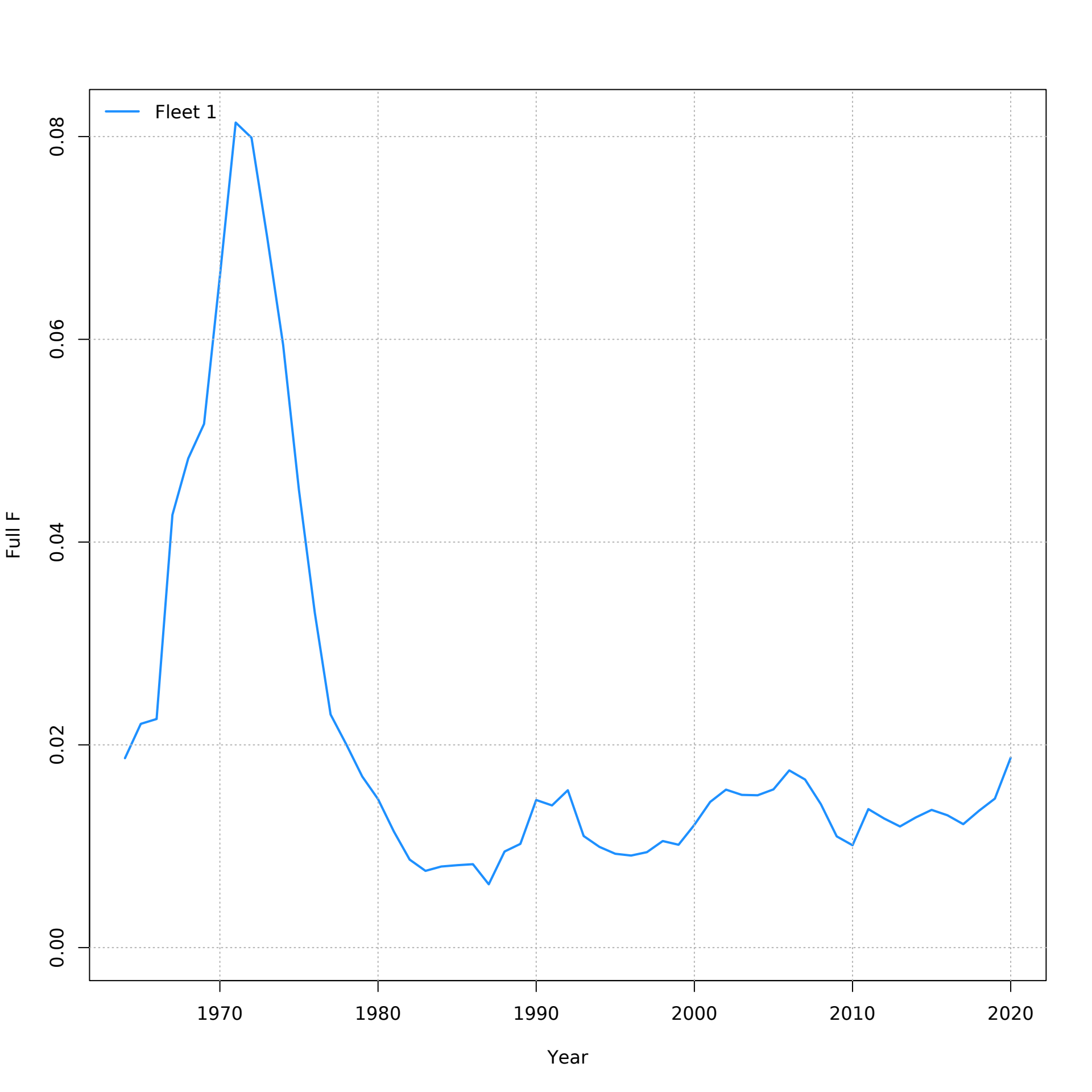

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15+
January 1 proportions at age
0.0
0.2
0.4
0.6
0.8
1.0
1968
1973
1978
1983
1988
1993
1998
2003
2008
2013
2018
Year

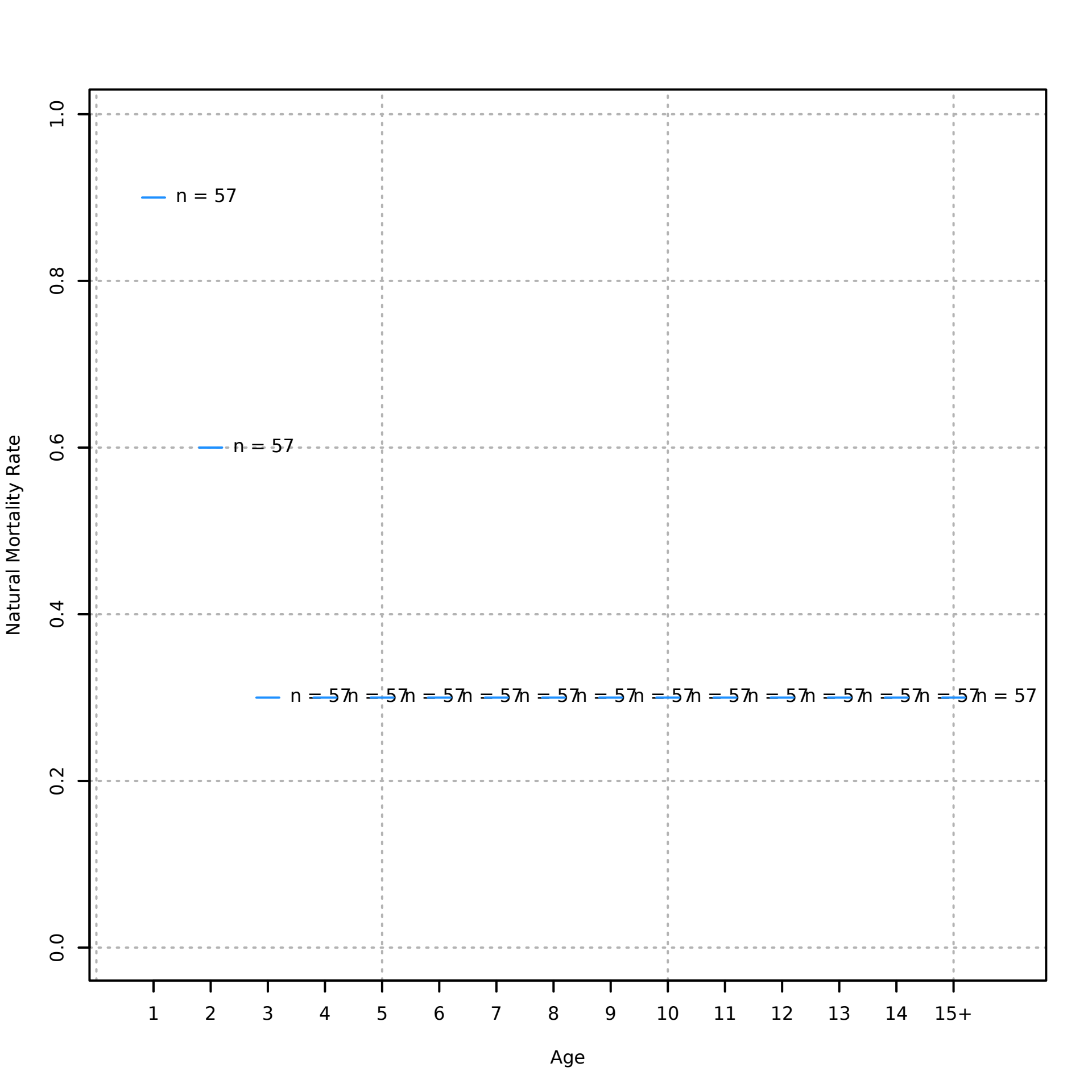

Age-1 Recruits (10^6)
SSB (kmt)
0
1000
2000
3000
4000
0
200
400
600

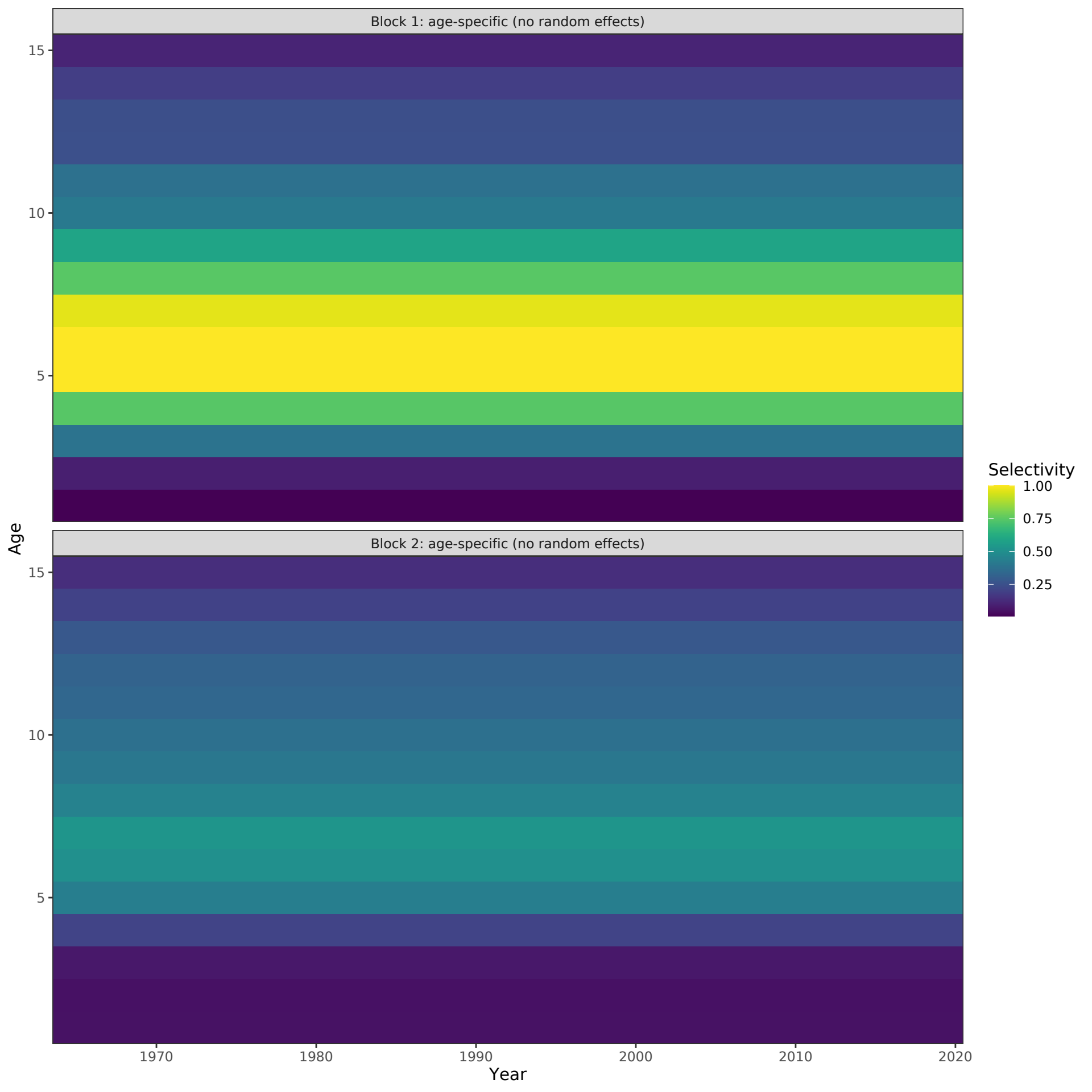

Age-1 Log-Recruits (10^6)
Log-SSB (kmt)
3
4
5
6
5
6
7
8

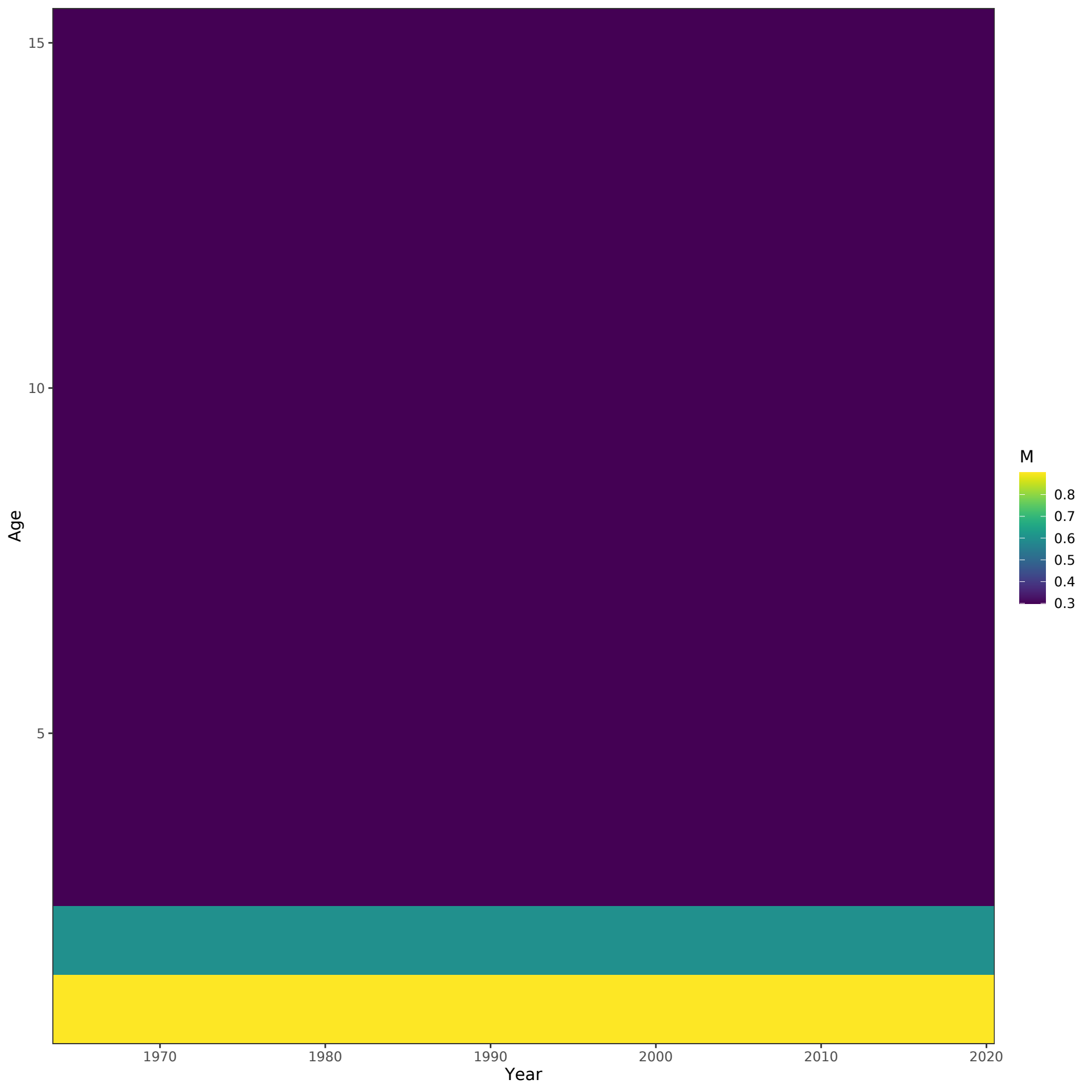

Age-1 Recruits (10^3)
0
2e+05
4e+05
6e+05
8e+05
1964
1966
1968
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
Year
0
50000
1e+05
150000
SSB (mt)


Recruits
SSB
Full F
CV
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
1970
1980
1990
2000
2010
2020
Year


Fleet 1
Full F
0.00
0.02
0.04
0.06
0.08
1970
1980
1990
2000
2010
2020
Year


Natural Mortality Rate
1.0
0.8
0.6
0.4
0.2
0.0
n = 57
n = 57
n = 57n = 57n = 57n = 57n = 57n = 57n = 57n = 57n = 57n = 57n = 57
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15+
Age


Block 1: age-specific (no random effects)
Block 2: age-specific (no random effects)
Age
15
10
5
Year
1970
1980
1990
2000
2010
2020
Selectivity
1.00
0.75
0.50
0.25


15
10
5
Age
1970
1980
1990
2000
2010
2020
Year
M
0.8
0.7
0.6
0.5
0.4
0.3