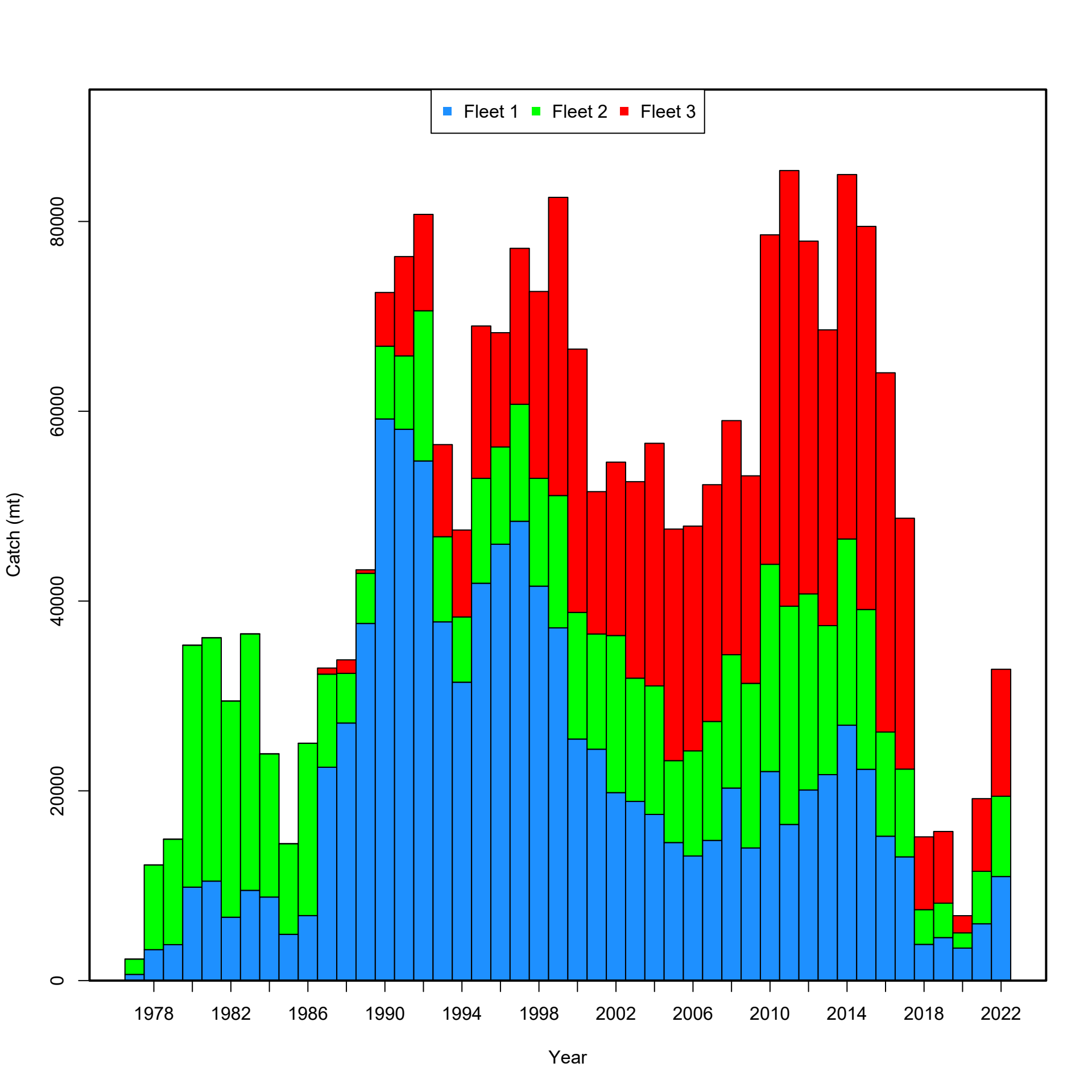
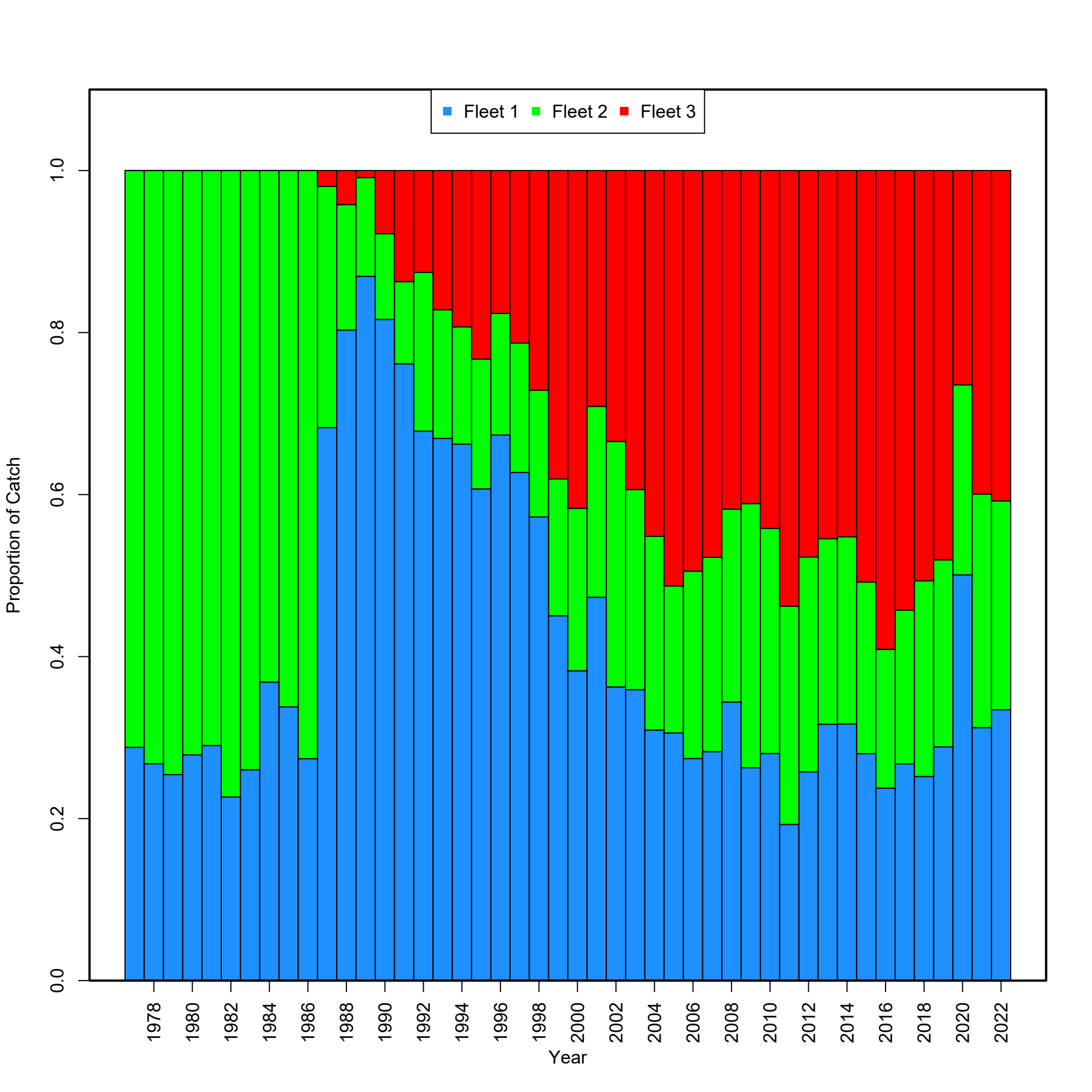
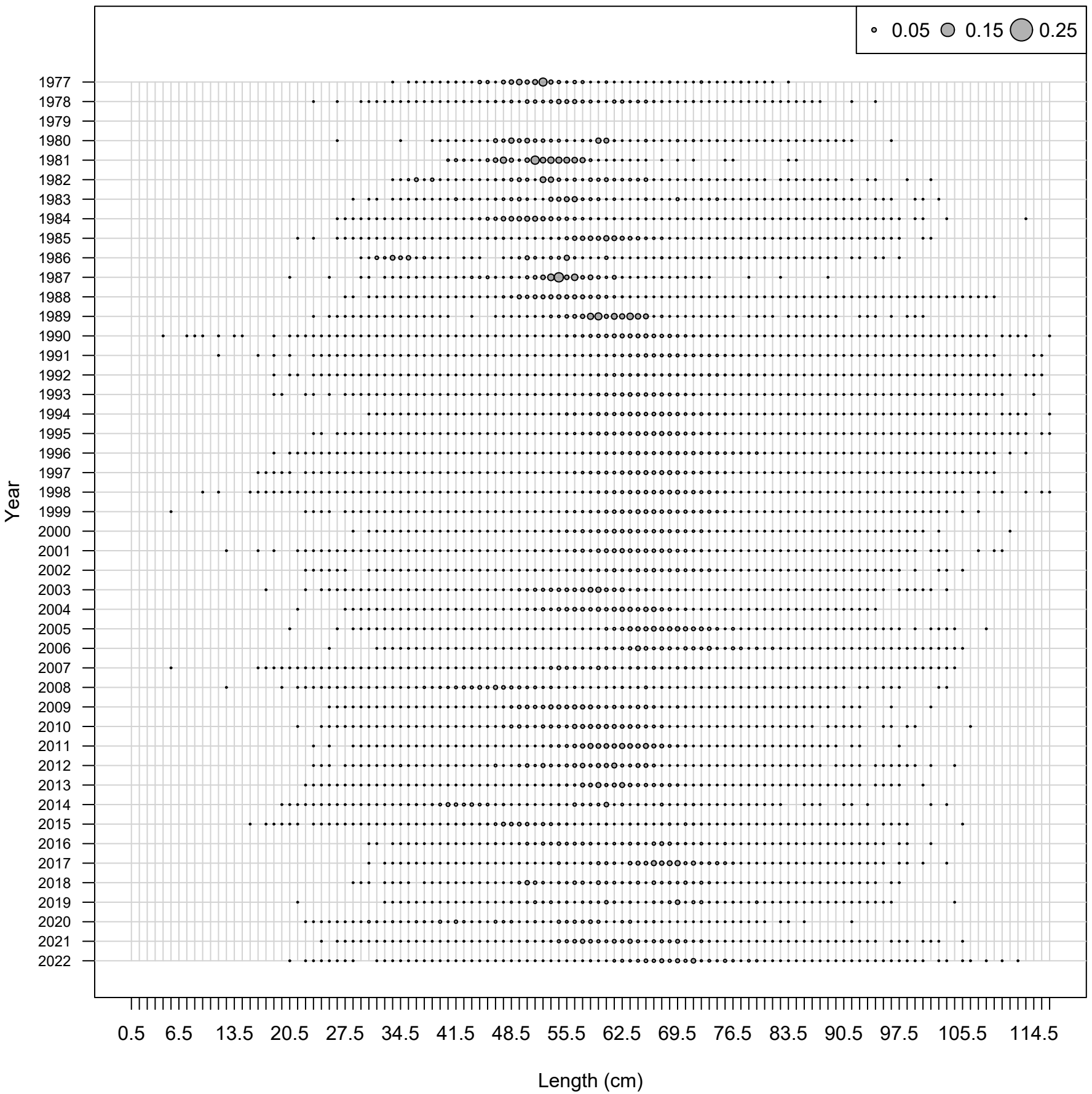
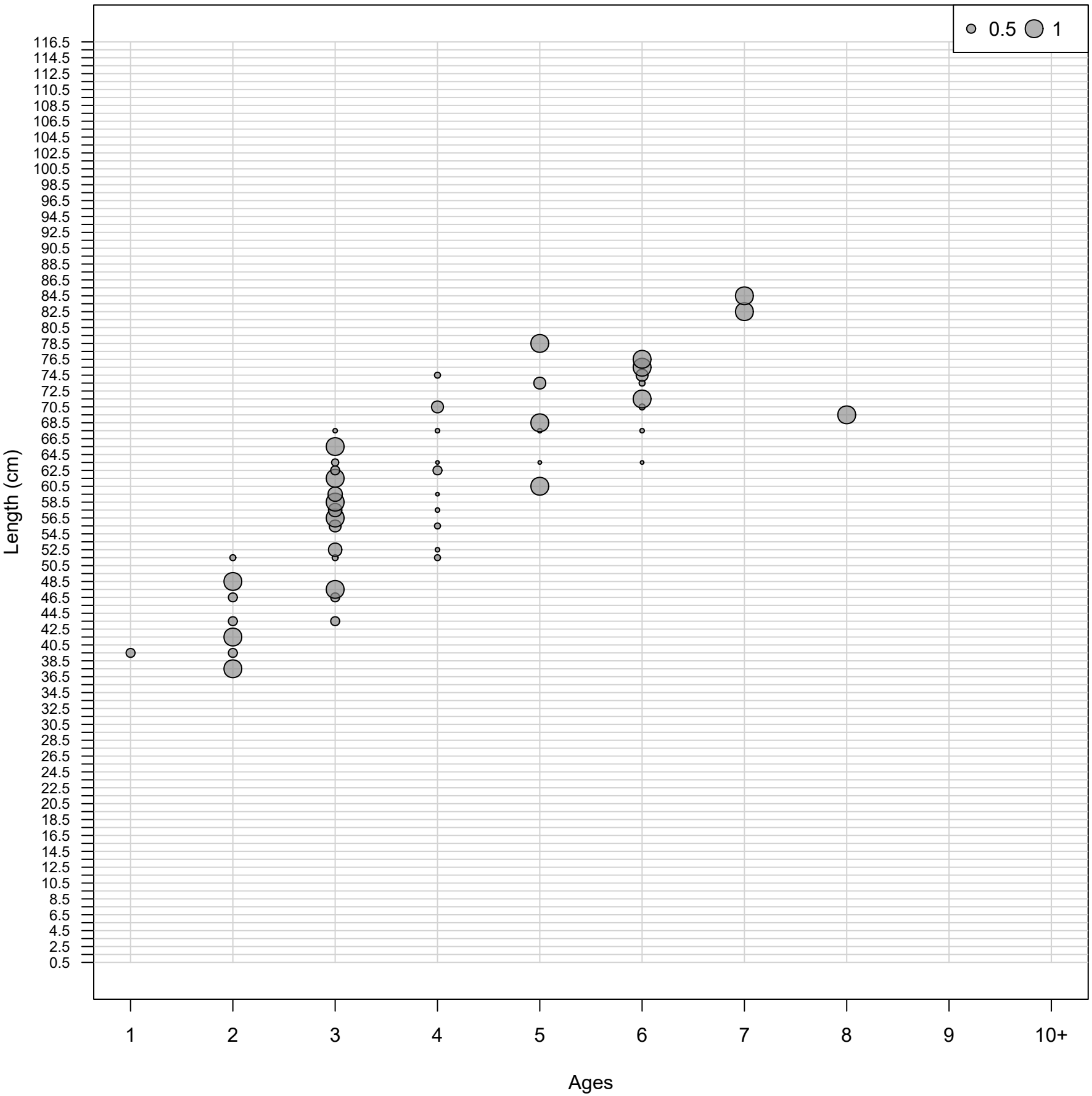
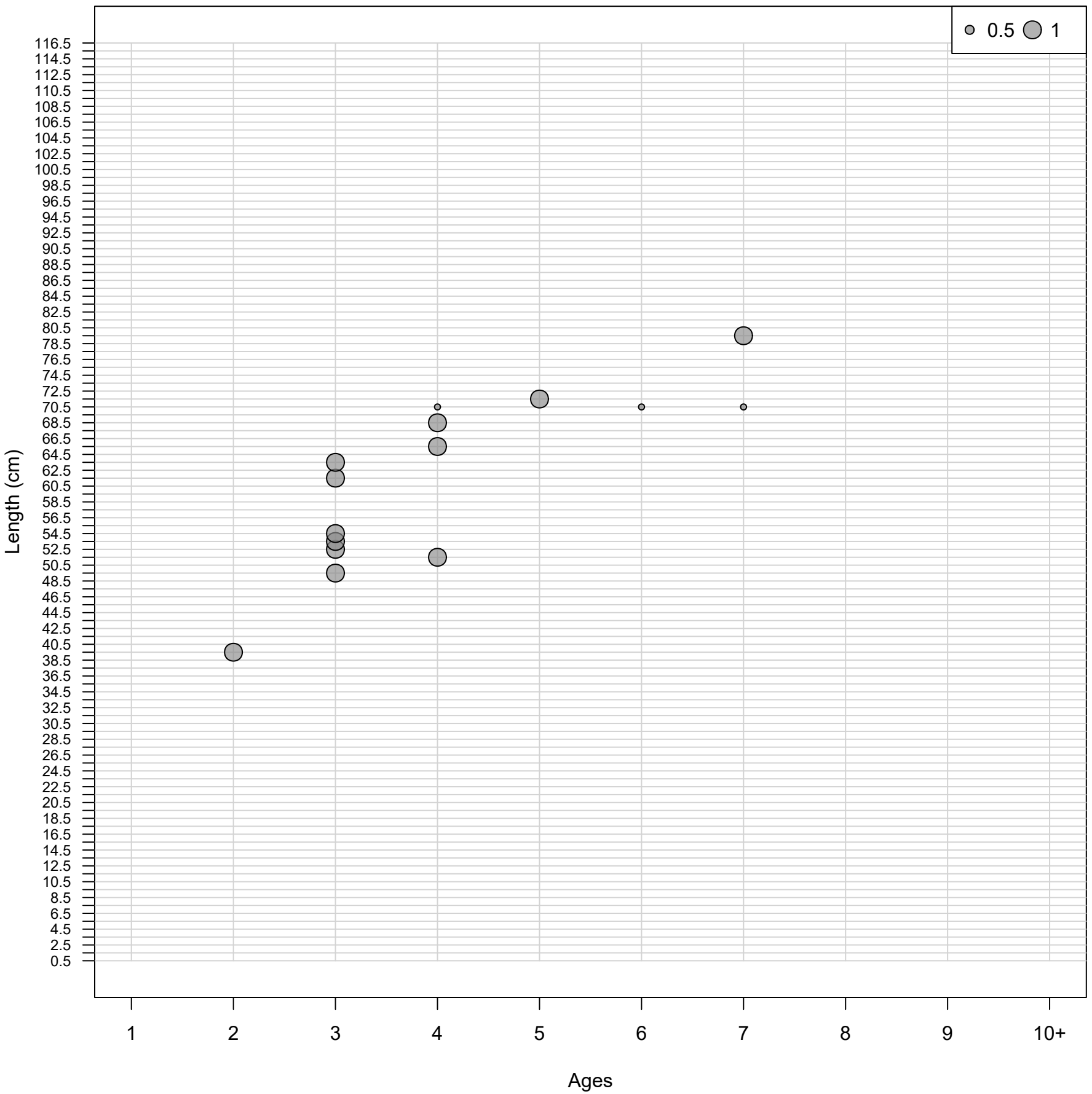
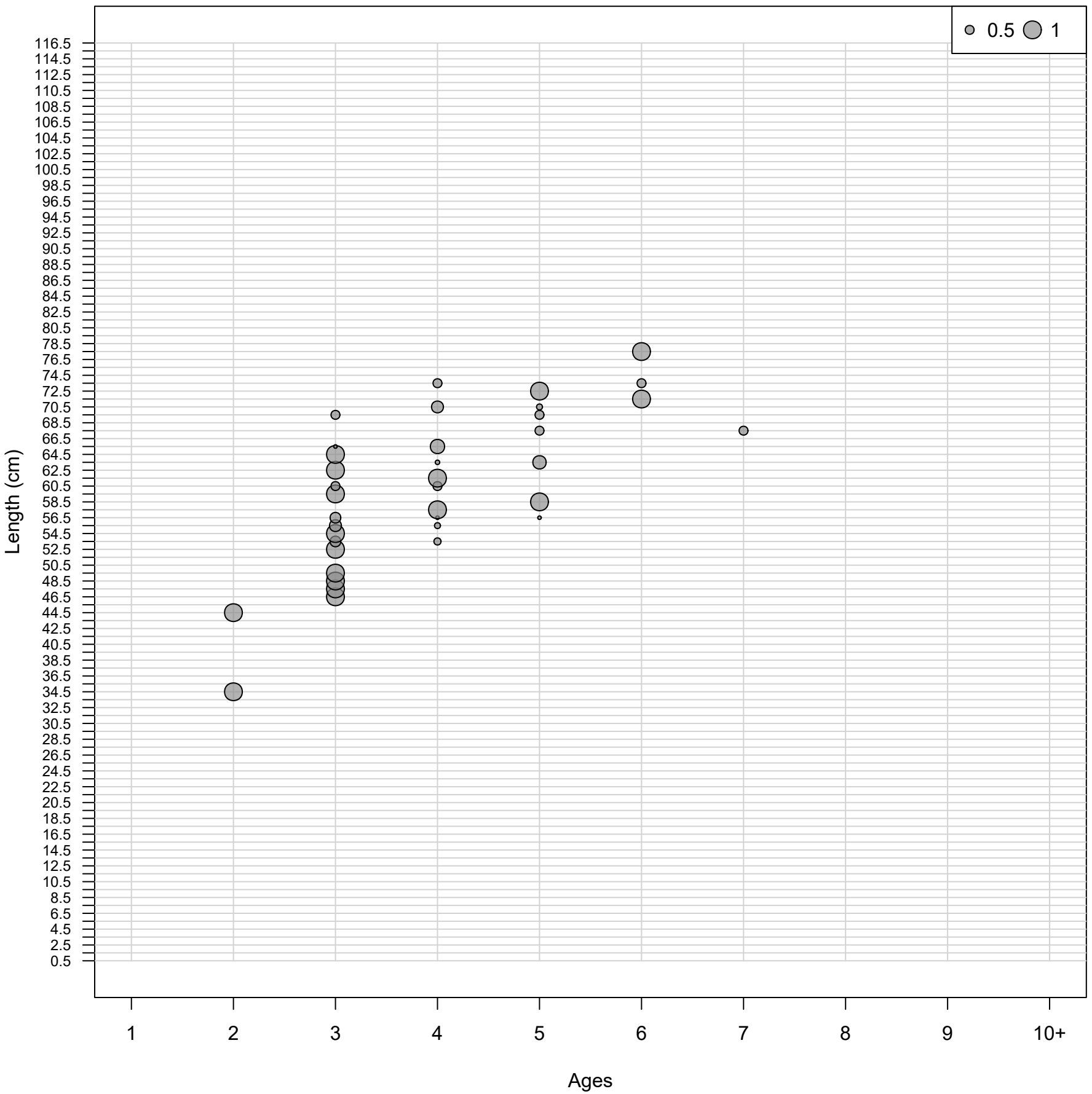

Fleet 1
Fleet 2
Fleet 3
Catch (mt)
0
20000
40000
60000
80000
1978
1982
1986
1990
1994
1998
2002
2006
2010
2014
2018
2022
Year

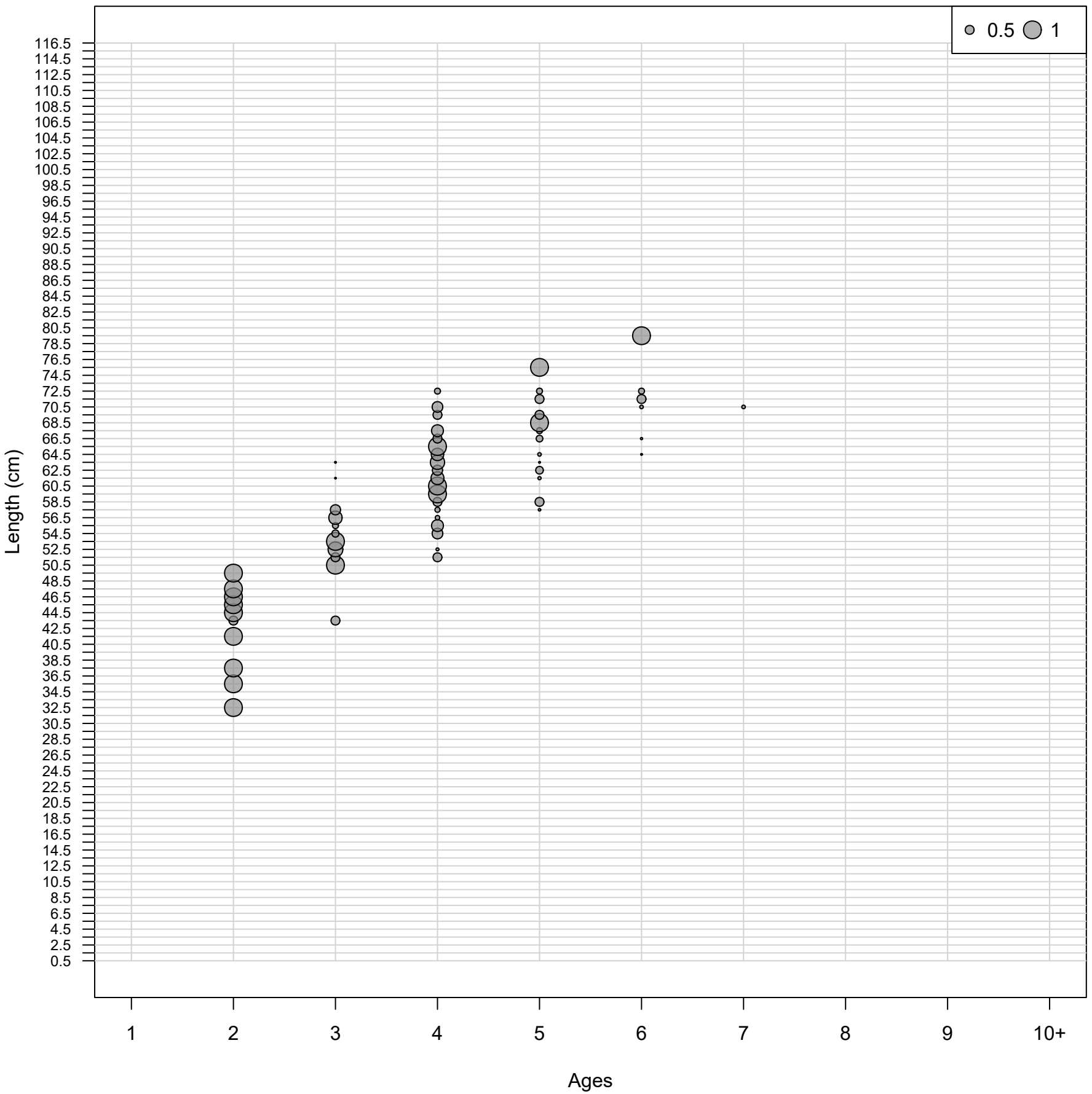

Fleet 1
Fleet 2
Fleet 3
Proportion of Catch
0.0
0.2
0.4
0.6
0.8
1.0
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
Year

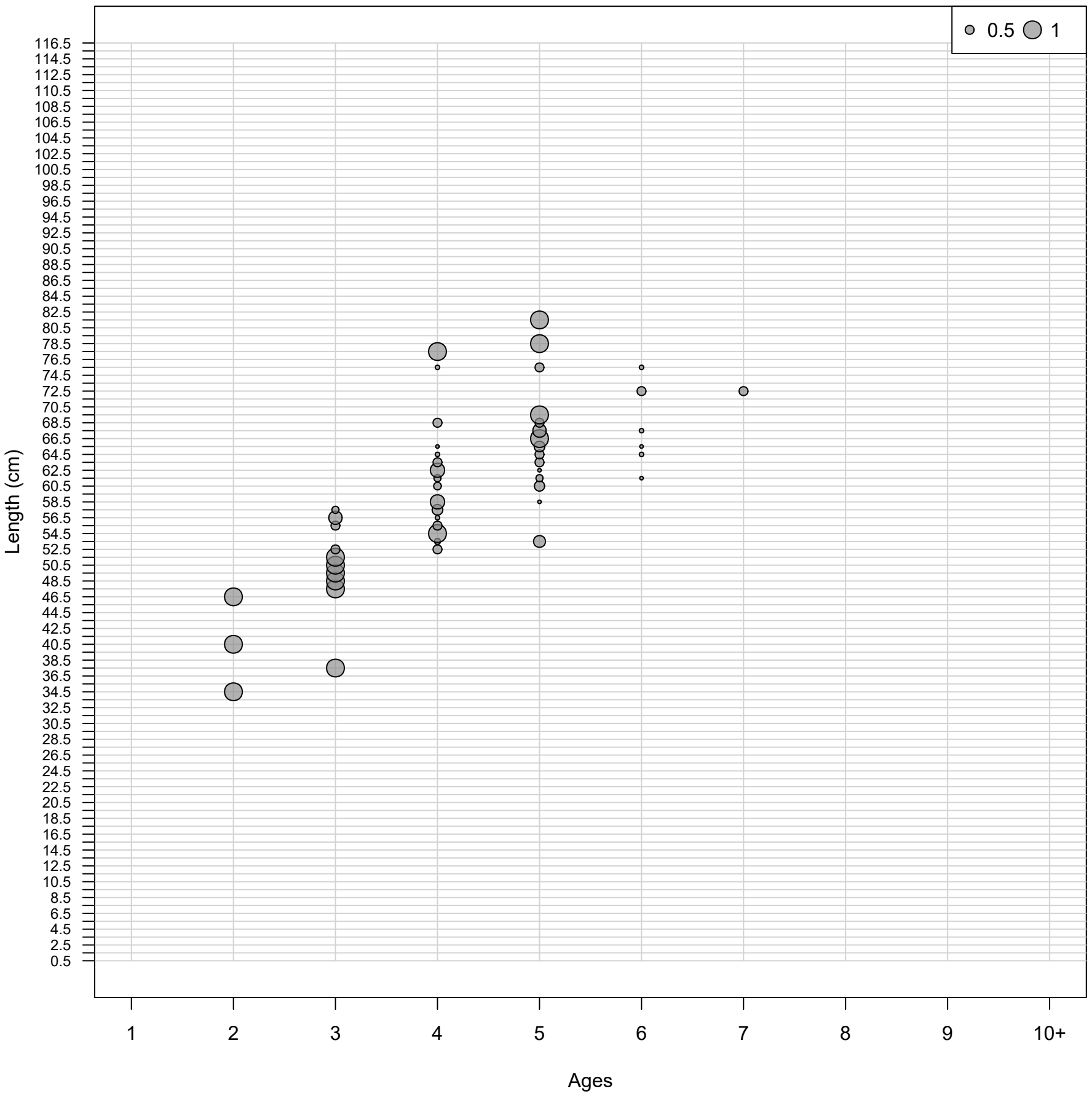

Length Comps for Catch for Fleet 1
0.05
0.15
0.25
Year
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
0.5
6.5
13.5
20.5
27.5
34.5
41.5
48.5
55.5
62.5
69.5
76.5
83.5
90.5
97.5
105.5
114.5
Length (cm)

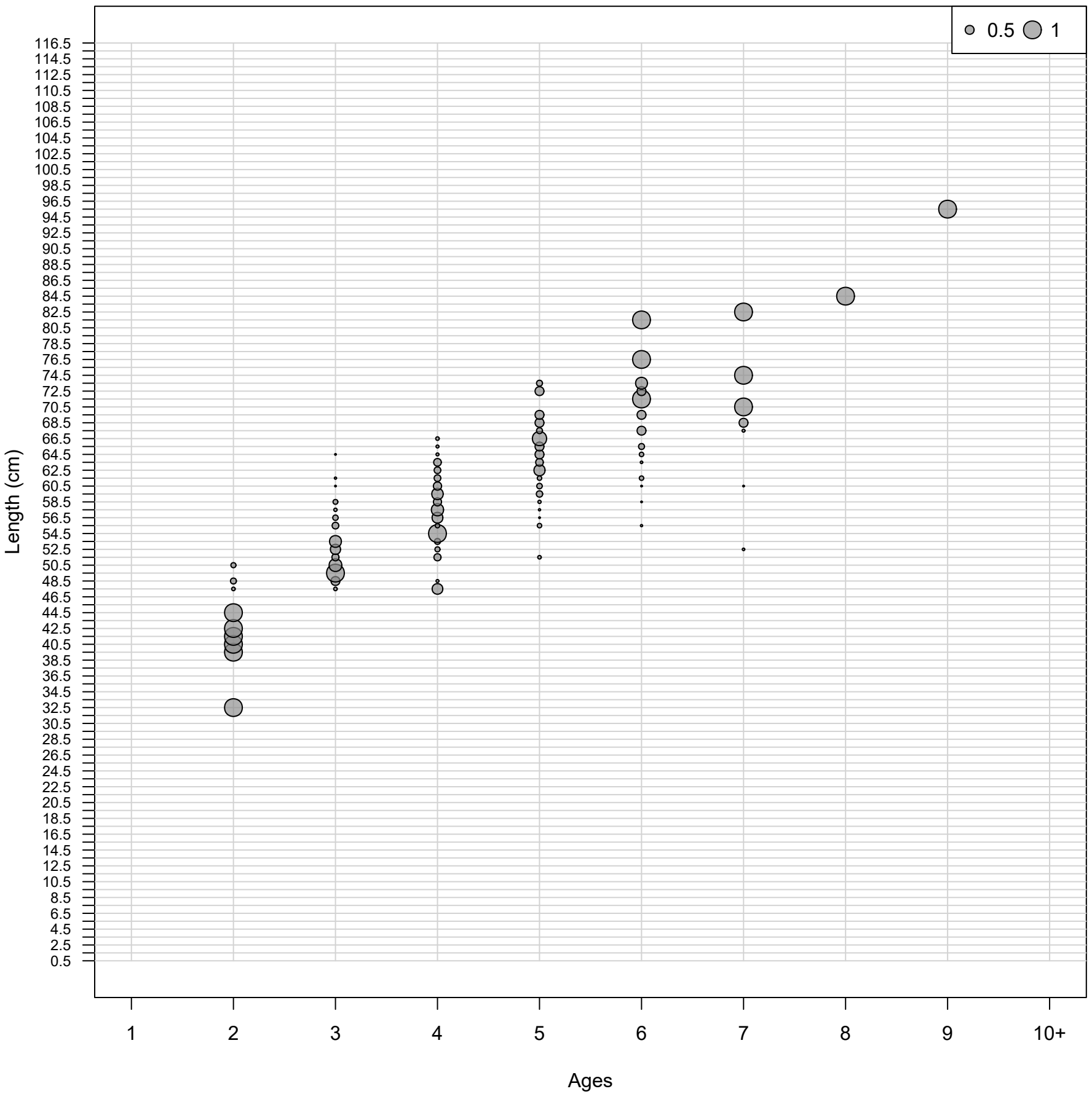

CAAL for Catch for Fleet 1 Year 31
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

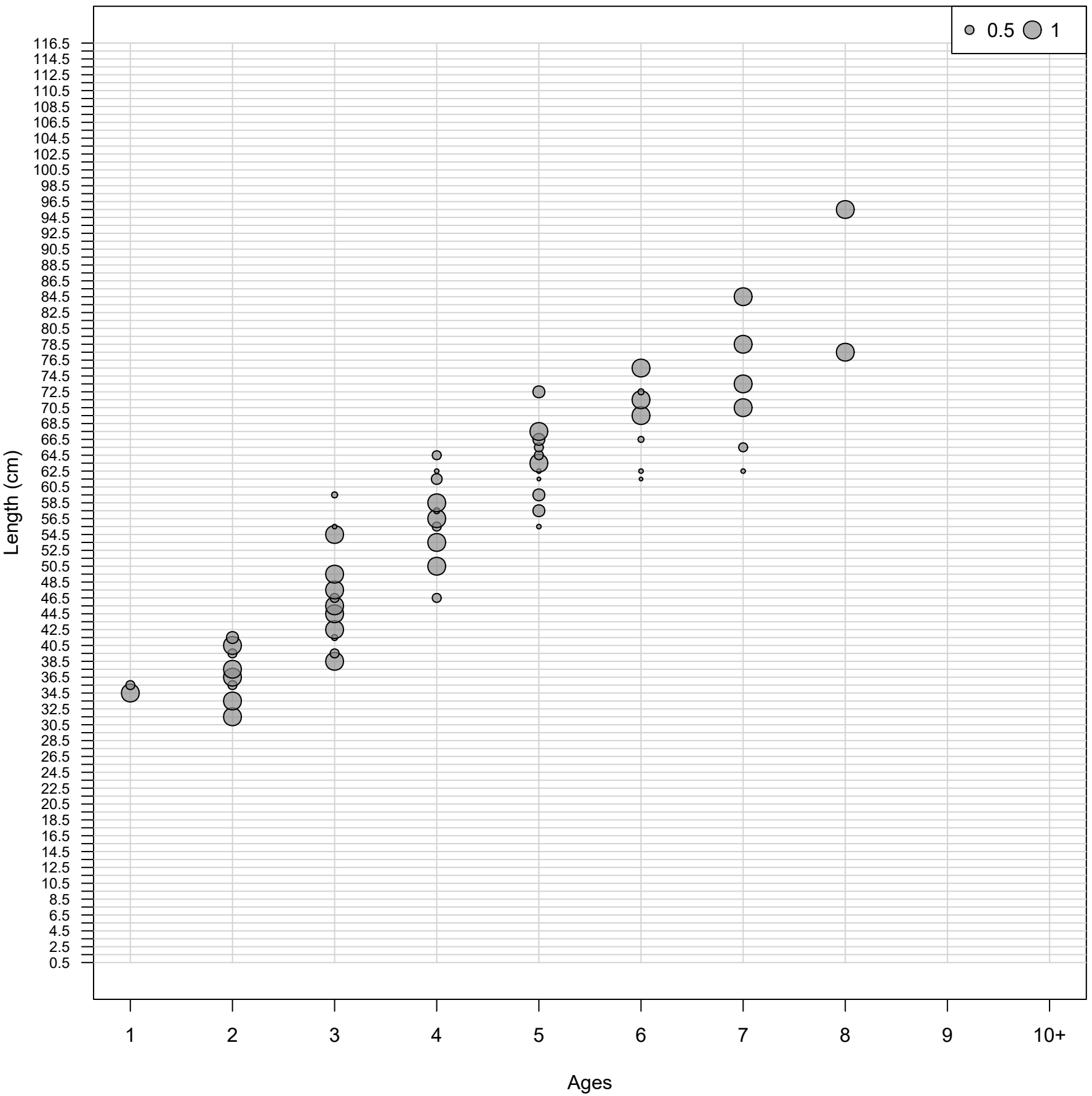

CAAL for Catch for Fleet 1 Year 32
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

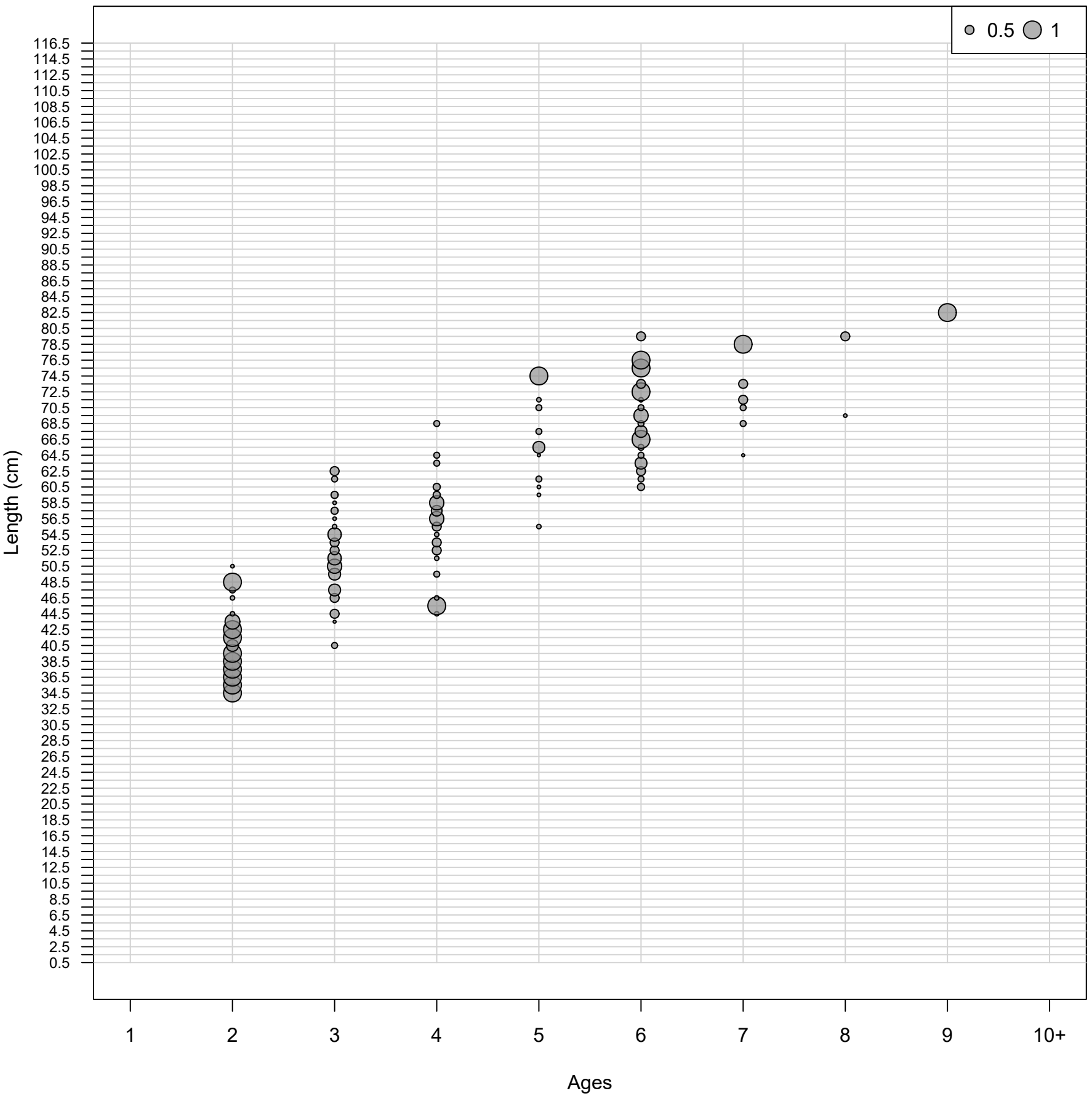

CAAL for Catch for Fleet 1 Year 33
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

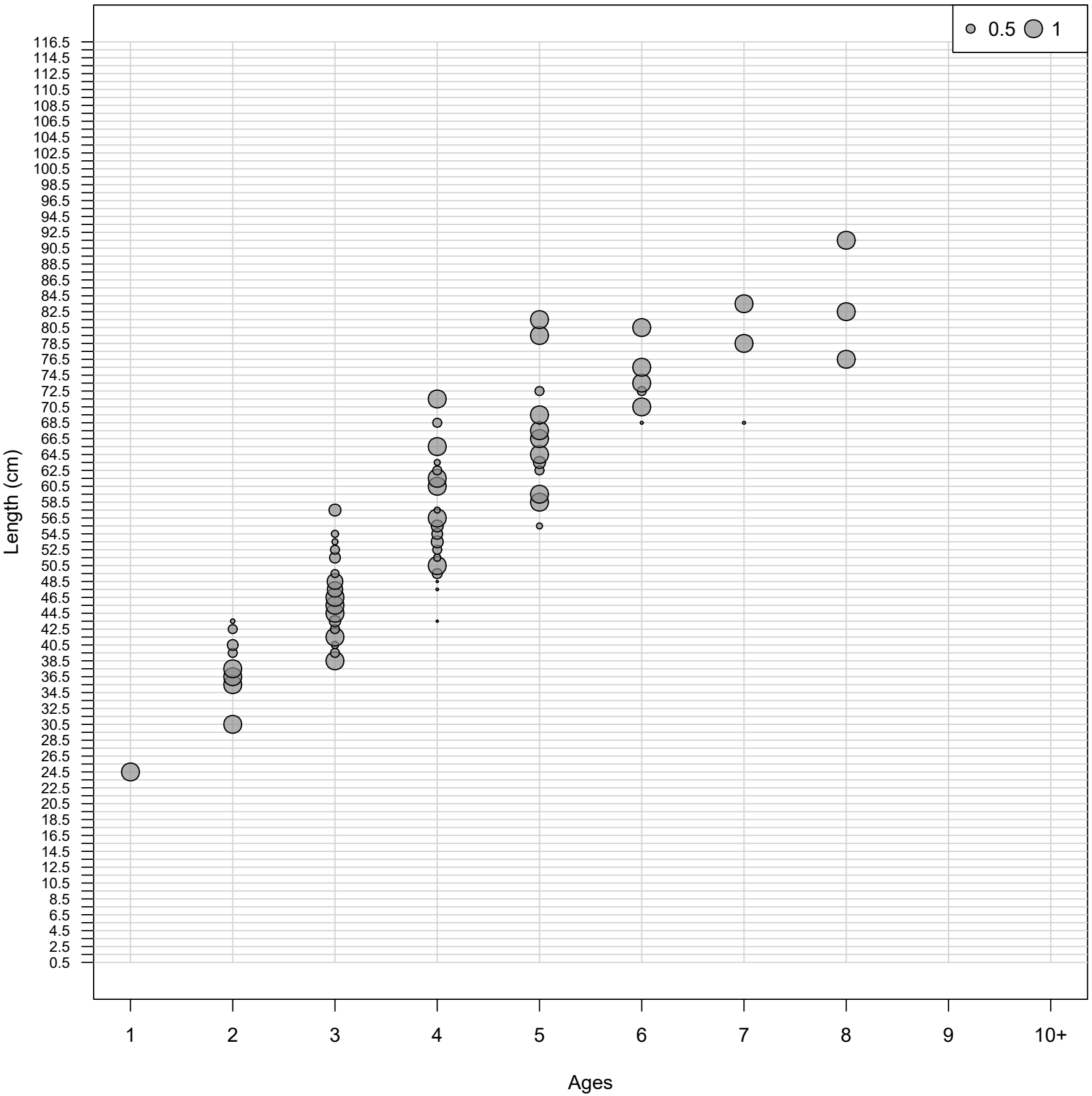

CAAL for Catch for Fleet 1 Year 34
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

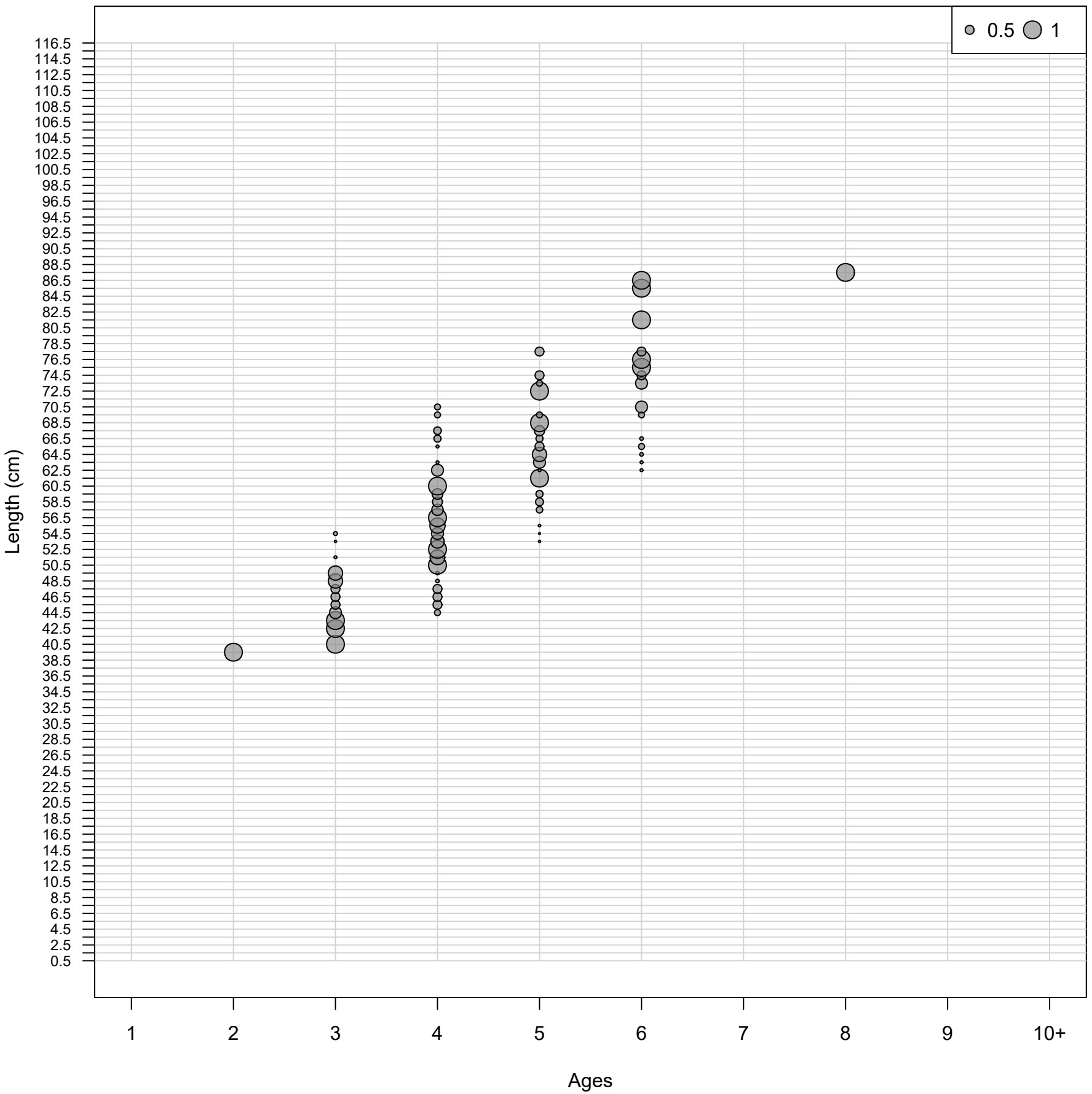

CAAL for Catch for Fleet 1 Year 35
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

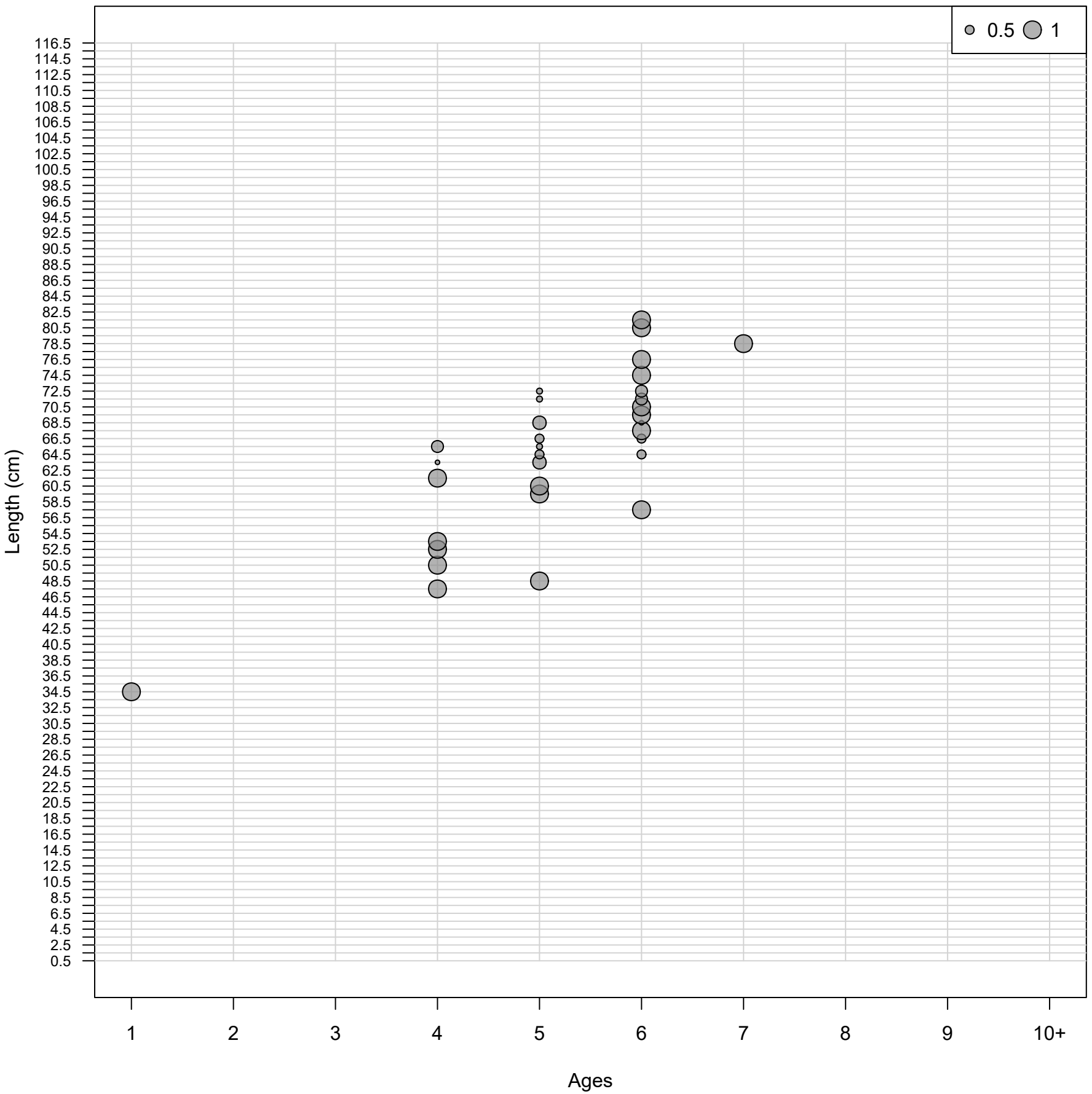

CAAL for Catch for Fleet 1 Year 36
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

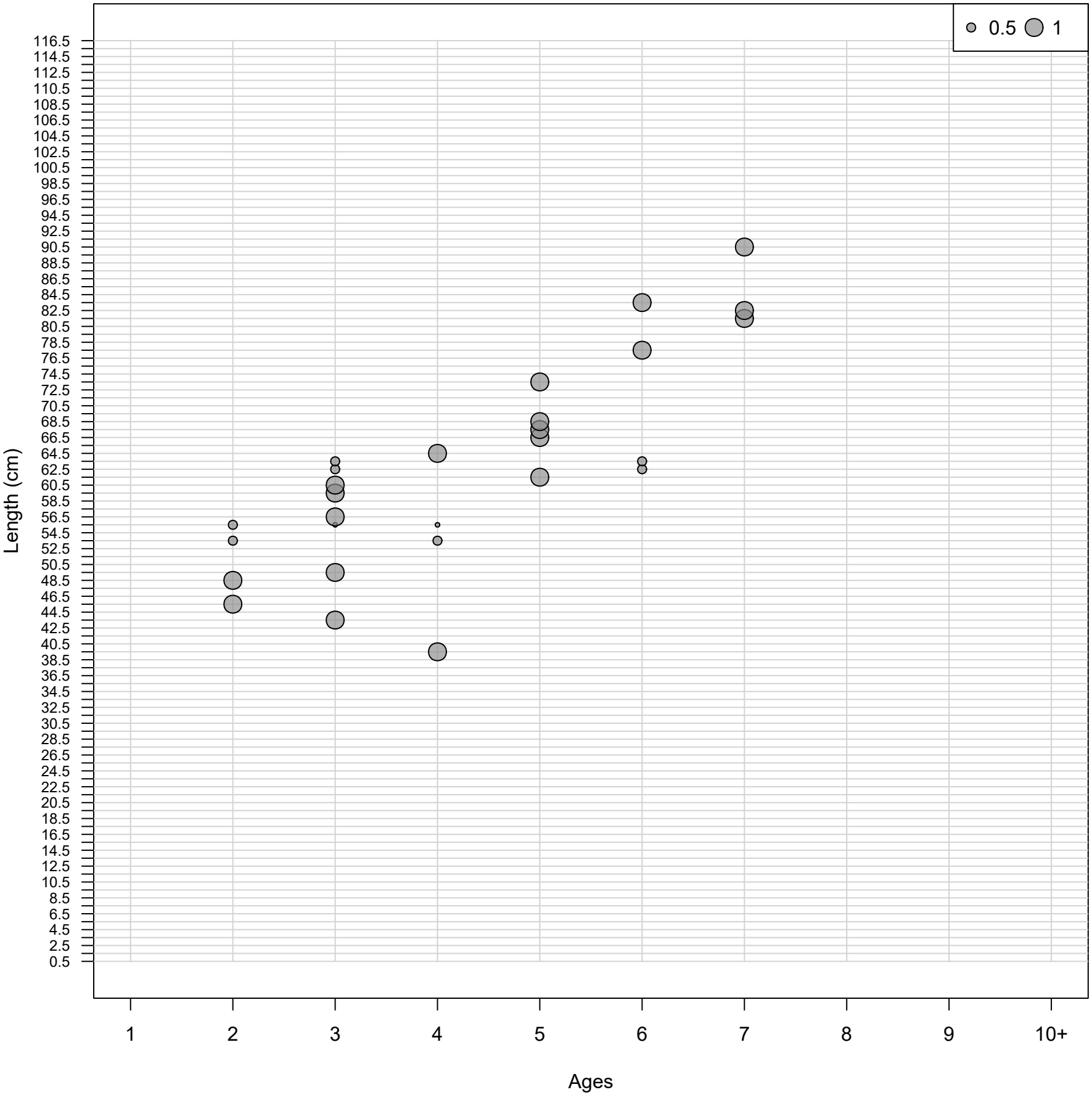

CAAL for Catch for Fleet 1 Year 37
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

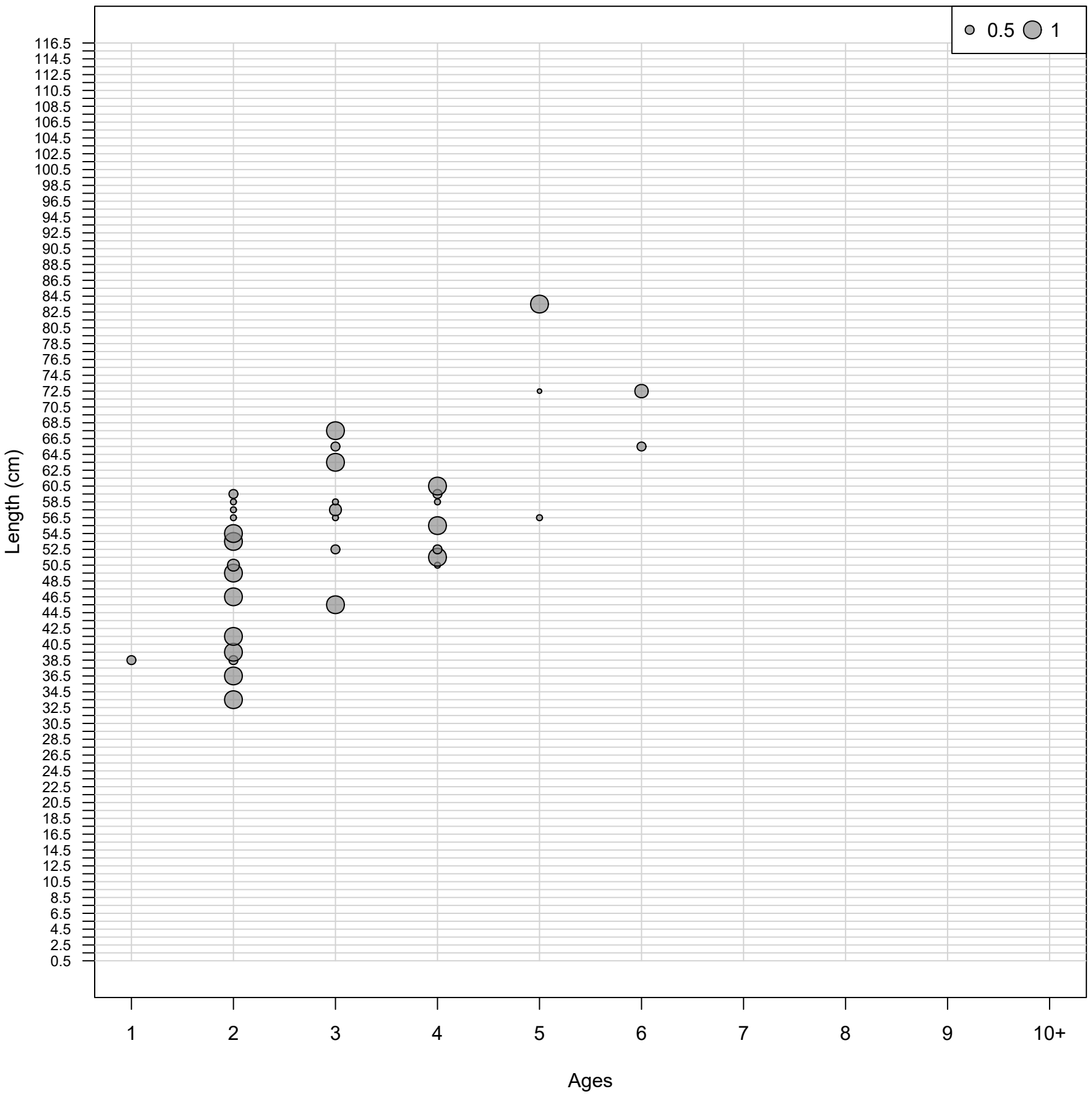

CAAL for Catch for Fleet 1 Year 38
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

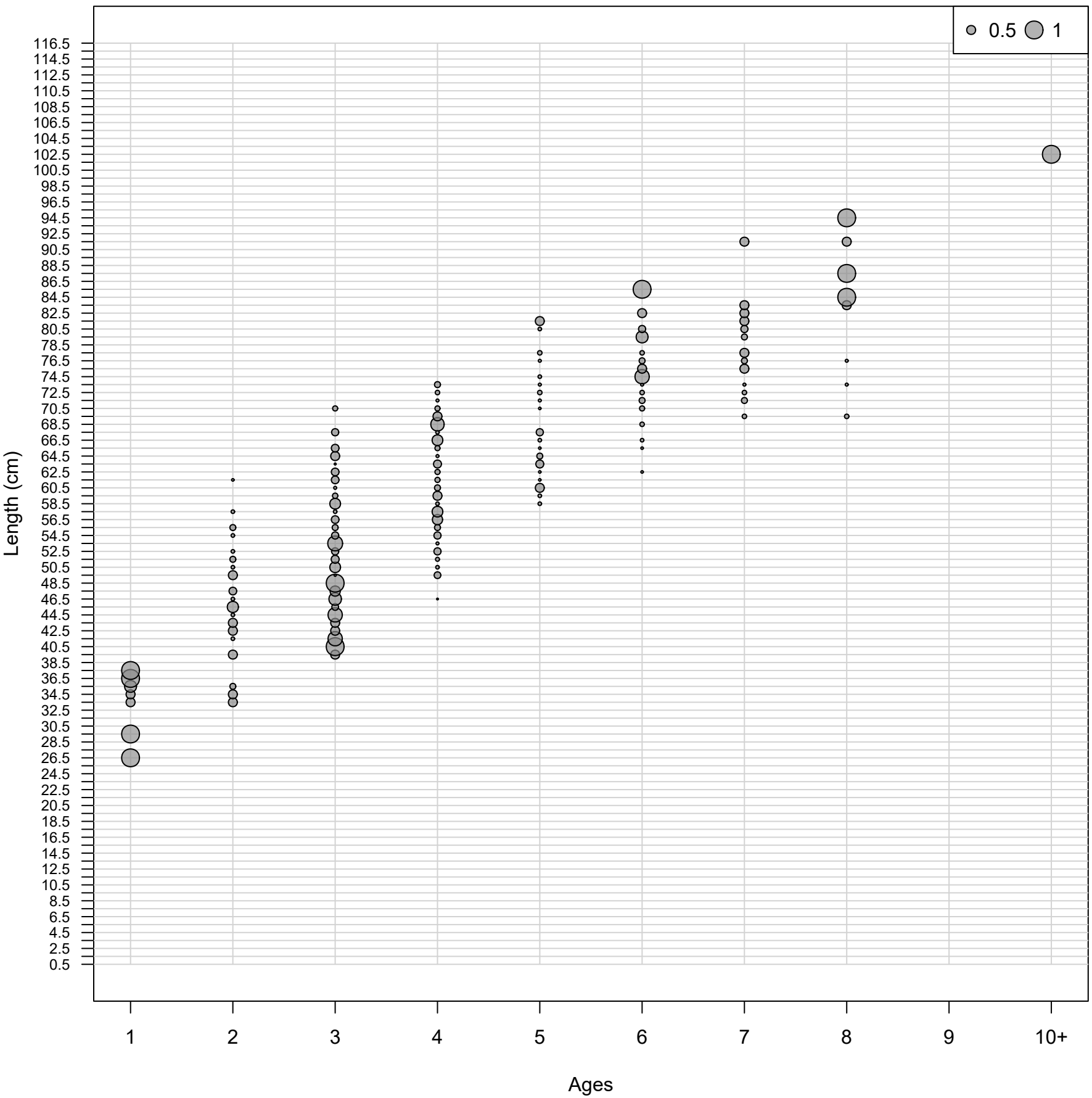

CAAL for Catch for Fleet 1 Year 39
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

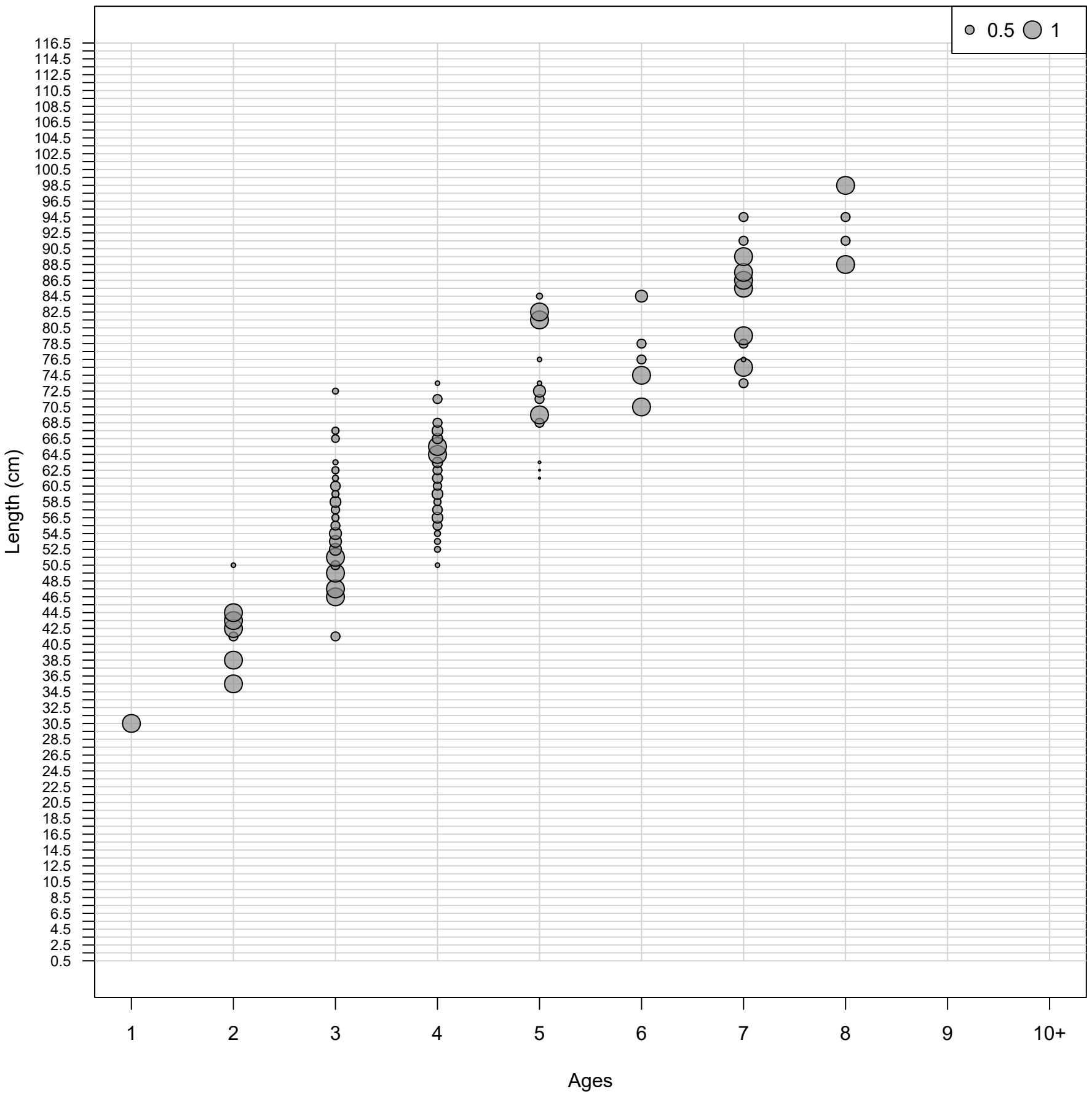

CAAL for Catch for Fleet 1 Year 40
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 1 Year 41
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 1 Year 42
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 1 Year 43
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 1 Year 44
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 1 Year 45
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
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48.5
46.5
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42.5
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8.5
6.5
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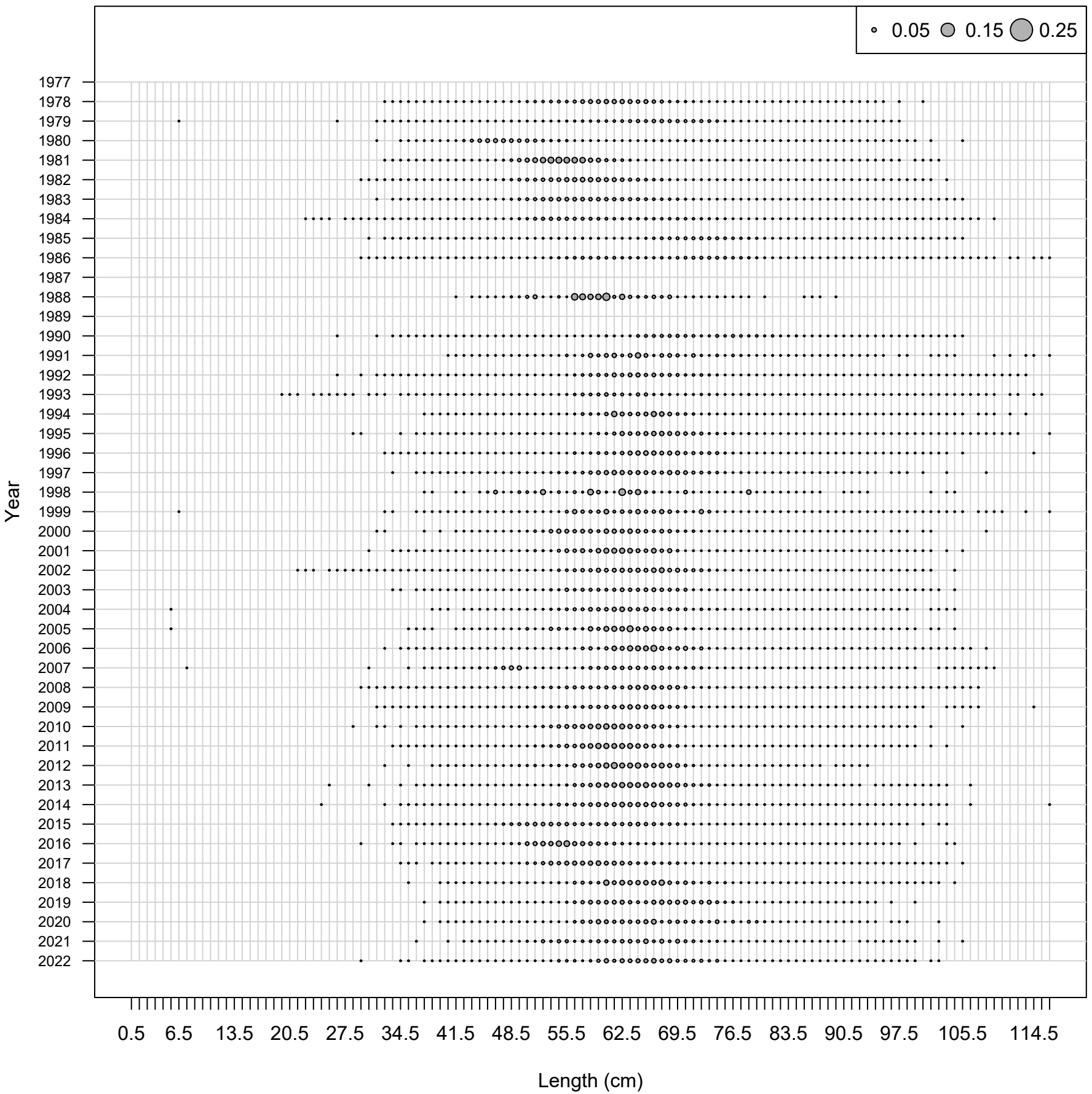
10+
Ages


Length Comps for Catch for Fleet 2
0.05
0.15
0.25
Year
1977
1978
1979
1980
1981
1982
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1984
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1988
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2018
2019
2020
2021
2022
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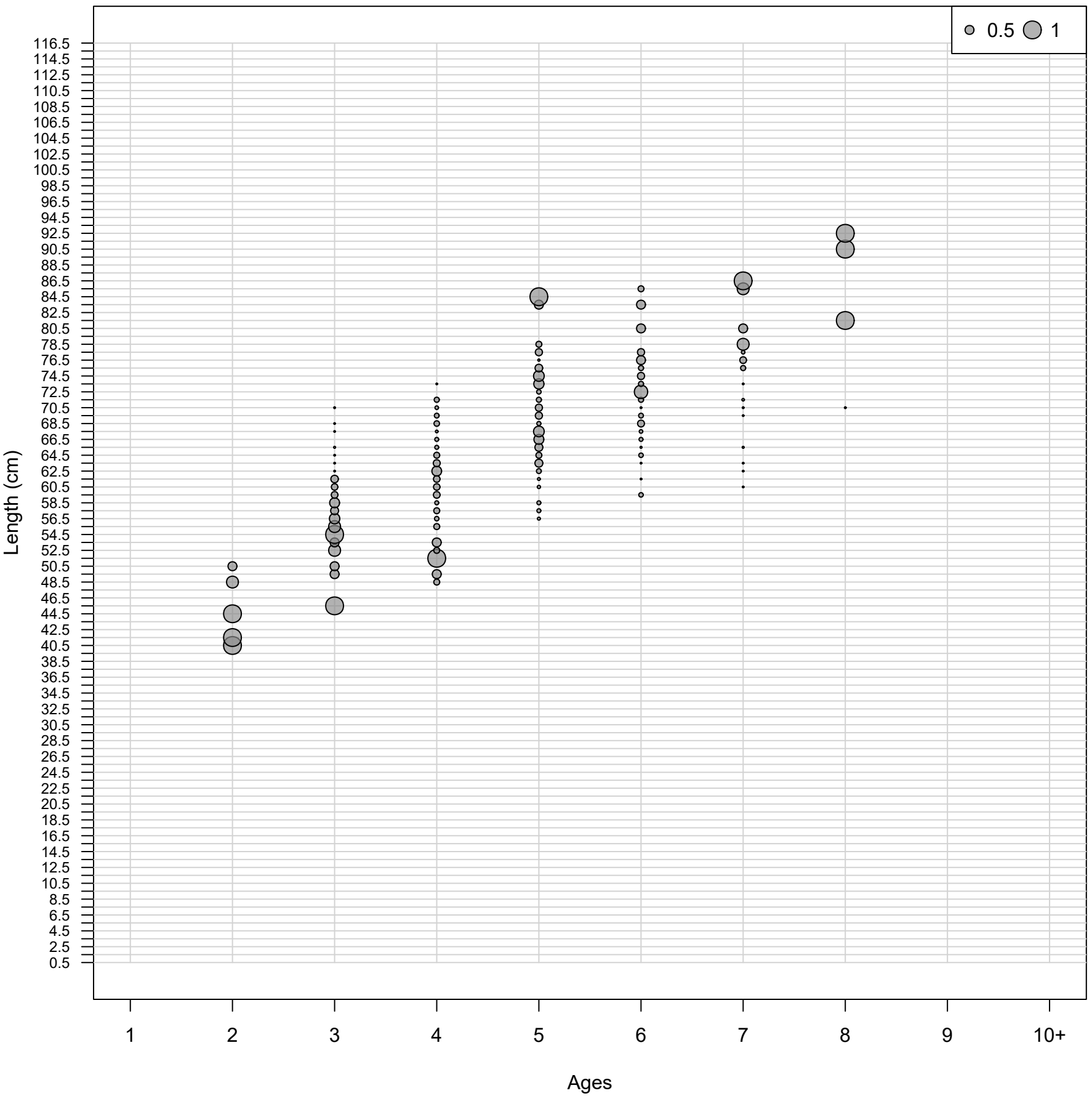
6.5
13.5
20.5
27.5
34.5
41.5
48.5
55.5
62.5
69.5
76.5
83.5
90.5
97.5
105.5
114.5
Length (cm)


CAAL for Catch for Fleet 2 Year 31
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
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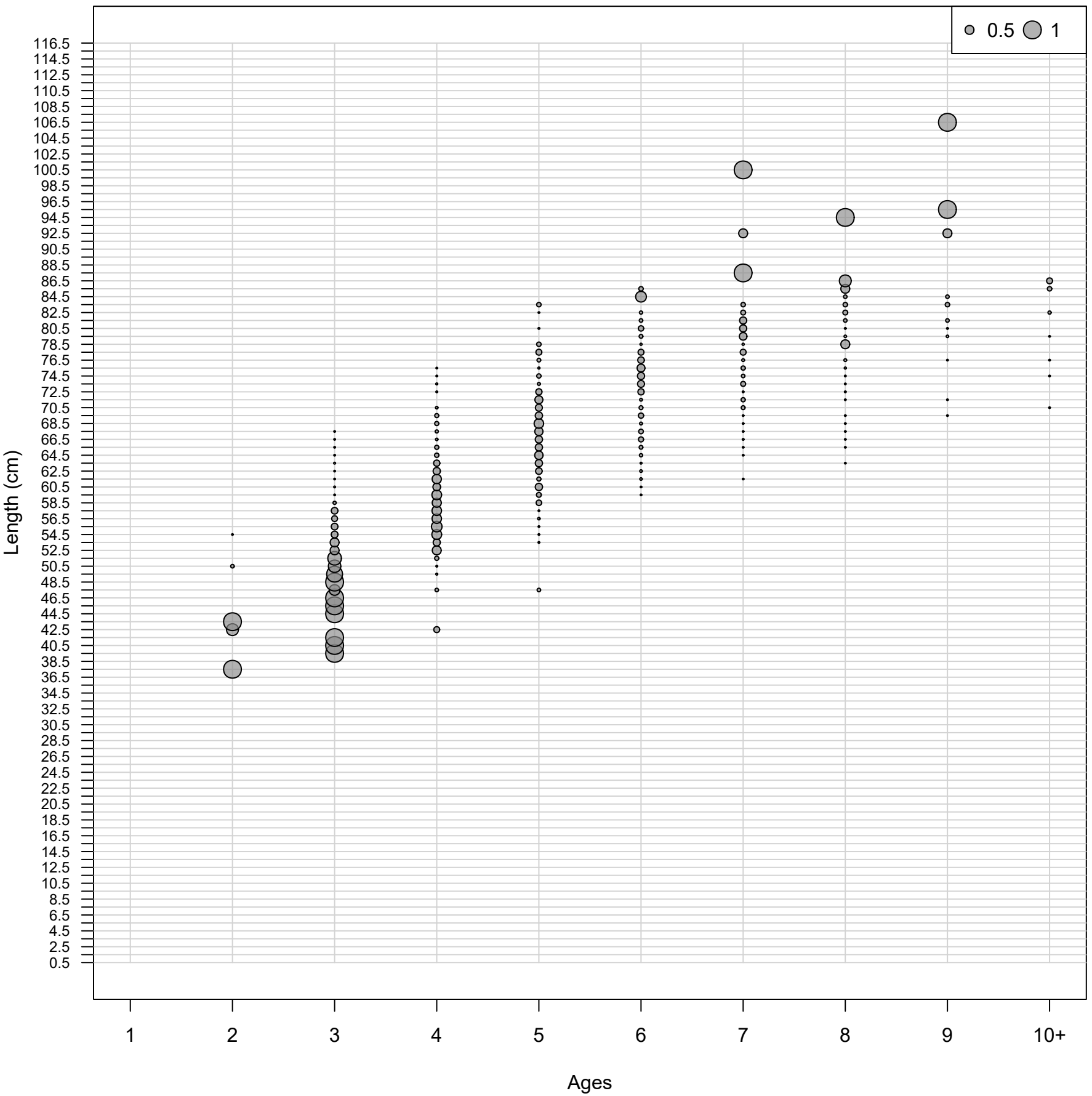
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 2 Year 32
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
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54.5
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38.5
36.5
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24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
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2
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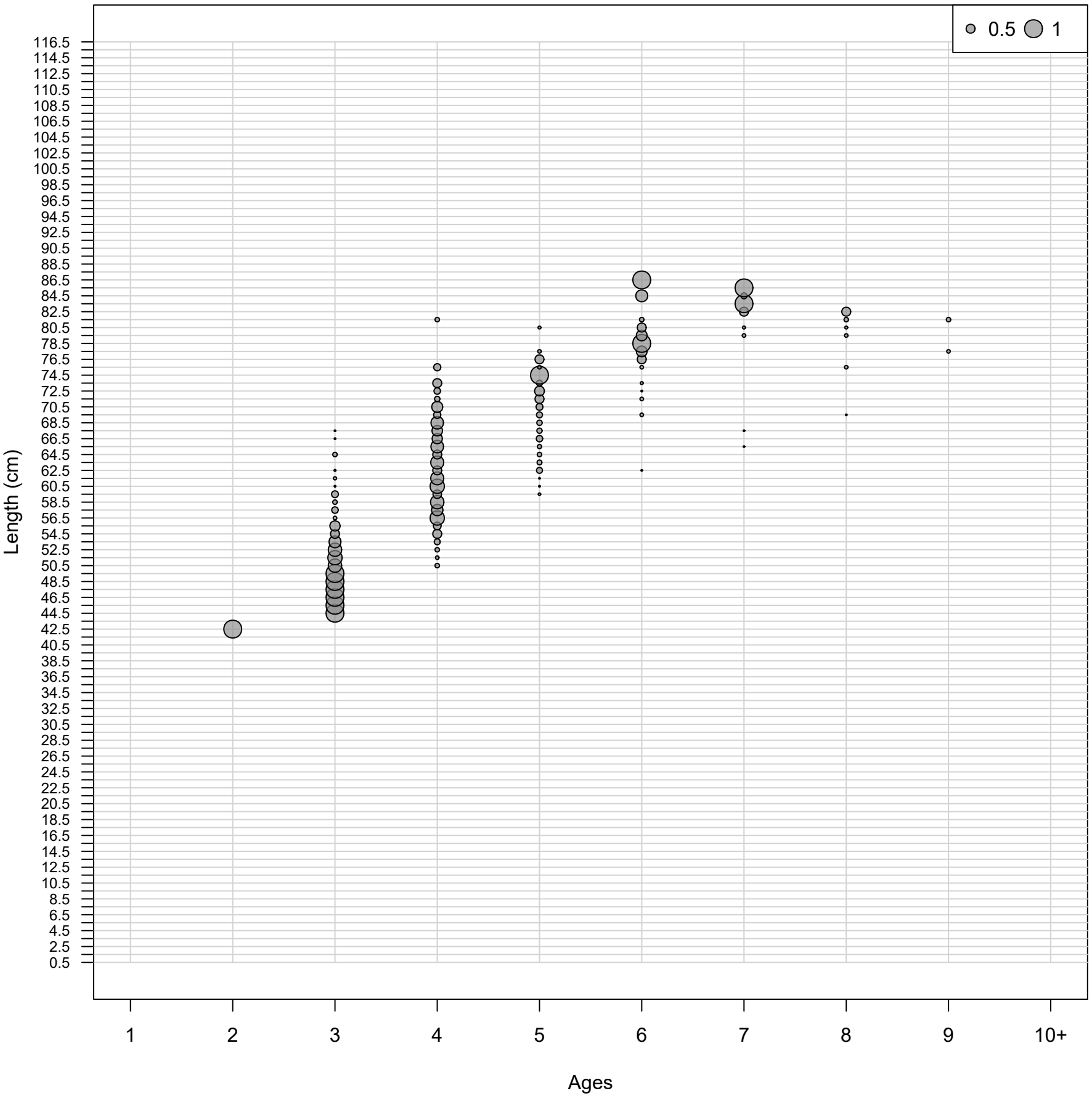
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 2 Year 33
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
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48.5
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44.5
42.5
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24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
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2
3
4
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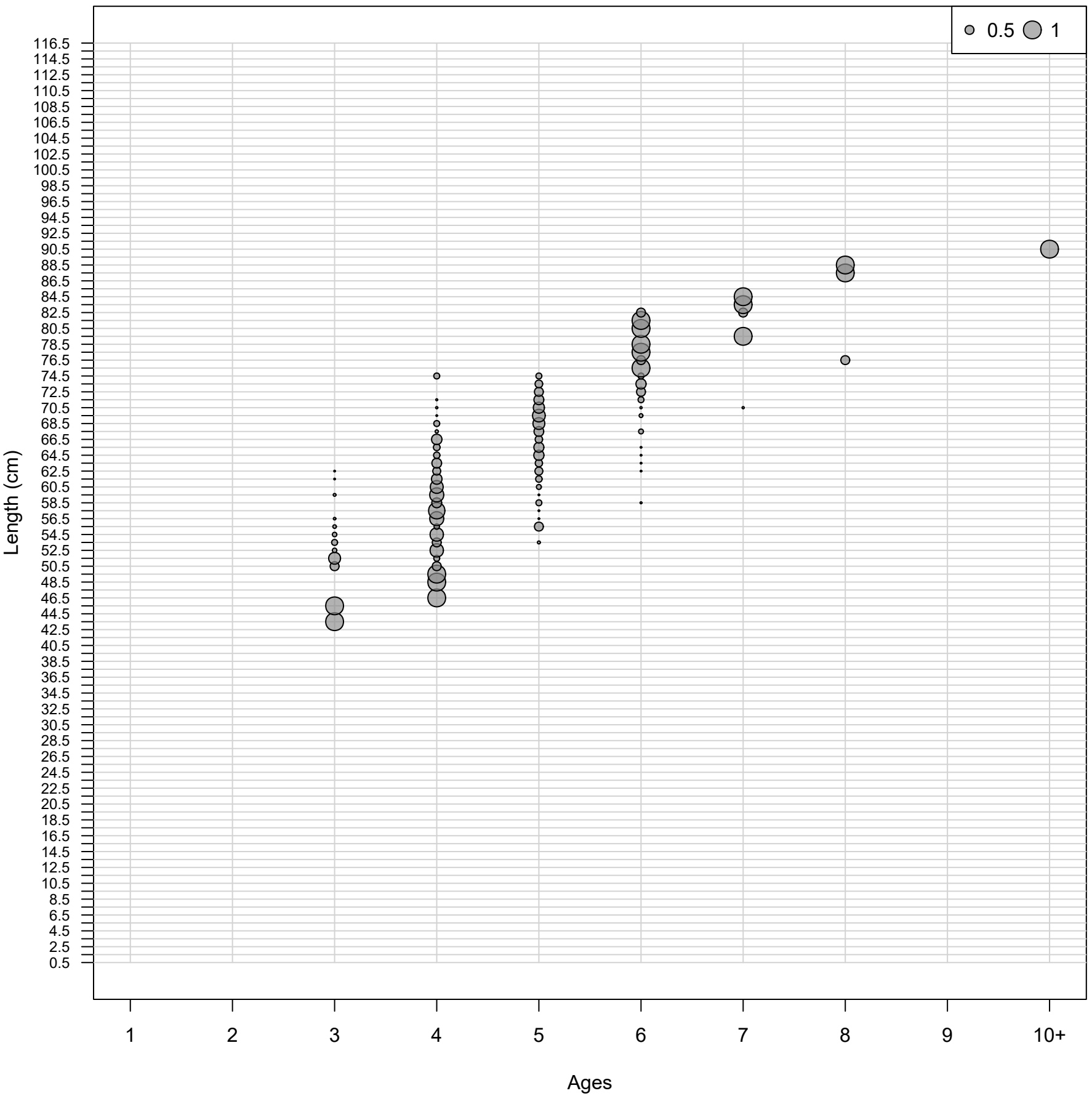
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 2 Year 34
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
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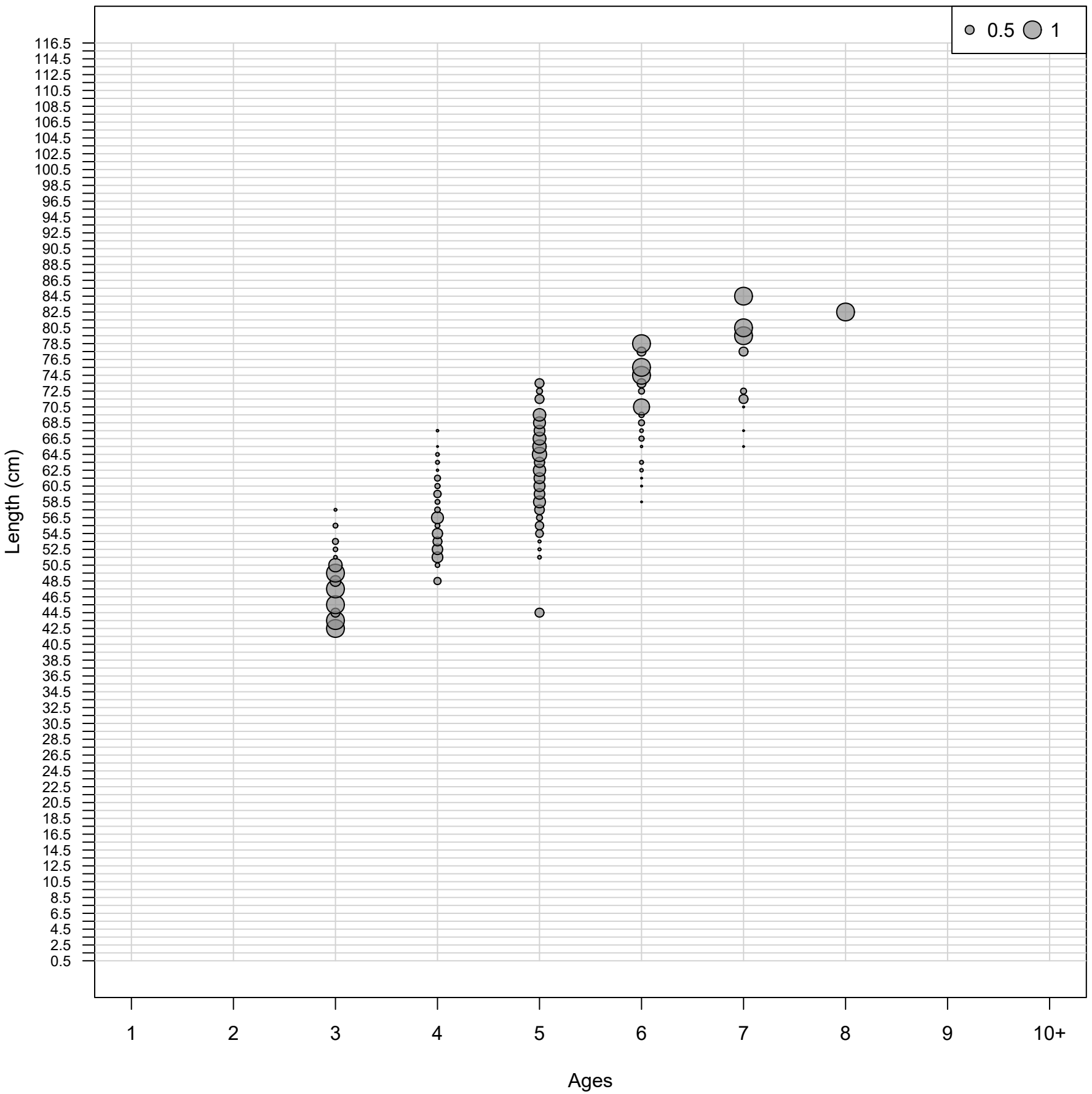
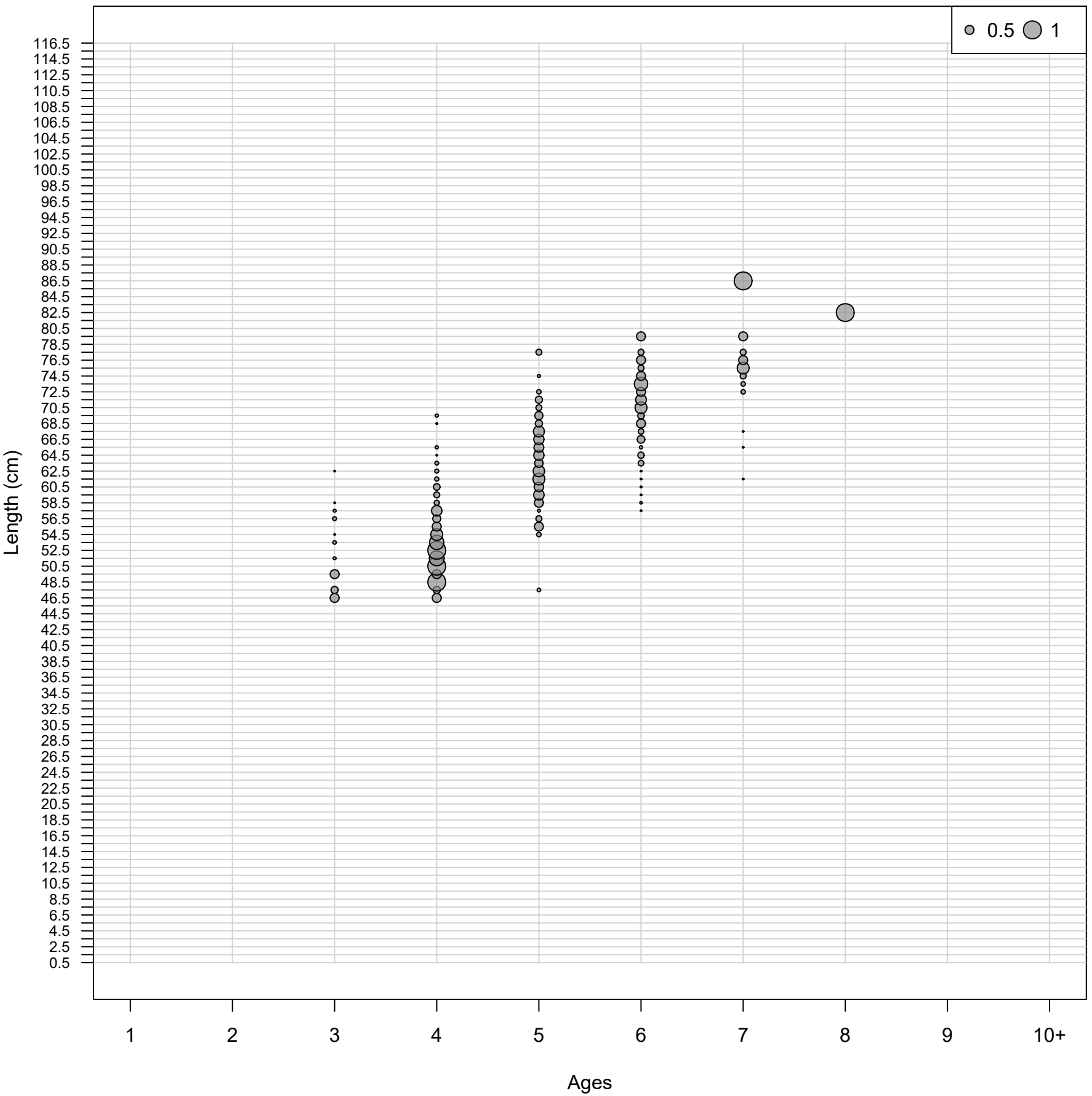
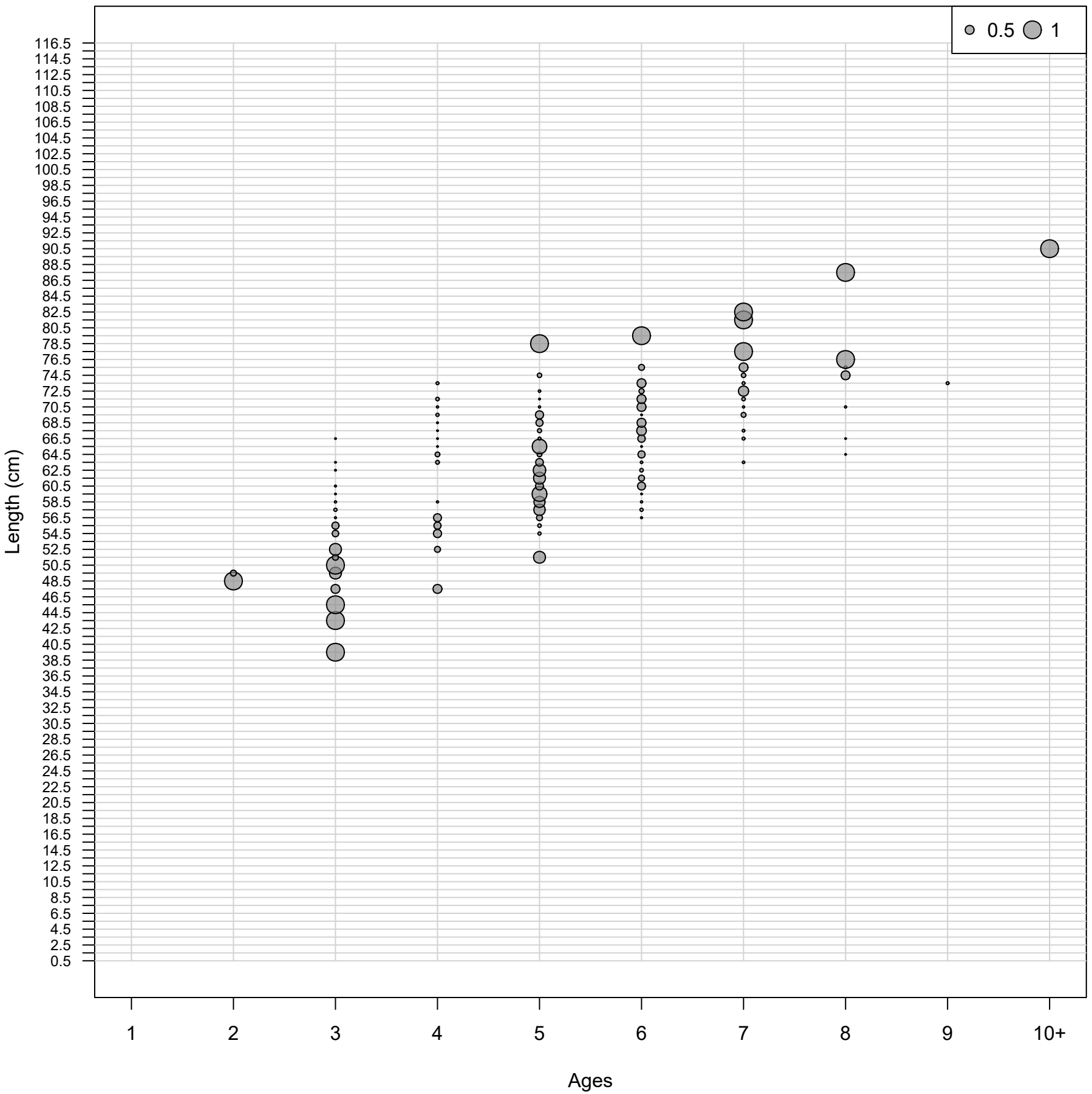
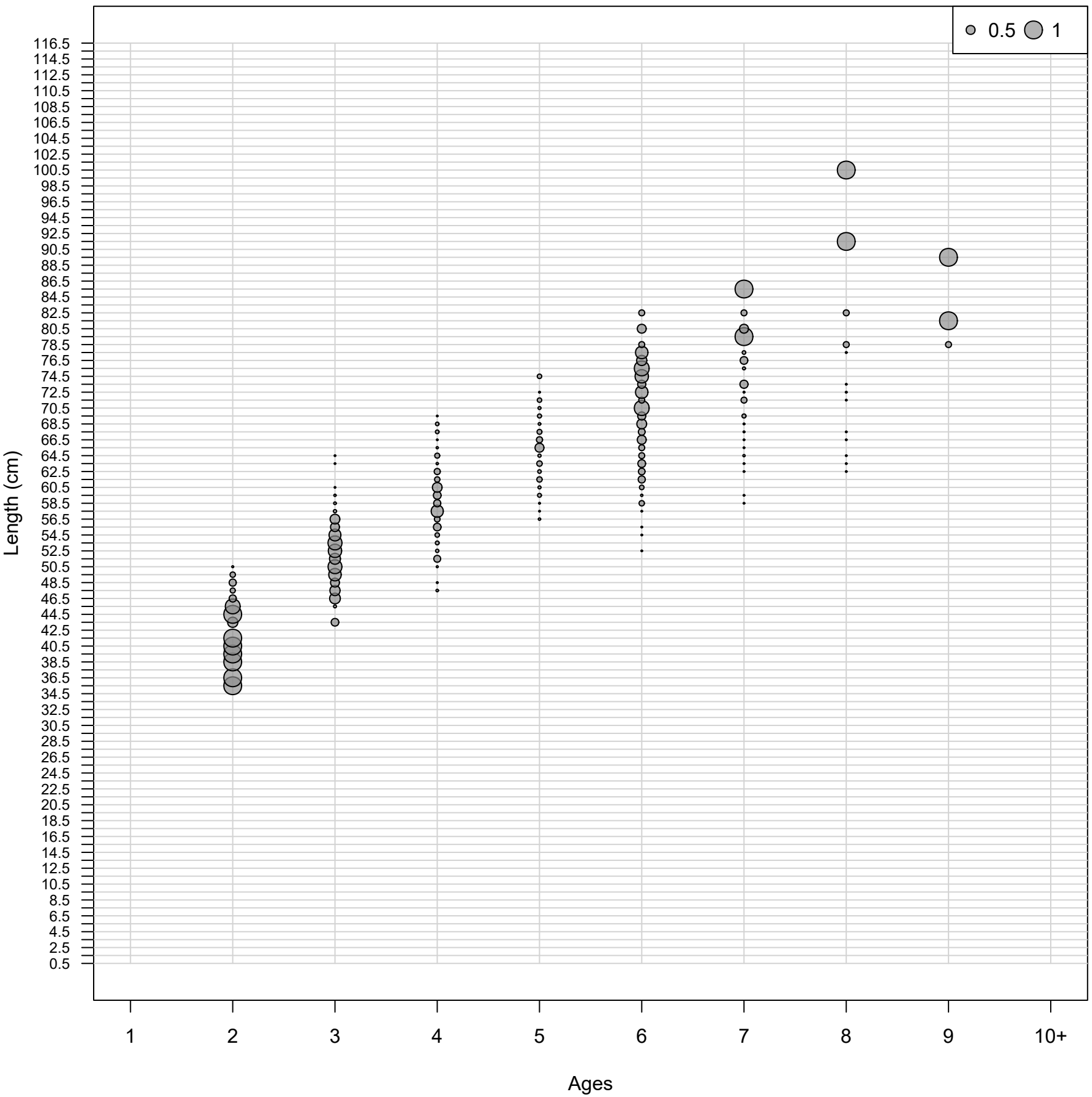
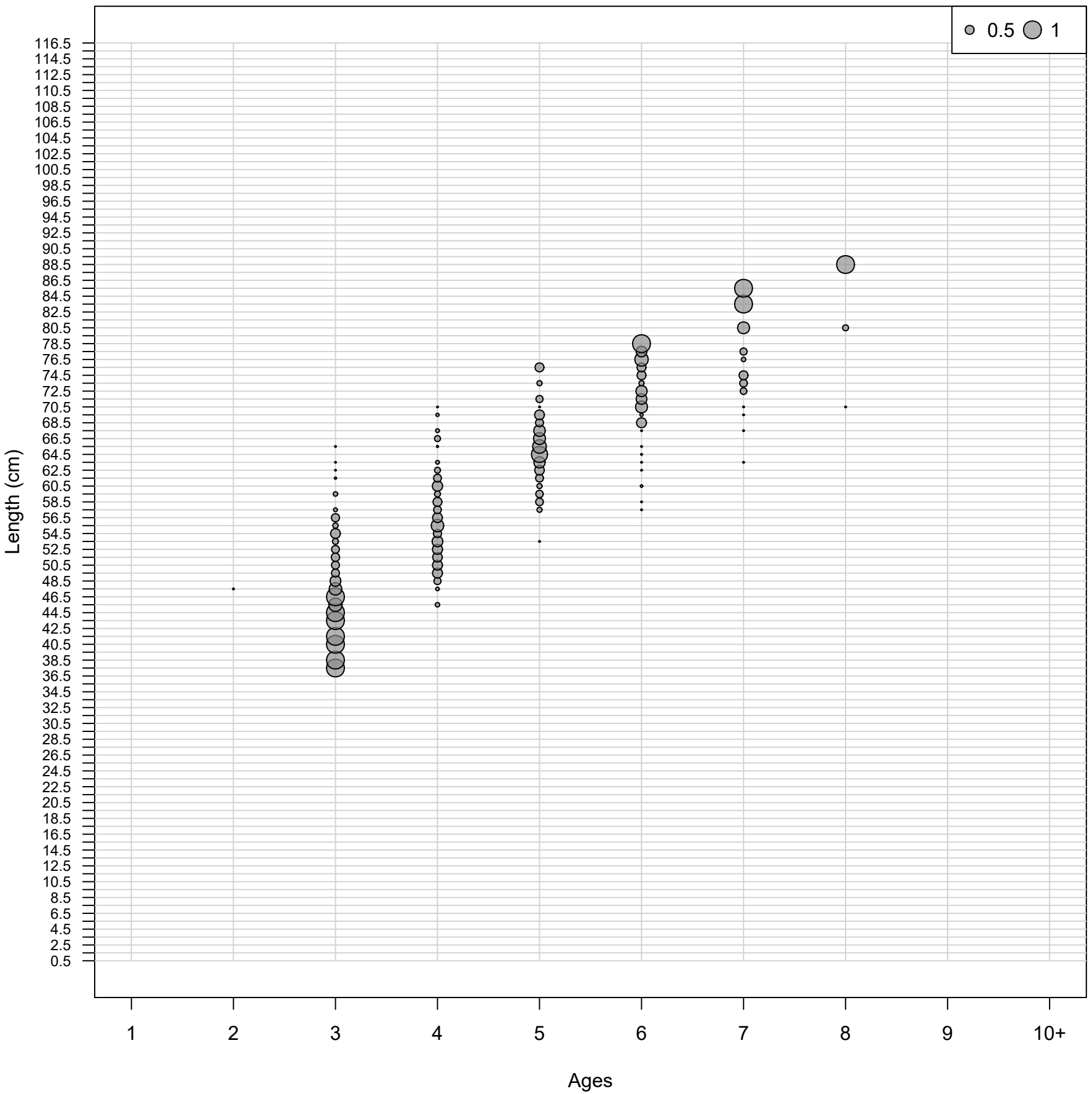
3
4
5
6
7
8
9
10+
Ages

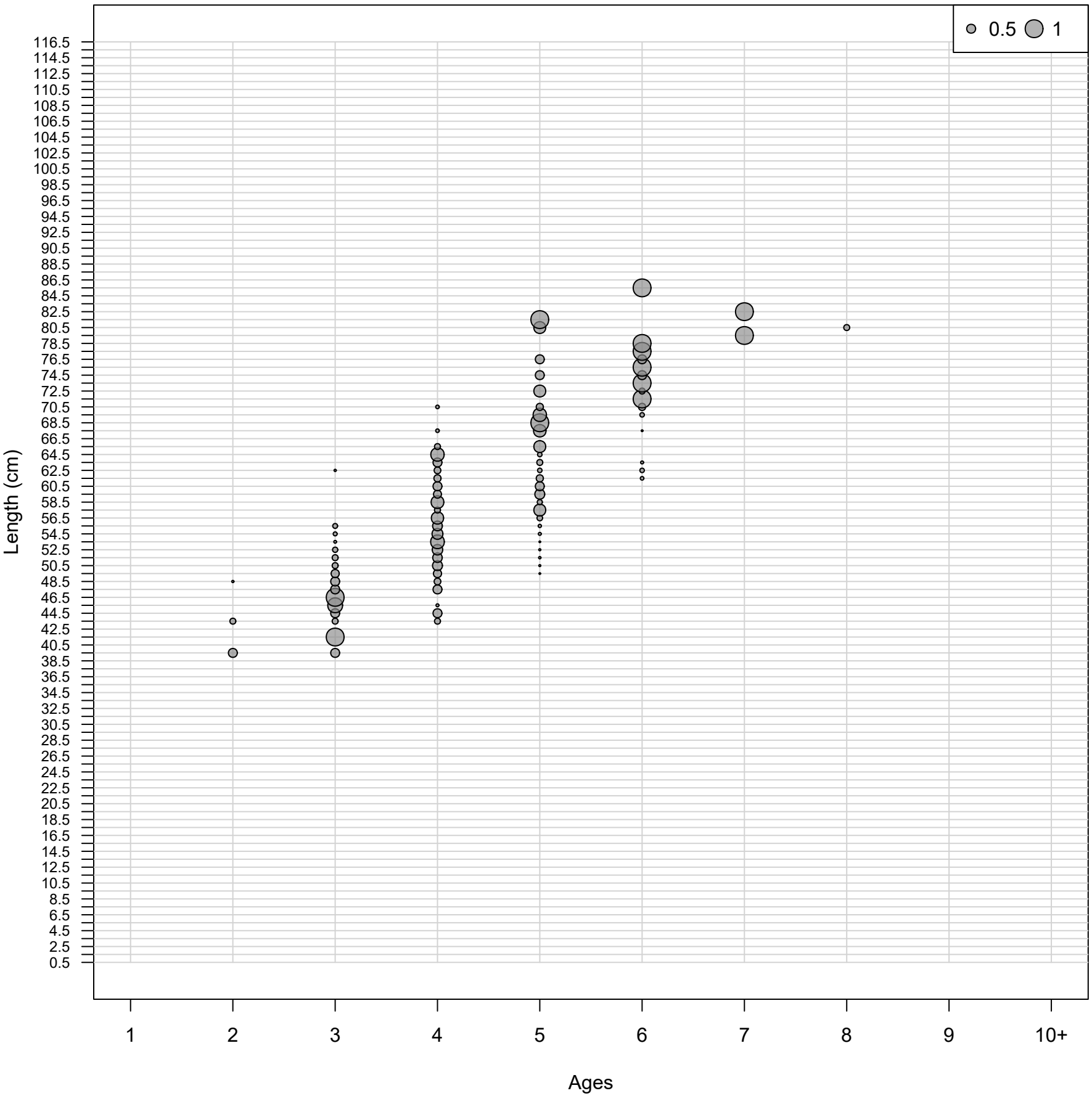

CAAL for Catch for Fleet 2 Year 35
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

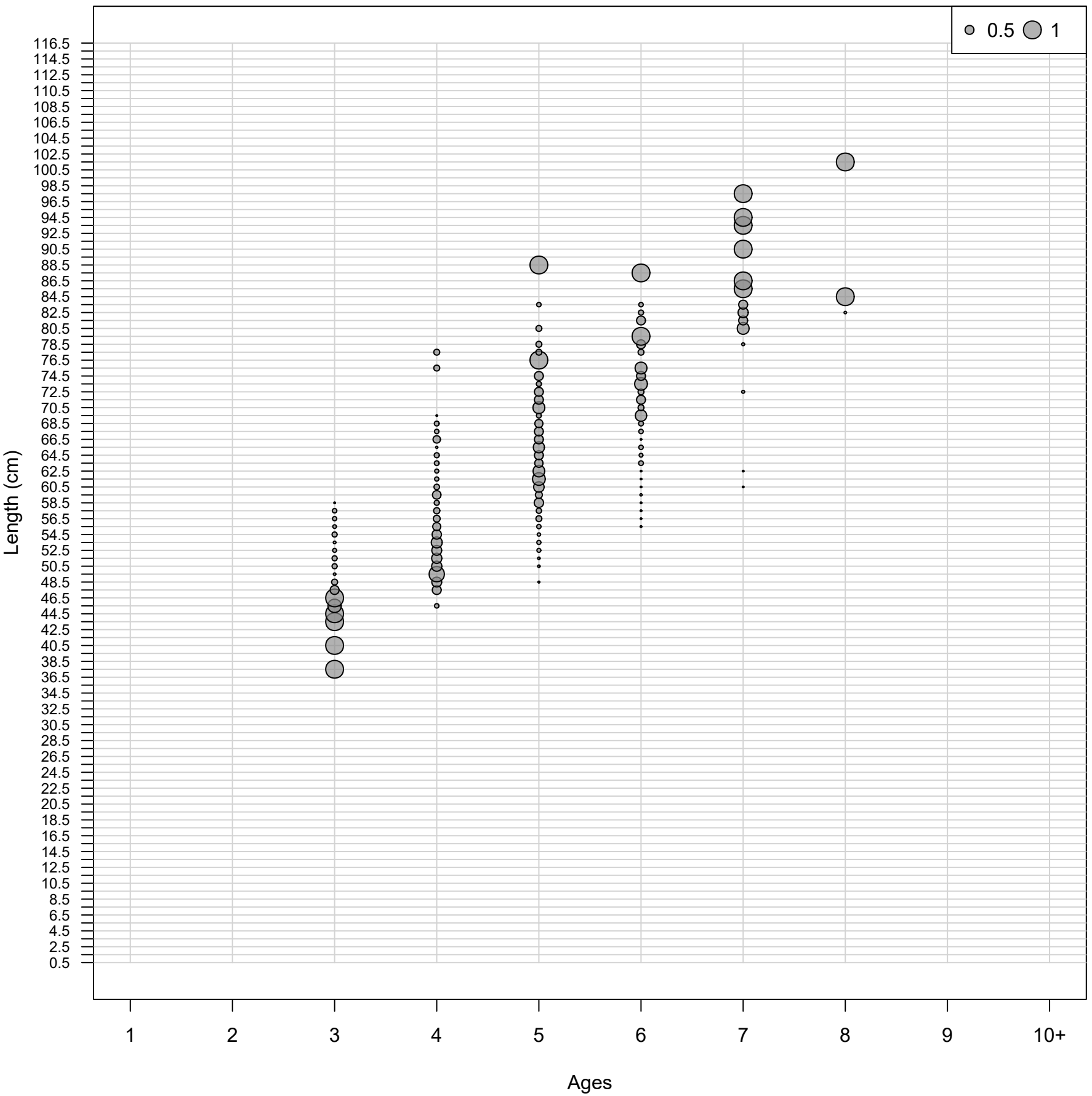

CAAL for Catch for Fleet 2 Year 36
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

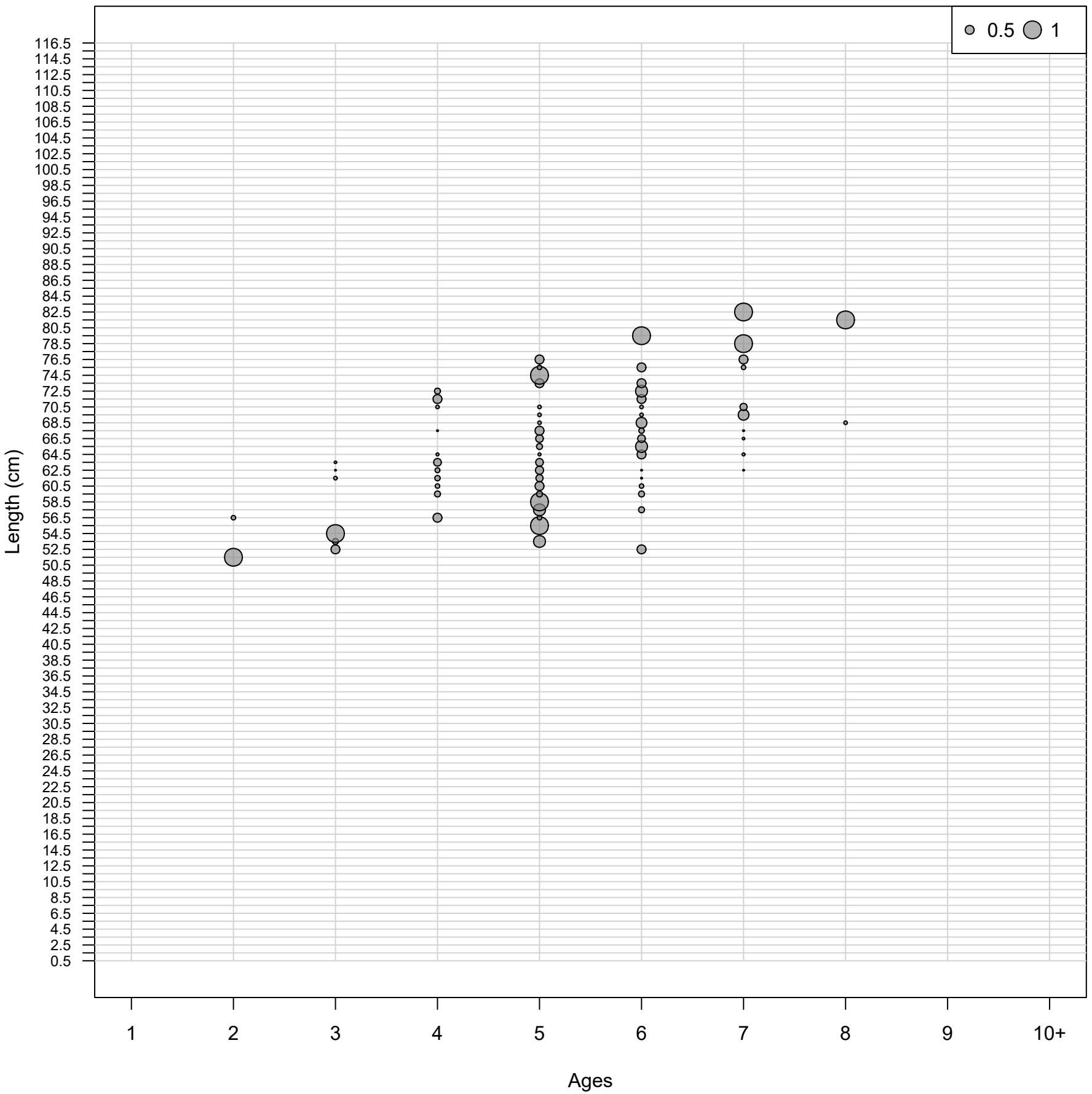

CAAL for Catch for Fleet 2 Year 37
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

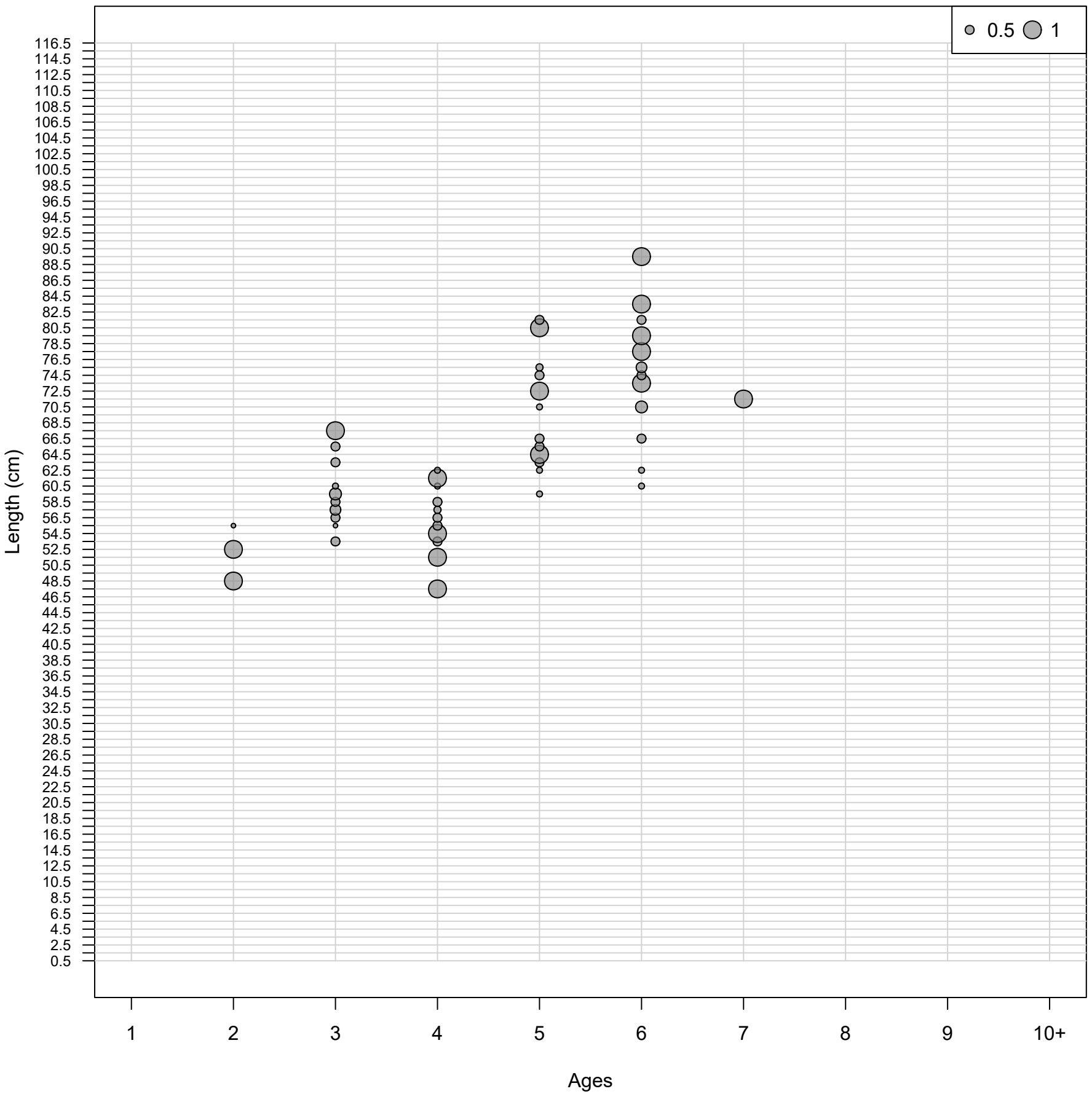

CAAL for Catch for Fleet 2 Year 38
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

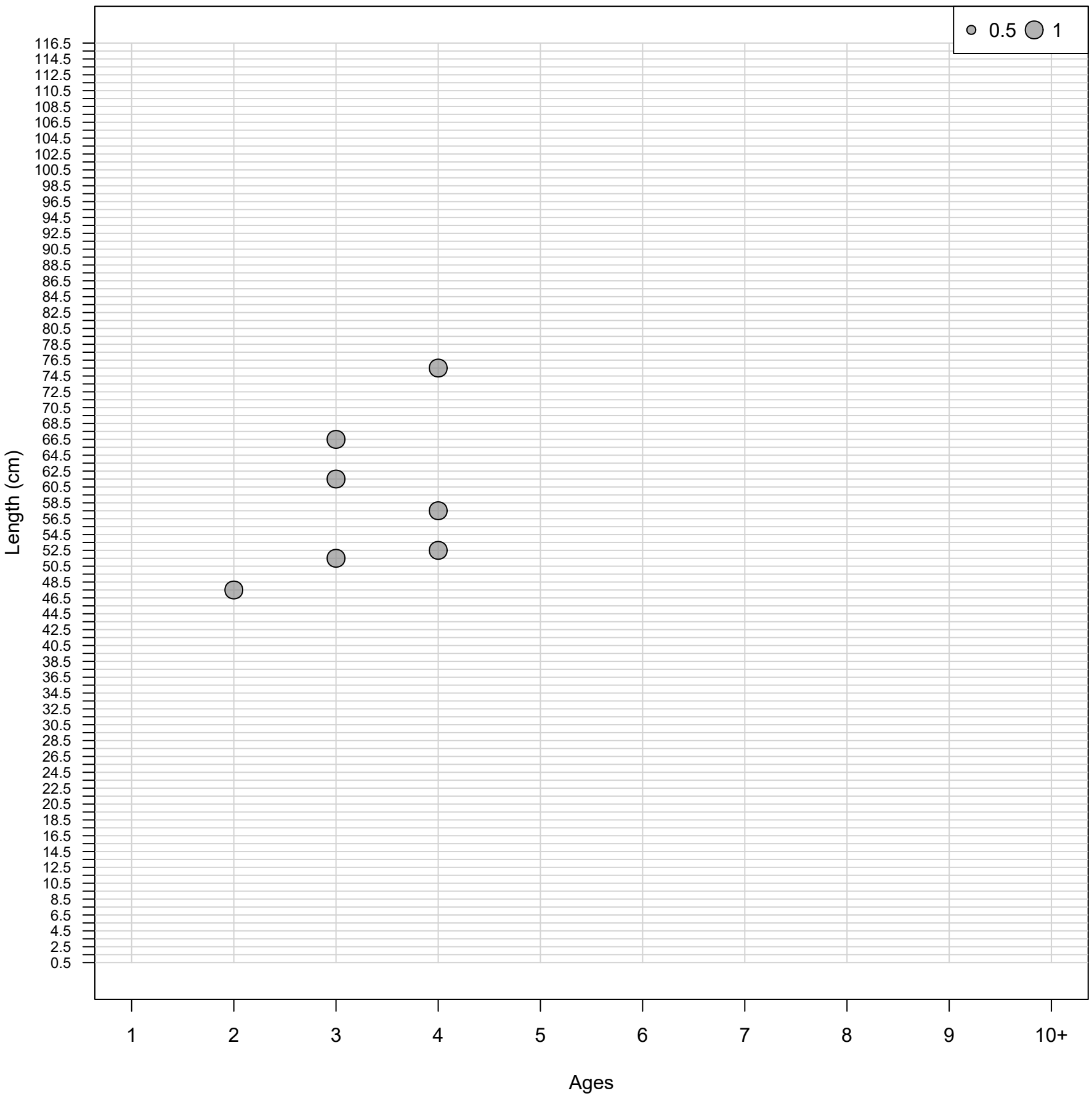

CAAL for Catch for Fleet 2 Year 39
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

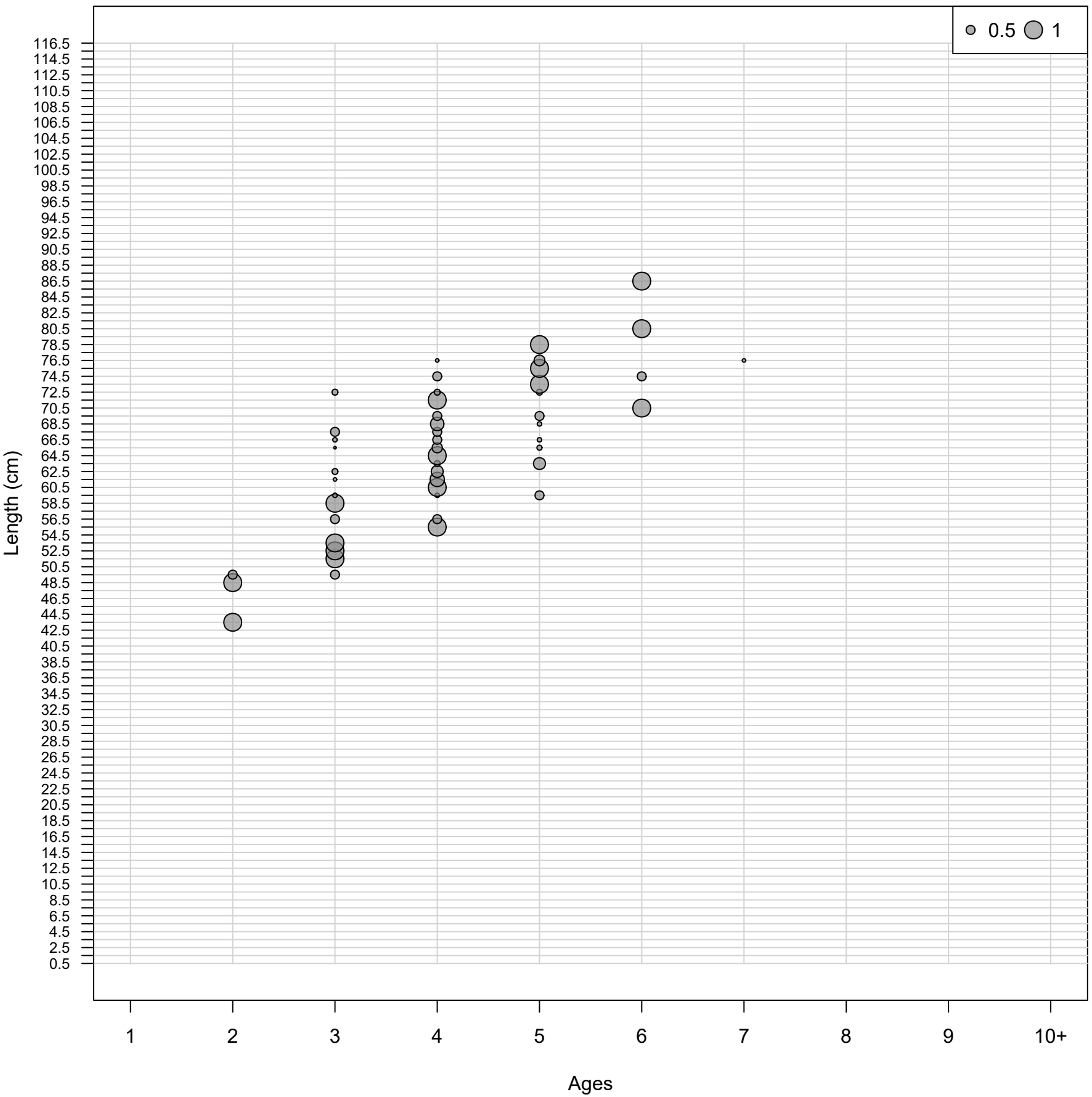

CAAL for Catch for Fleet 2 Year 40
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages

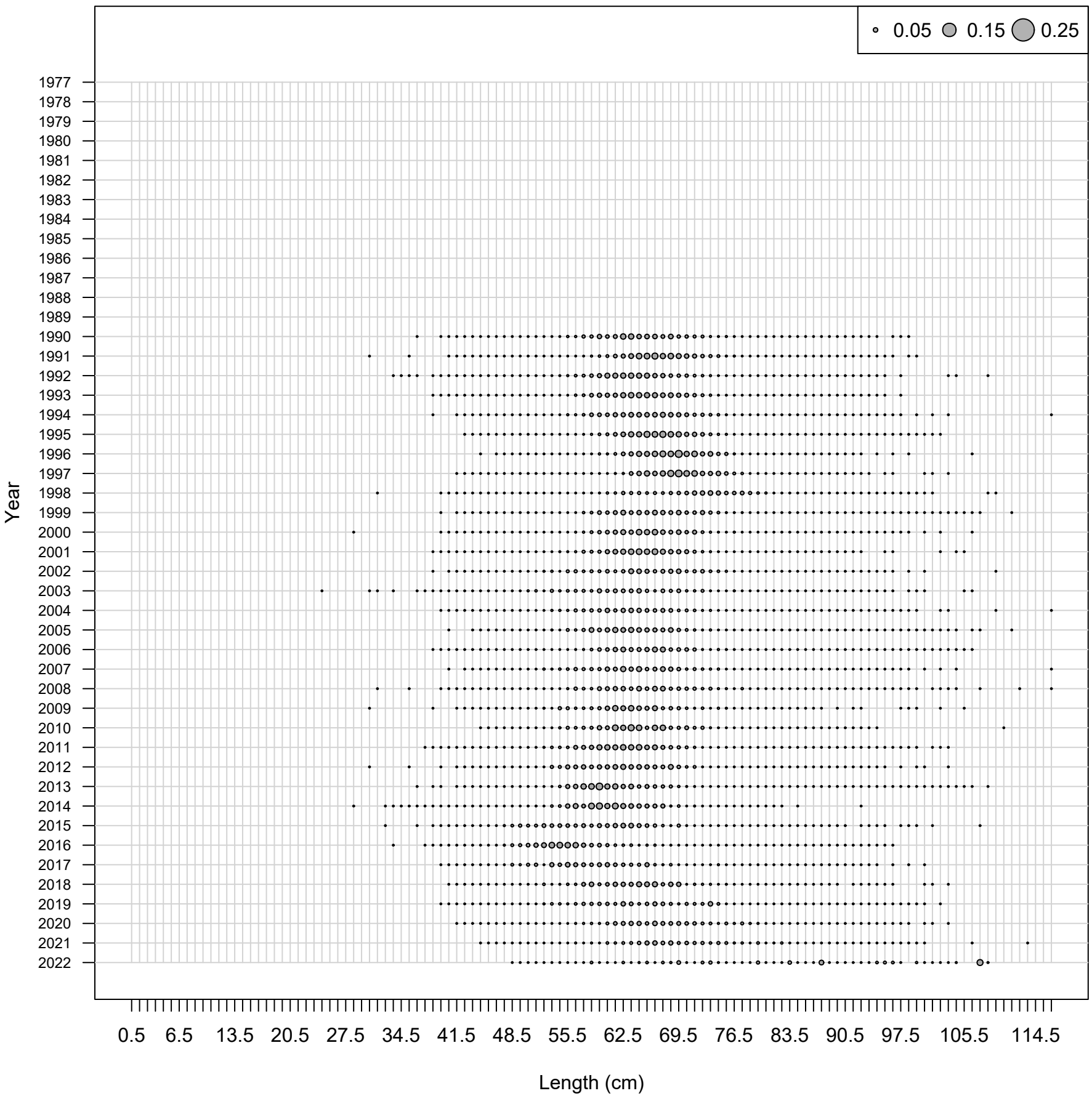

CAAL for Catch for Fleet 2 Year 41
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 2 Year 42
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 2 Year 43
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 2 Year 44
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 2 Year 45
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


Length Comps for Catch for Fleet 3
0.05
0.15
0.25
Year
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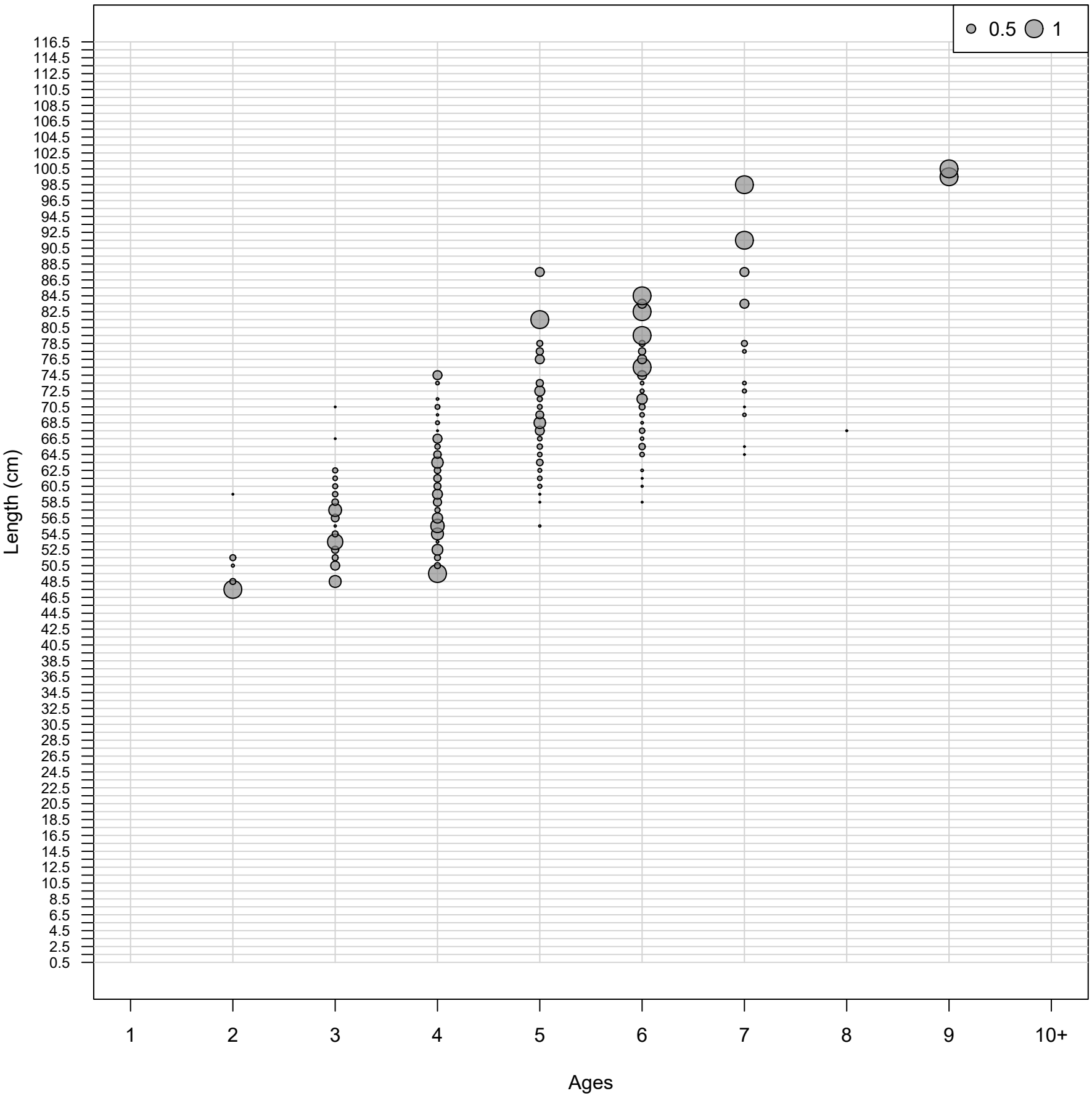
2022
0.5
6.5
13.5
20.5
27.5
34.5
41.5
48.5
55.5
62.5
69.5
76.5
83.5
90.5
97.5
105.5
114.5
Length (cm)


CAAL for Catch for Fleet 3 Year 31
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
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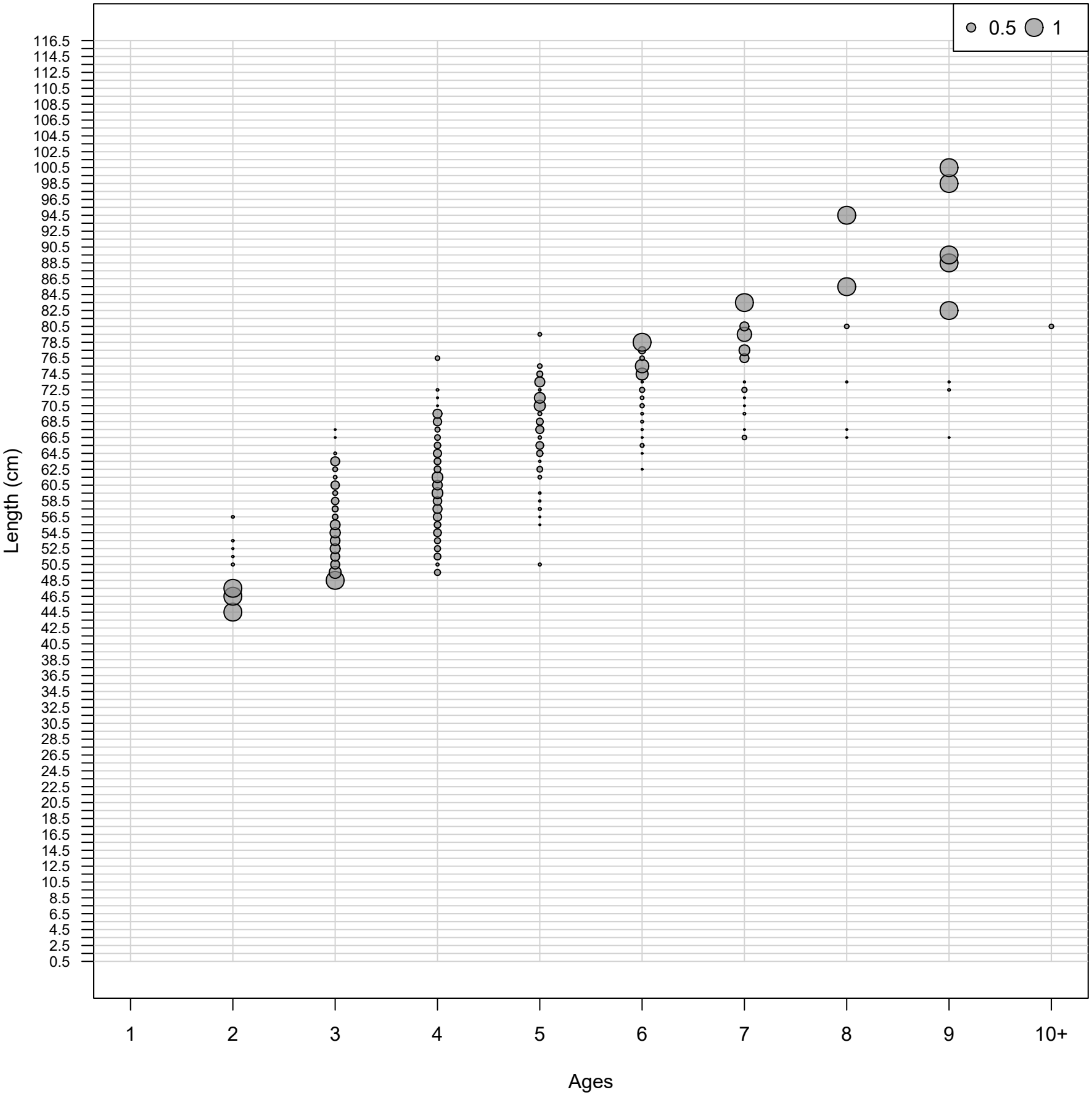
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 32
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
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66.5
64.5
62.5
60.5
58.5
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38.5
36.5
34.5
32.5
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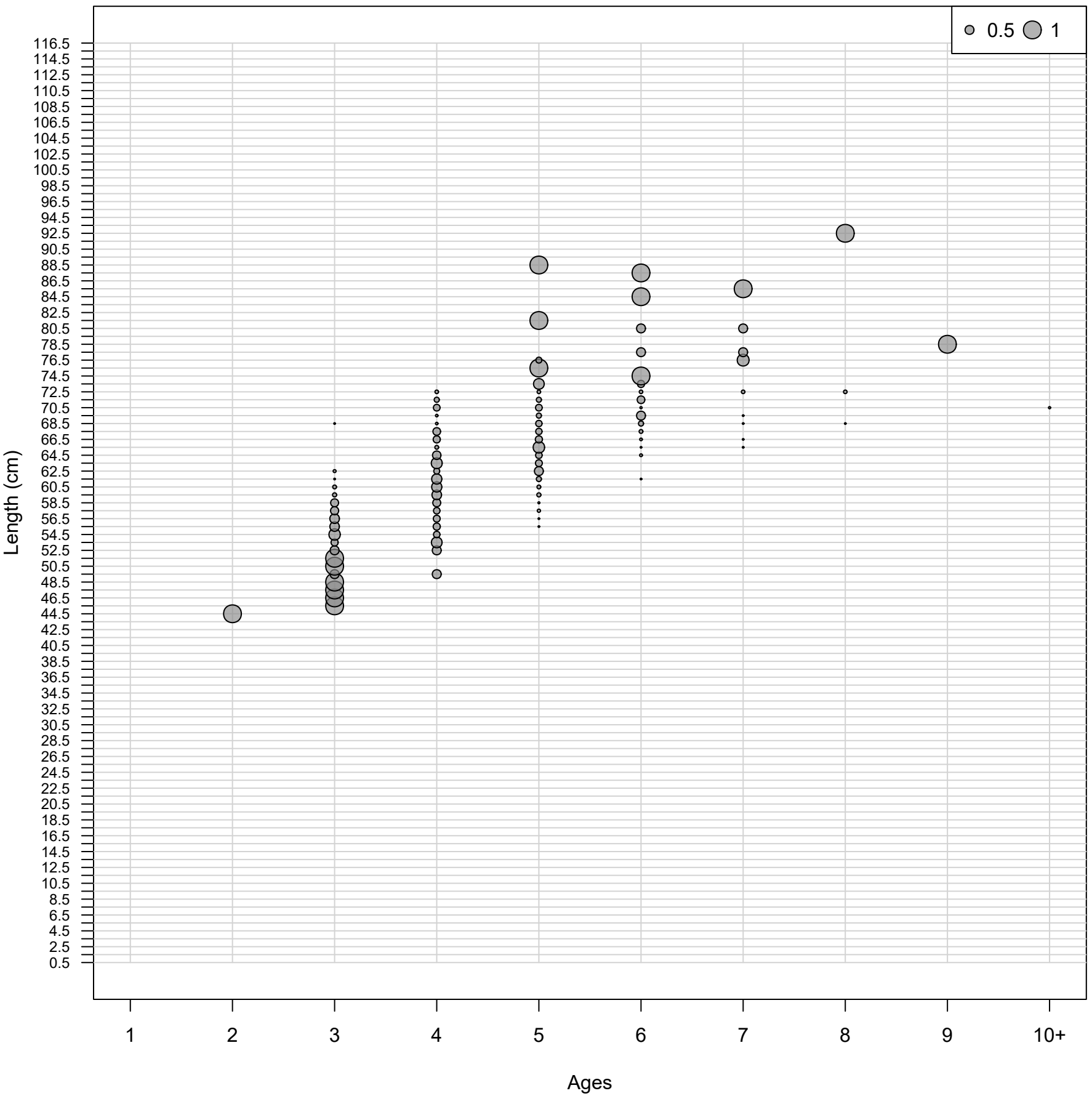
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 33
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
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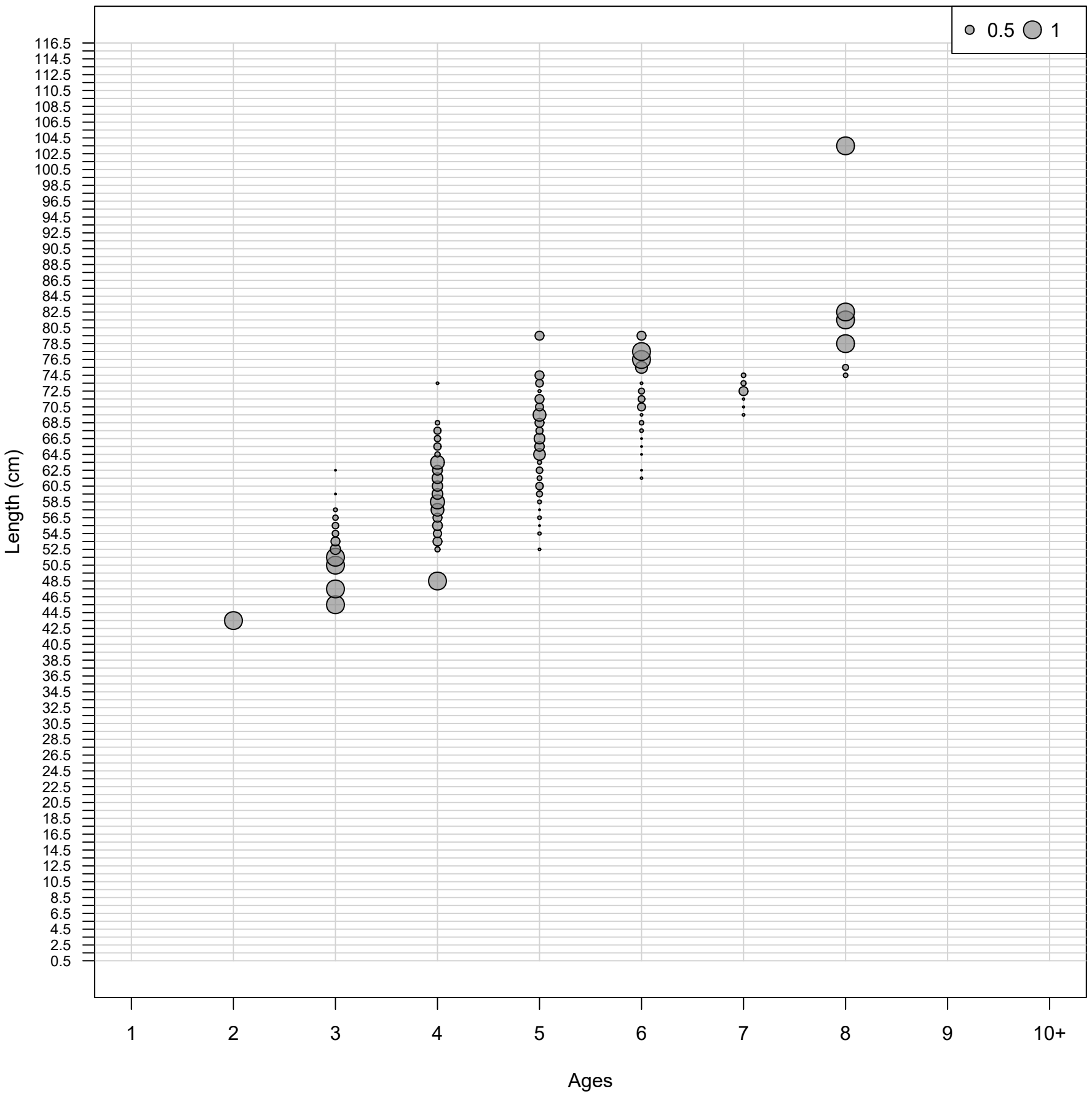
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 34
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
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66.5
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62.5
60.5
58.5
56.5
54.5
52.5
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48.5
46.5
44.5
42.5
40.5
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36.5
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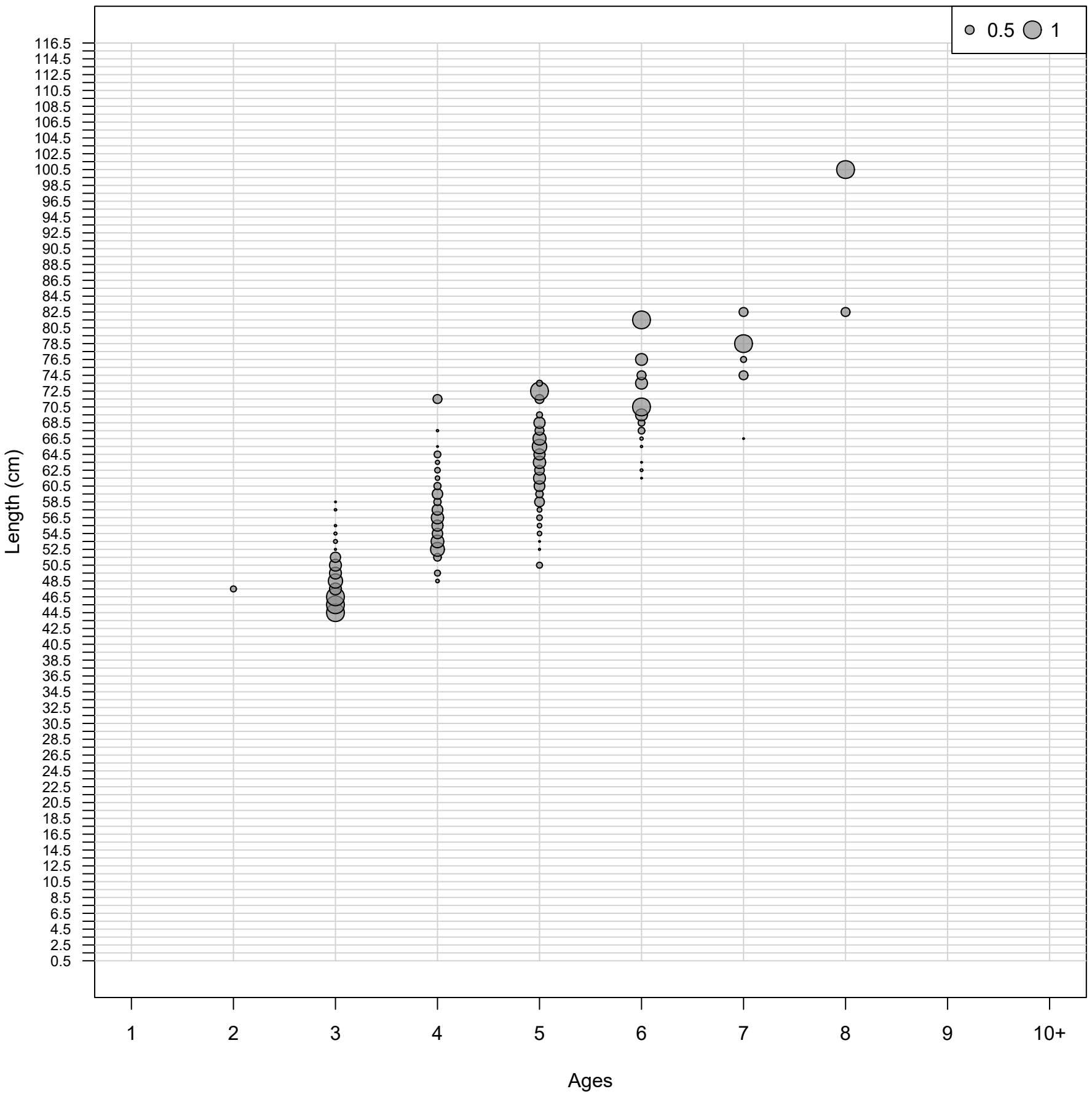
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 35
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
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28.5
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24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
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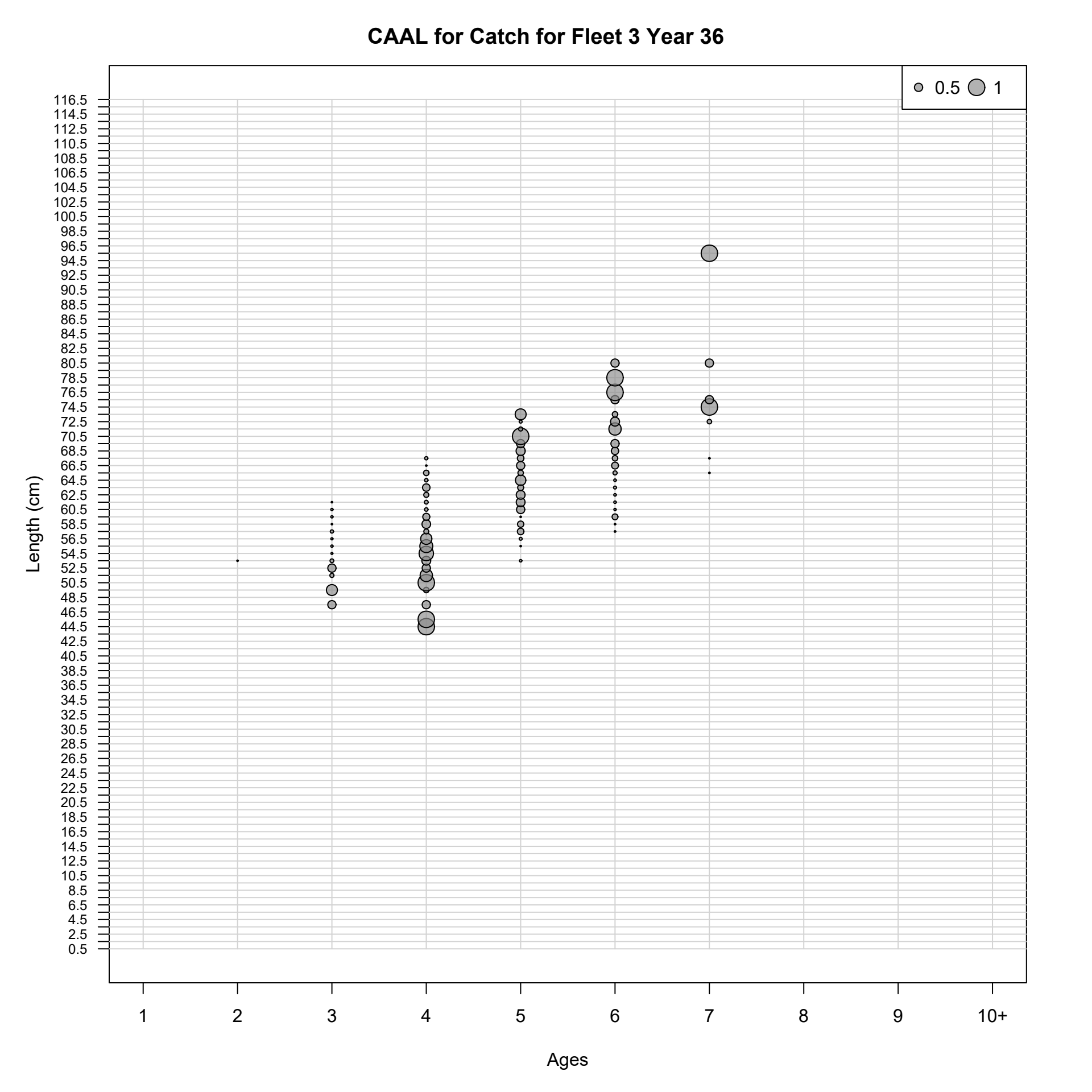
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 36
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
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80.5
78.5
76.5
74.5
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70.5
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64.5
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60.5
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48.5
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38.5
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24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
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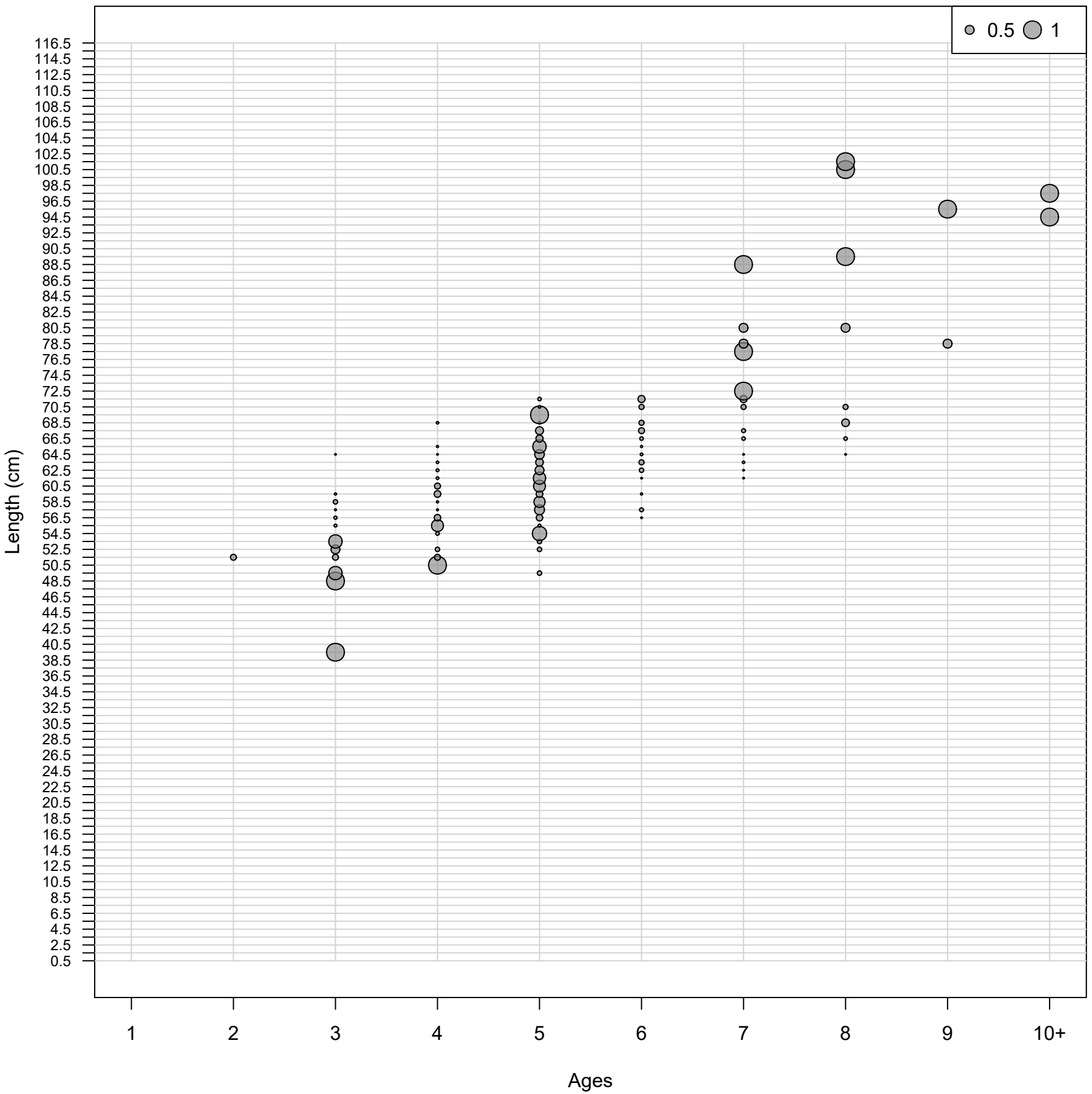
10+
Ages


CAAL for Catch for Fleet 3 Year 37
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
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66.5
64.5
62.5
60.5
58.5
56.5
54.5
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50.5
48.5
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44.5
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28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
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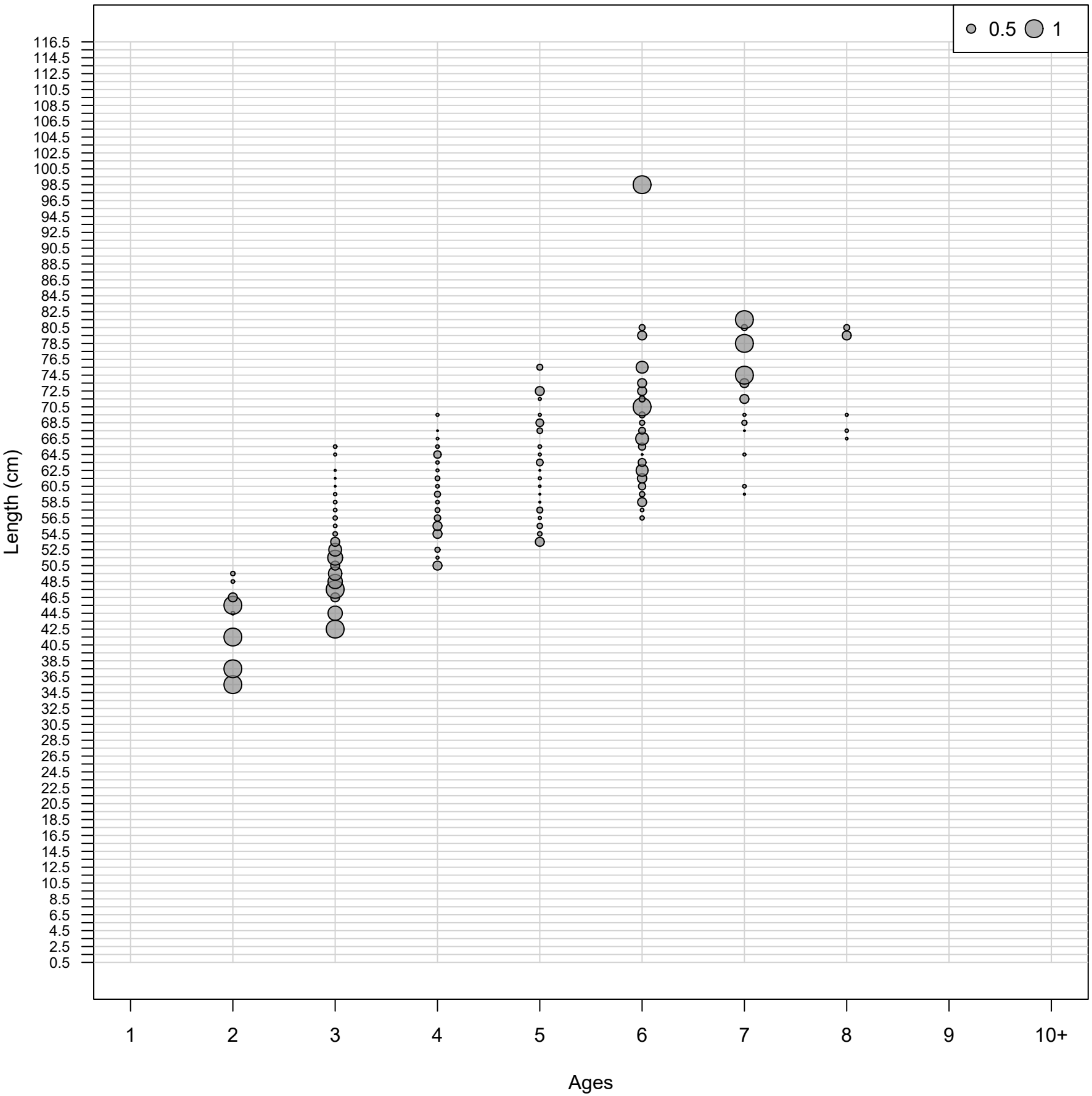
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 38
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
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66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
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44.5
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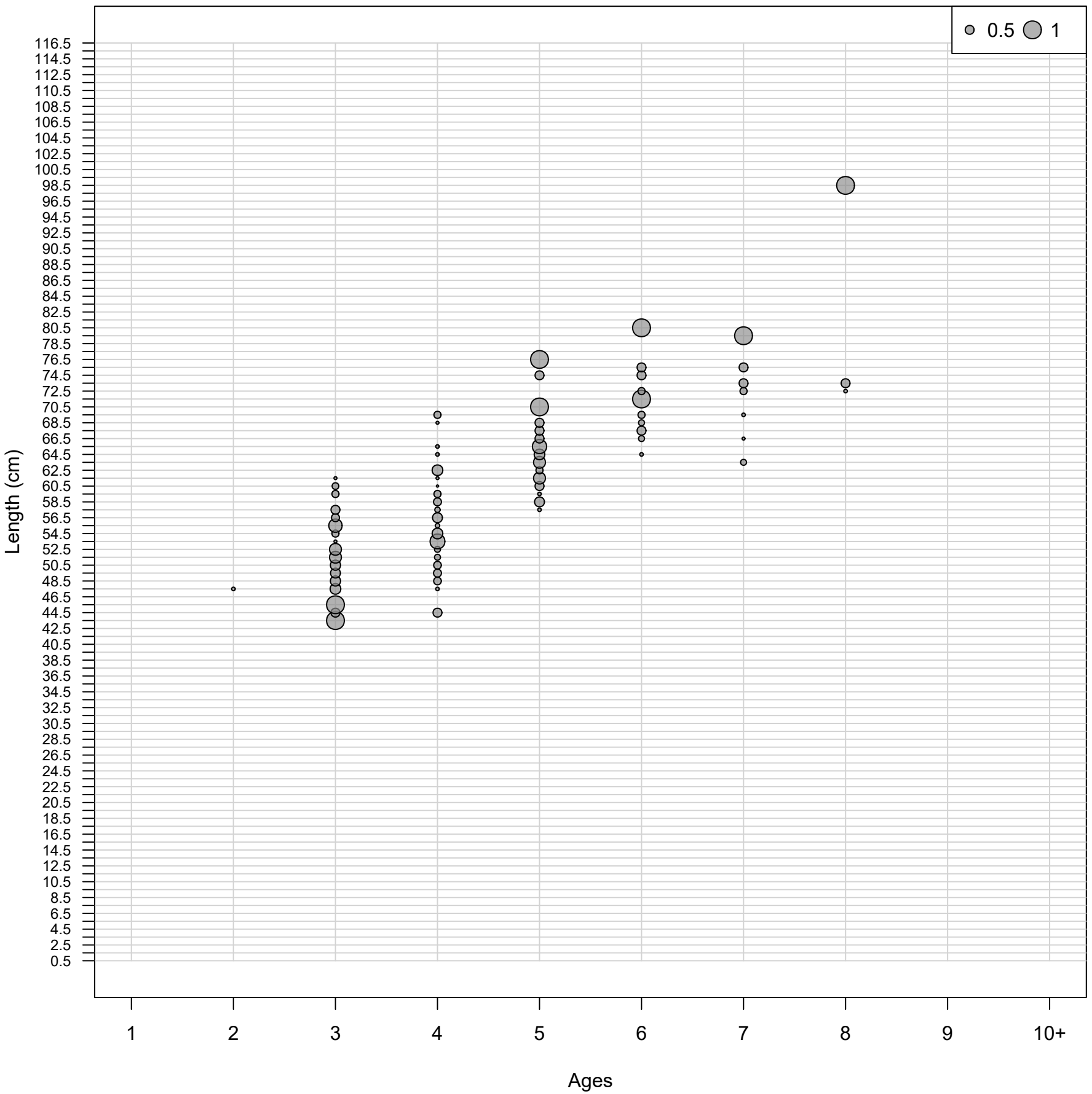
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 39
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
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64.5
62.5
60.5
58.5
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52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
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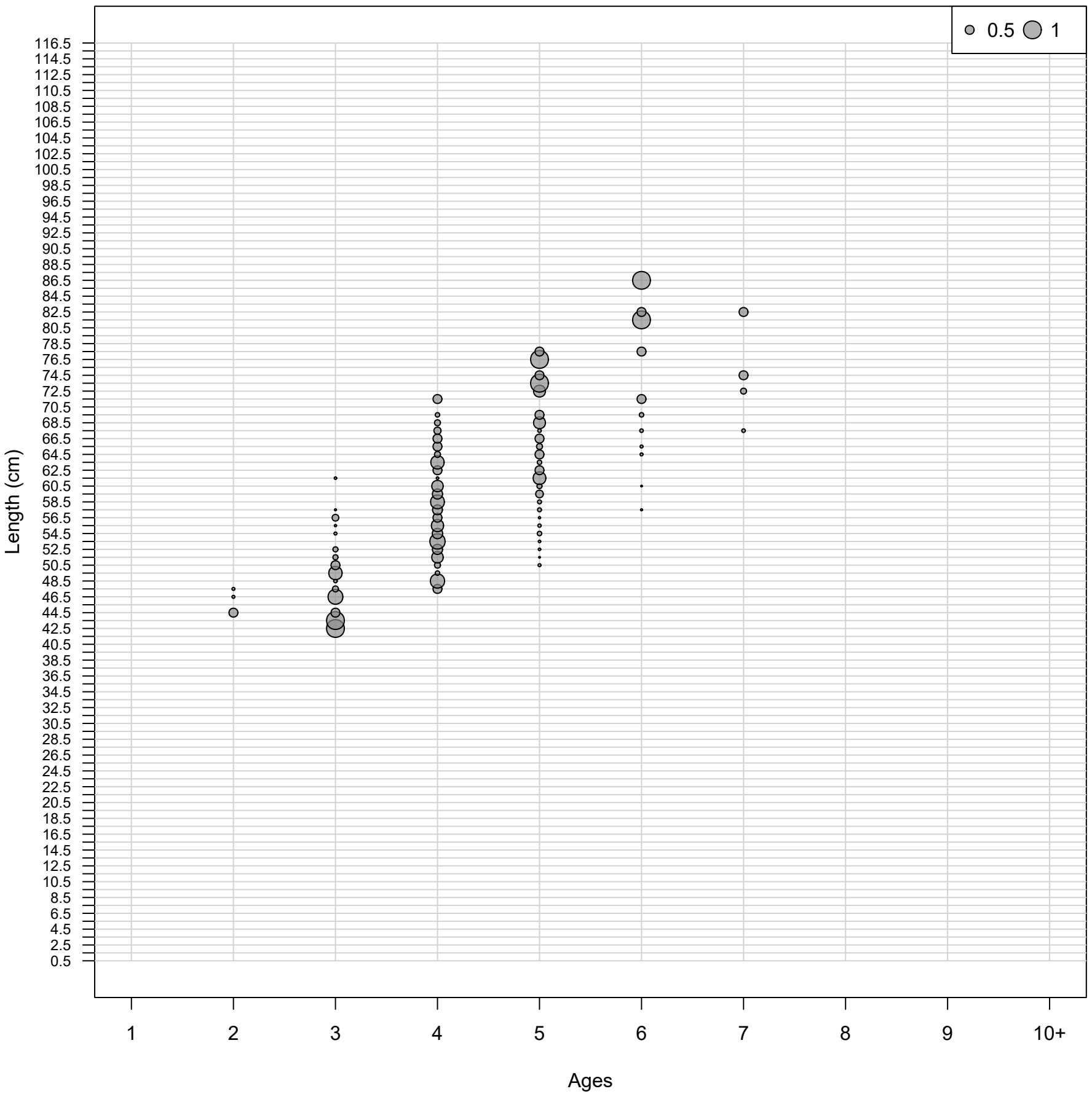
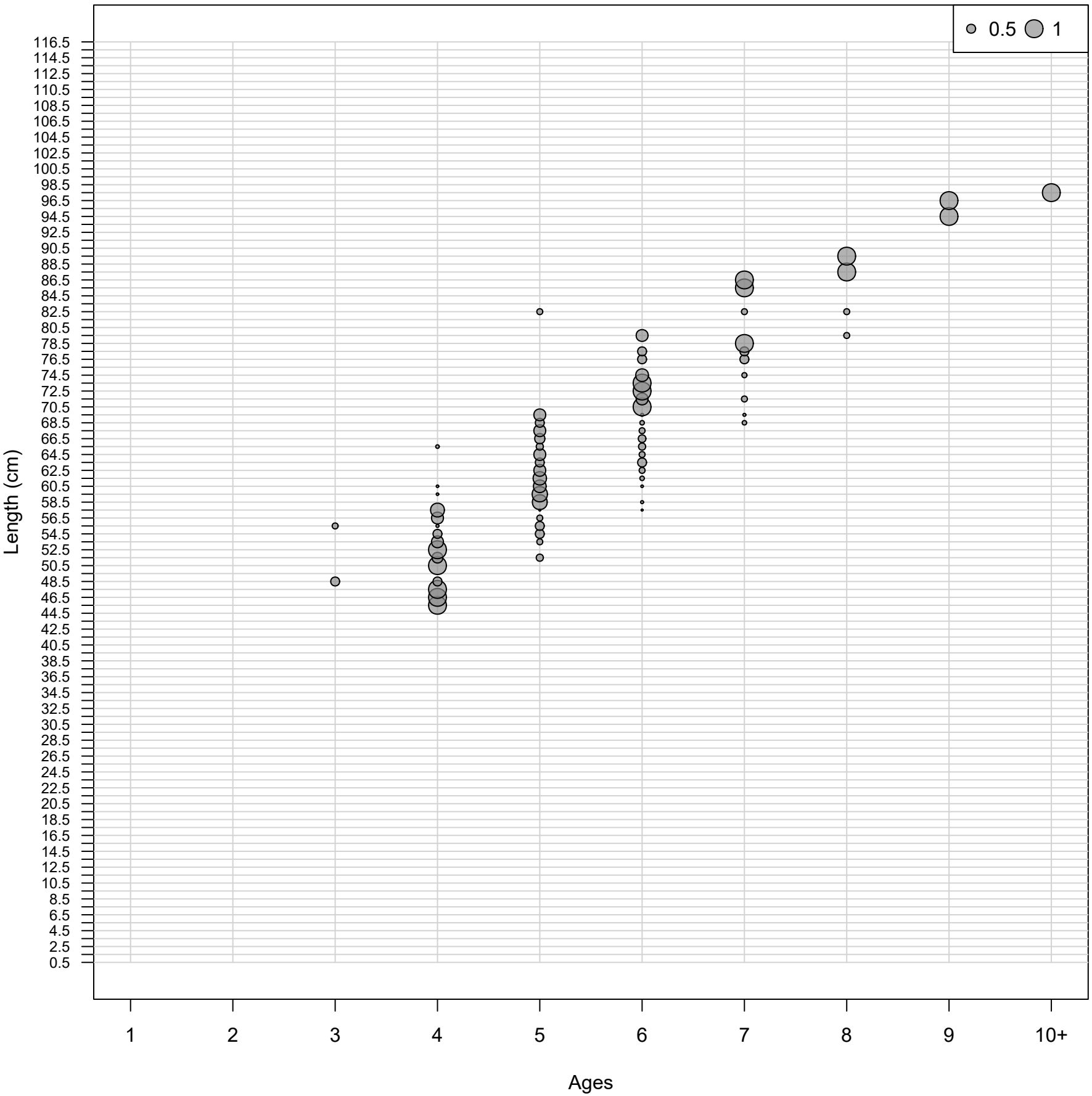
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 40
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 41
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
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46.5
44.5
42.5
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24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
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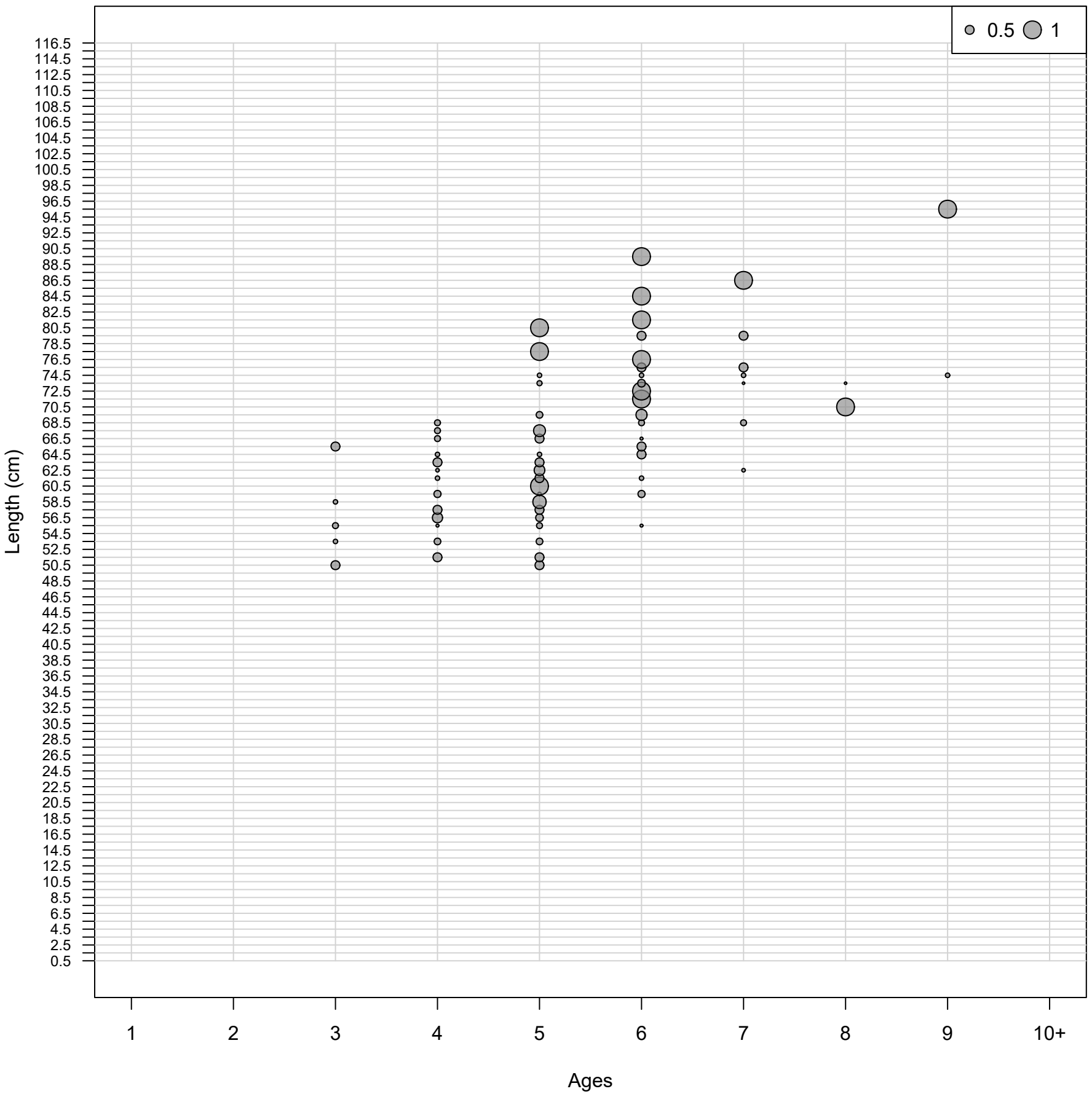
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 42
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
60.5
58.5
56.5
54.5
52.5
50.5
48.5
46.5
44.5
42.5
40.5
38.5
36.5
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32.5
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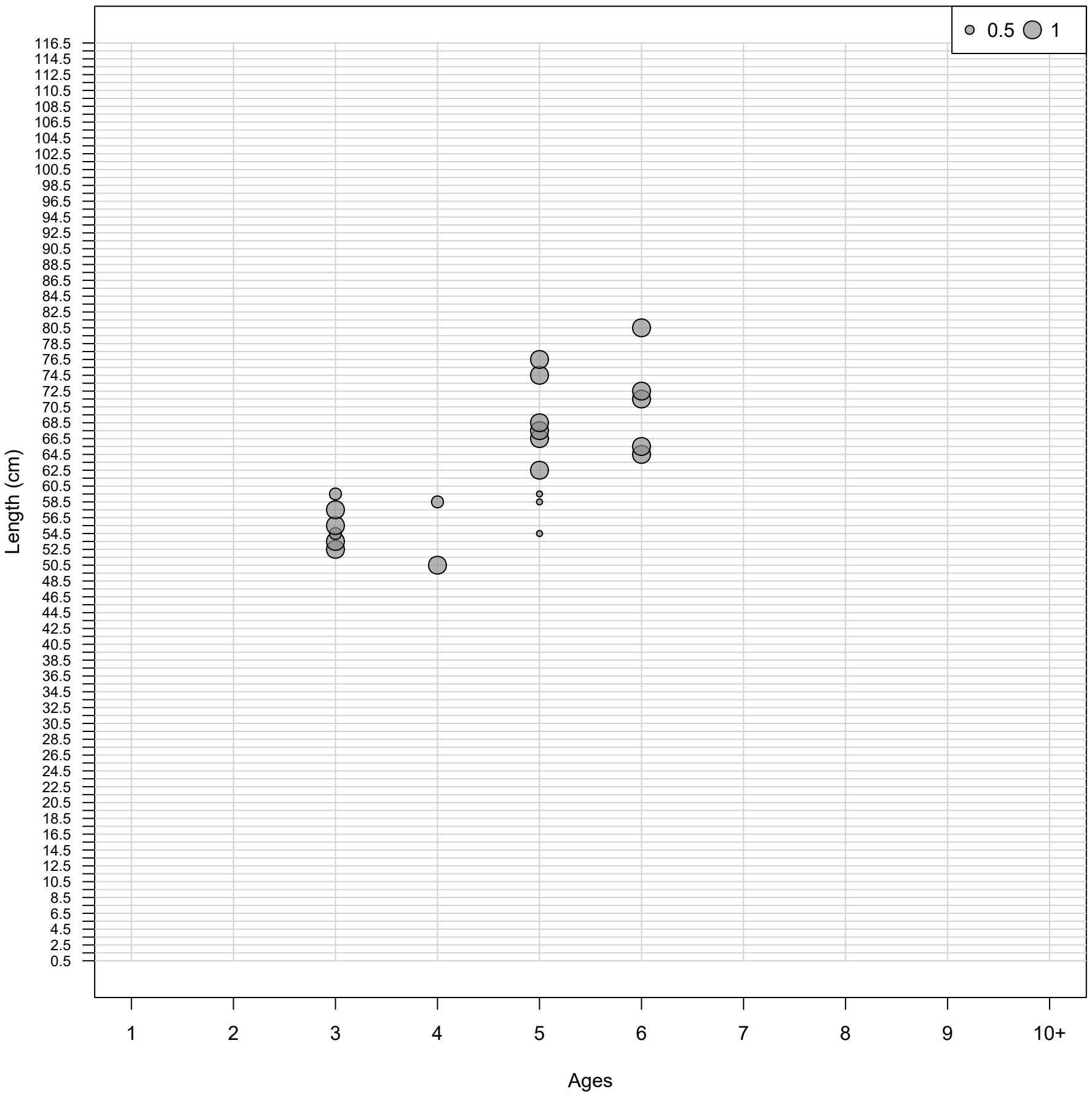
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
3
4
5
6
7
8
9
10+
Ages


CAAL for Catch for Fleet 3 Year 43
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
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64.5
62.5
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56.5
54.5
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48.5
46.5
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42.5
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38.5
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24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
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6.5
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2.5
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1
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6
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8
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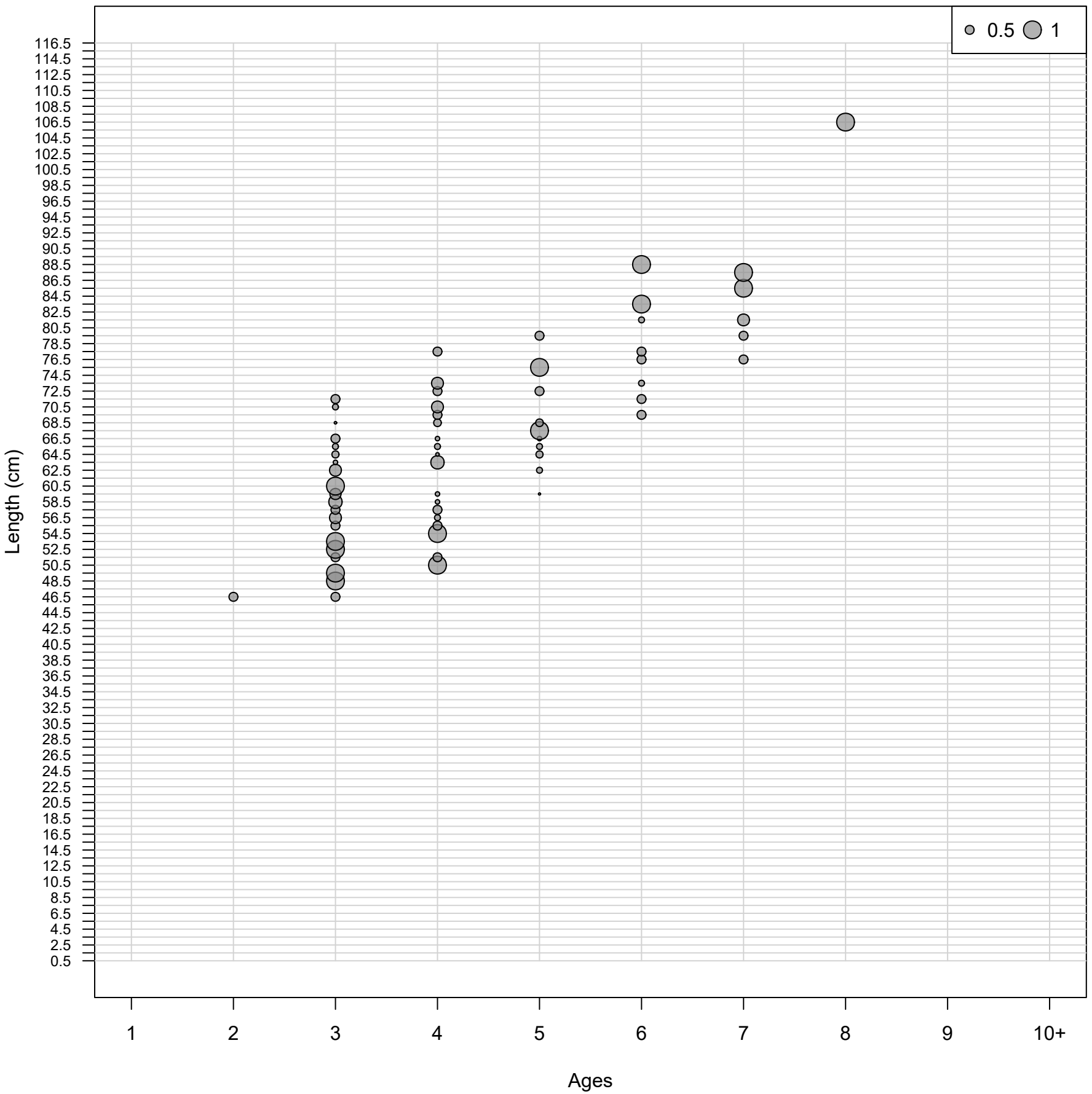
10+
Ages


CAAL for Catch for Fleet 3 Year 45
0.5
1
Length (cm)
116.5
114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
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82.5
80.5
78.5
76.5
74.5
72.5
70.5
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66.5
64.5
62.5
60.5
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56.5
54.5
52.5
50.5
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46.5
44.5
42.5
40.5
38.5
36.5
34.5
32.5
30.5
28.5
26.5
24.5
22.5
20.5
18.5
16.5
14.5
12.5
10.5
8.5
6.5
4.5
2.5
0.5
1
2
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5
6
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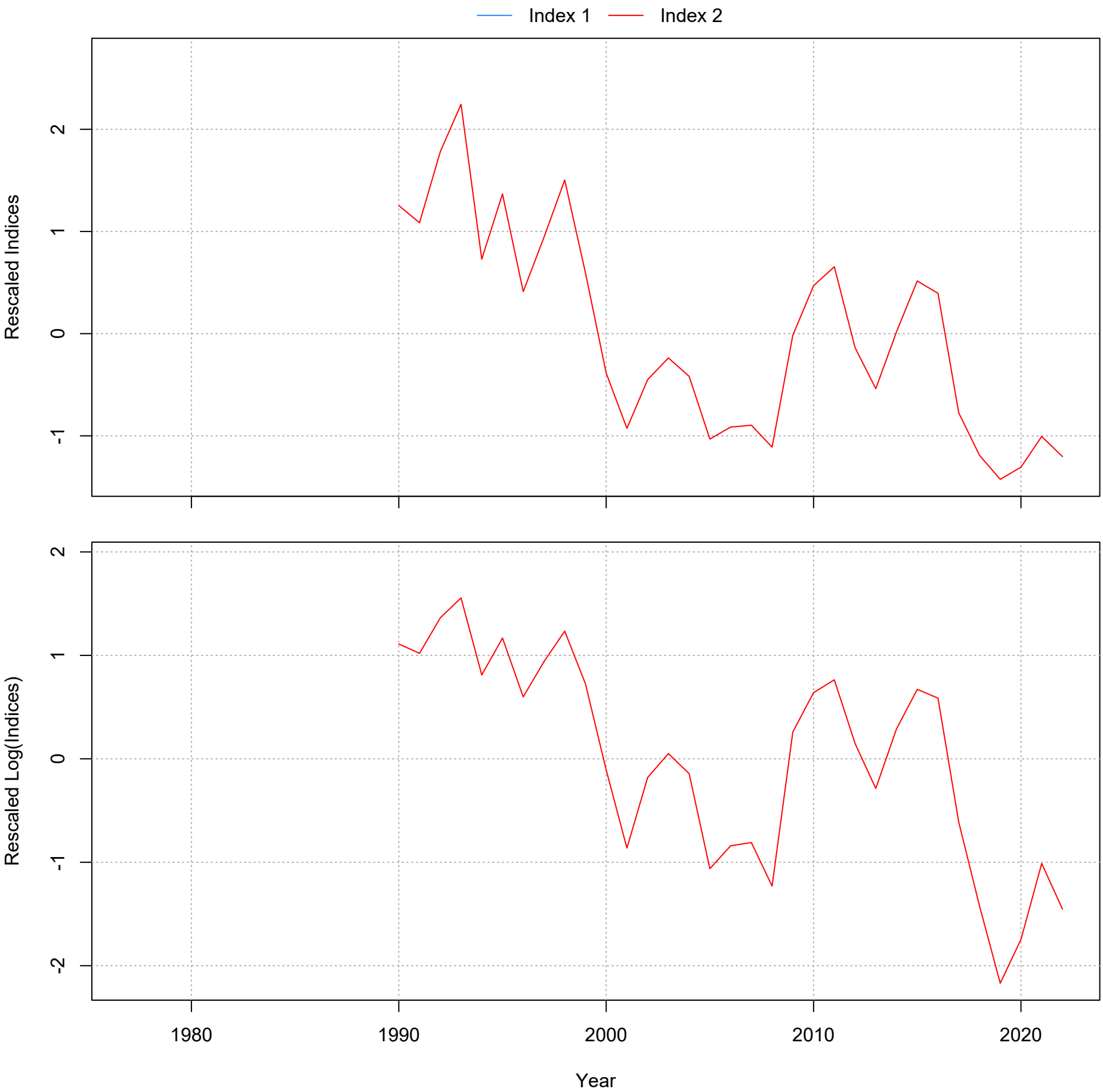
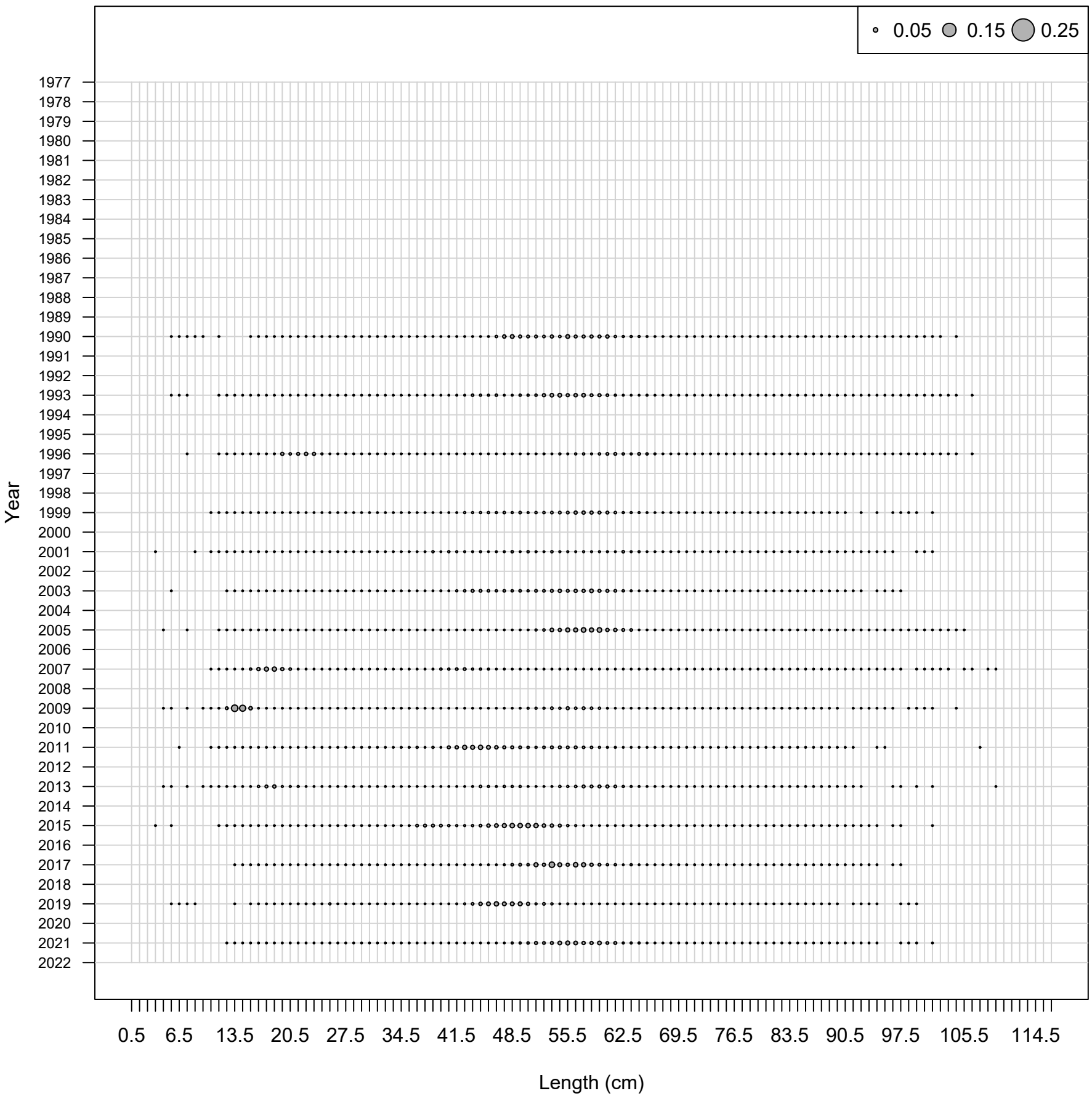
8
9
10+
Ages


Index 1
Index 2
Rescaled Indices
2
1
0
-1
Rescaled Log(Indices)
2
1
0
-1
-2
1980
1990
2000
2010
2020
Year


Length Comps for Index 1
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0.15
0.25
Year
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1984
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2019
2020
2021
2022
0.5
6.5
13.5
20.5
27.5
34.5
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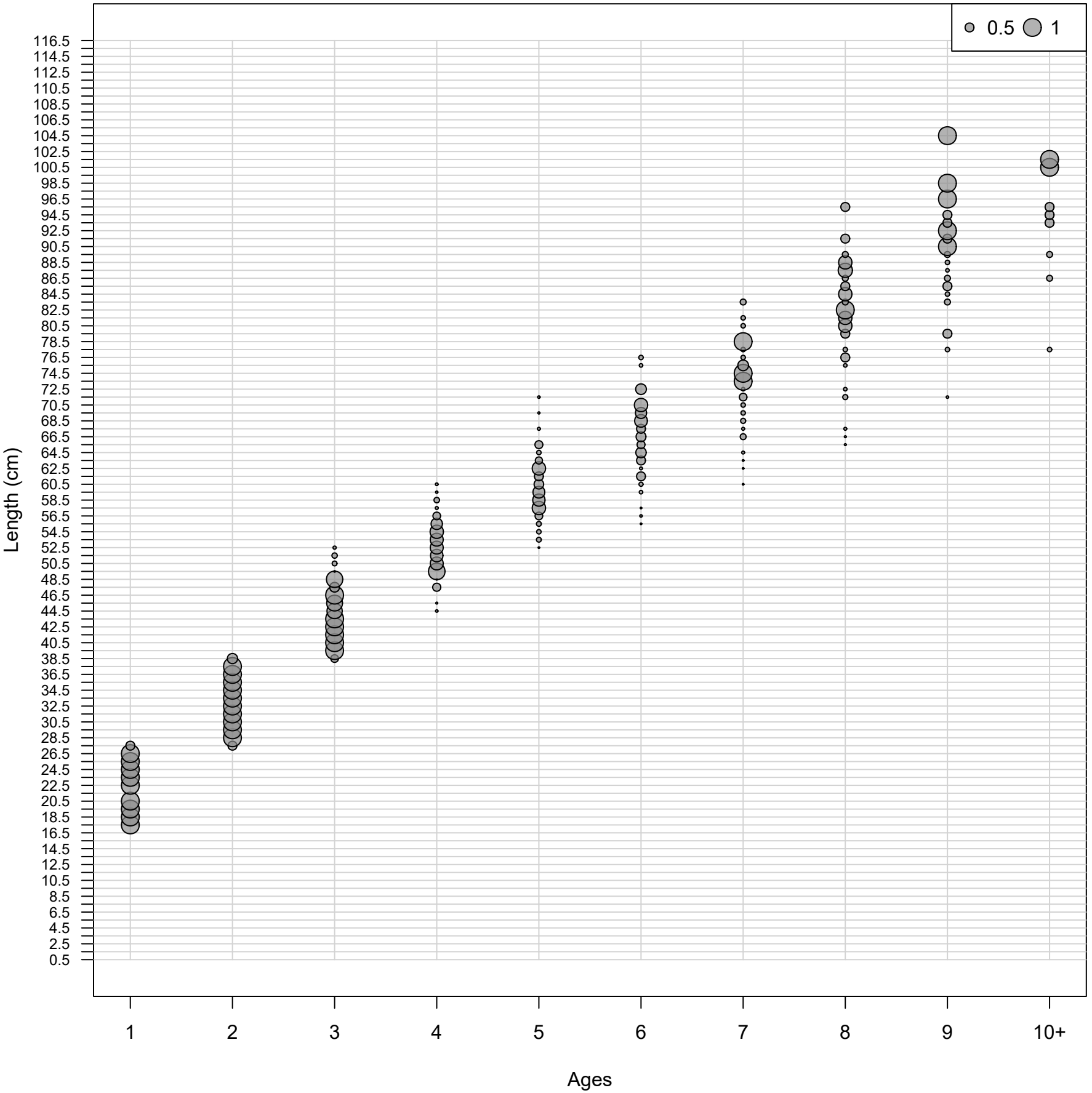
48.5
55.5
62.5
69.5
76.5
83.5
90.5
97.5
105.5
114.5
Length (cm)


CAAL for Index 1 Year 1990
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1
Length (cm)
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114.5
112.5
110.5
108.5
106.5
104.5
102.5
100.5
98.5
96.5
94.5
92.5
90.5
88.5
86.5
84.5
82.5
80.5
78.5
76.5
74.5
72.5
70.5
68.5
66.5
64.5
62.5
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58.5
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54.5
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48.5
46.5
44.5
42.5
40.5
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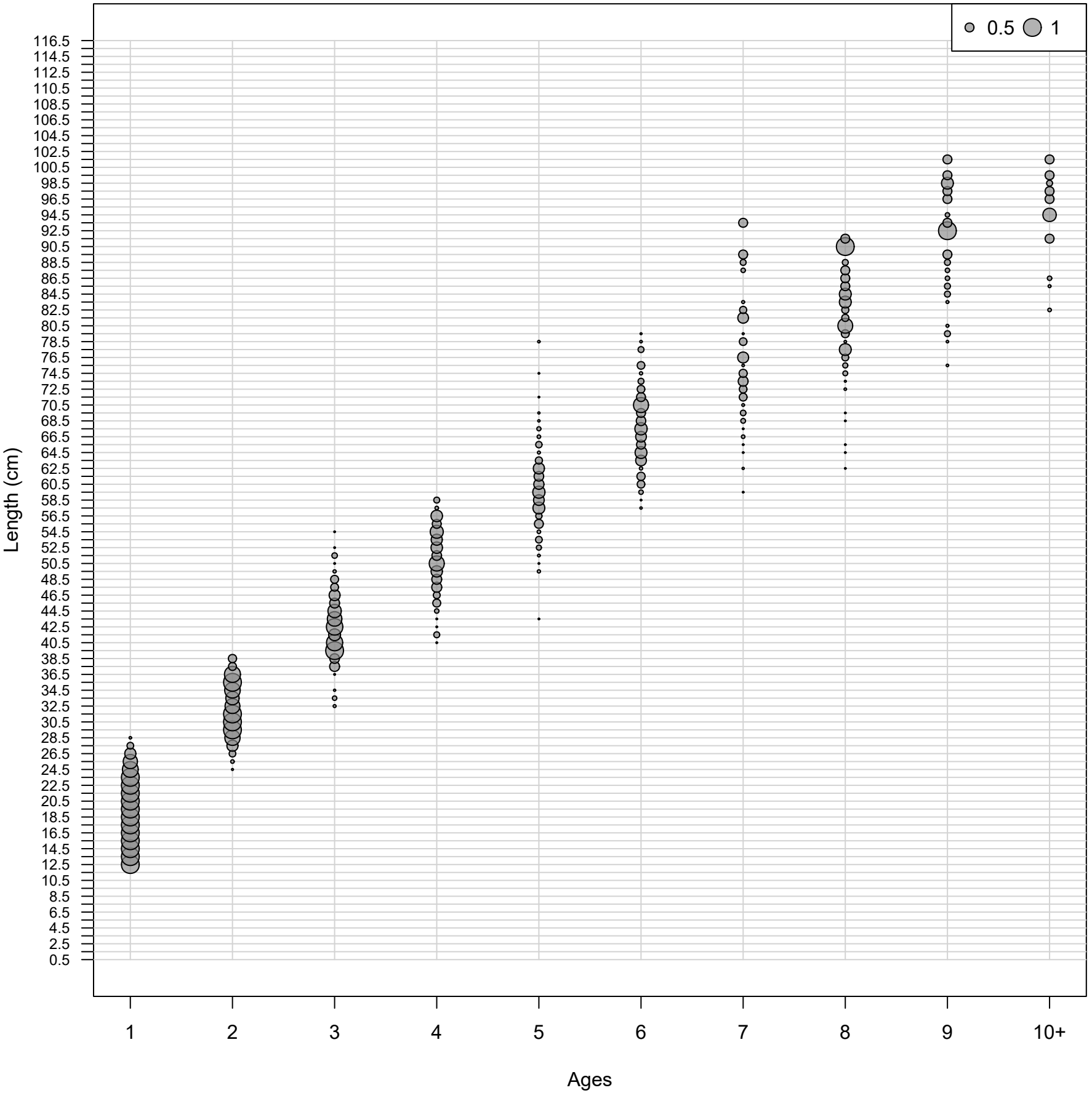
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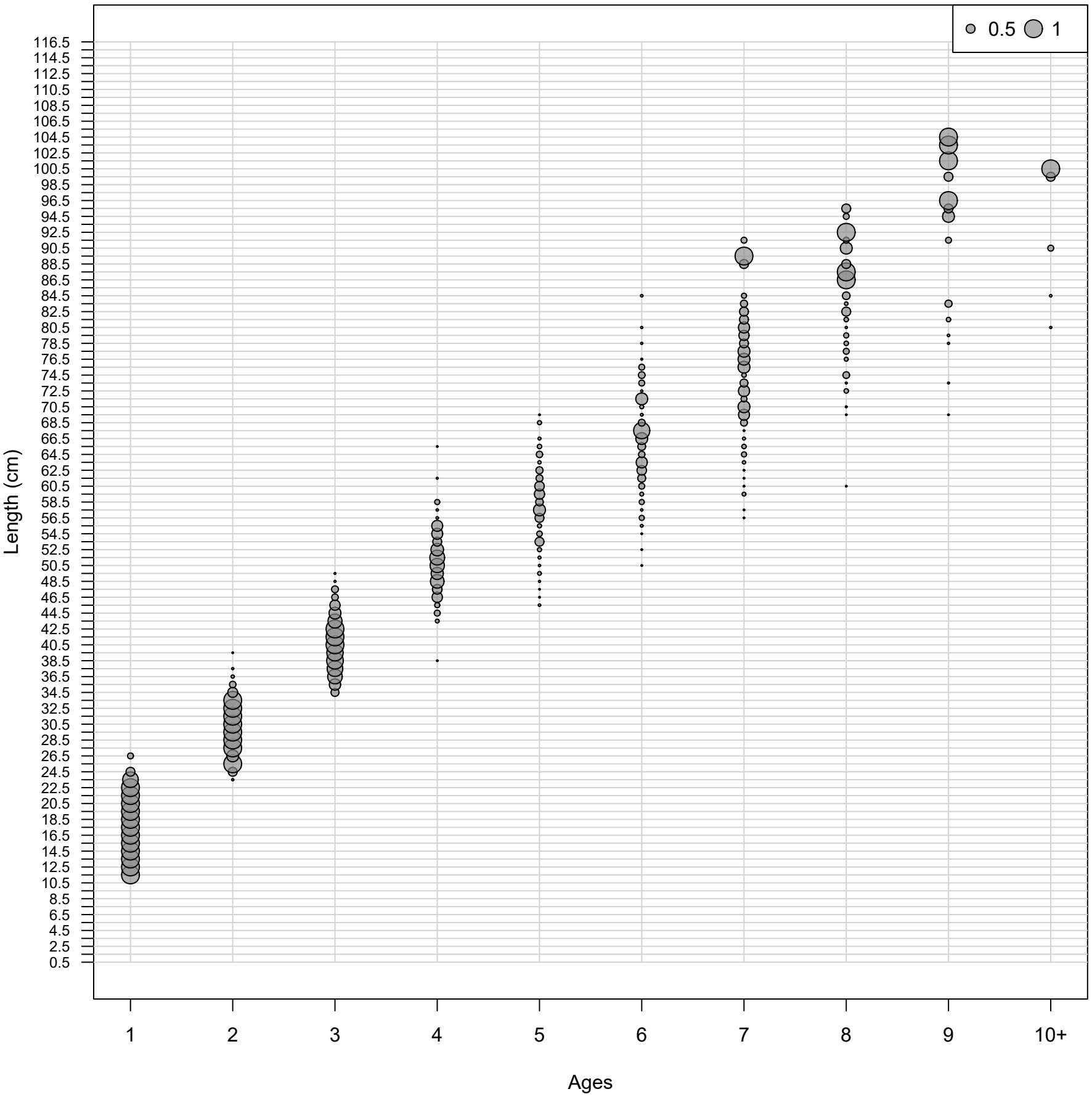
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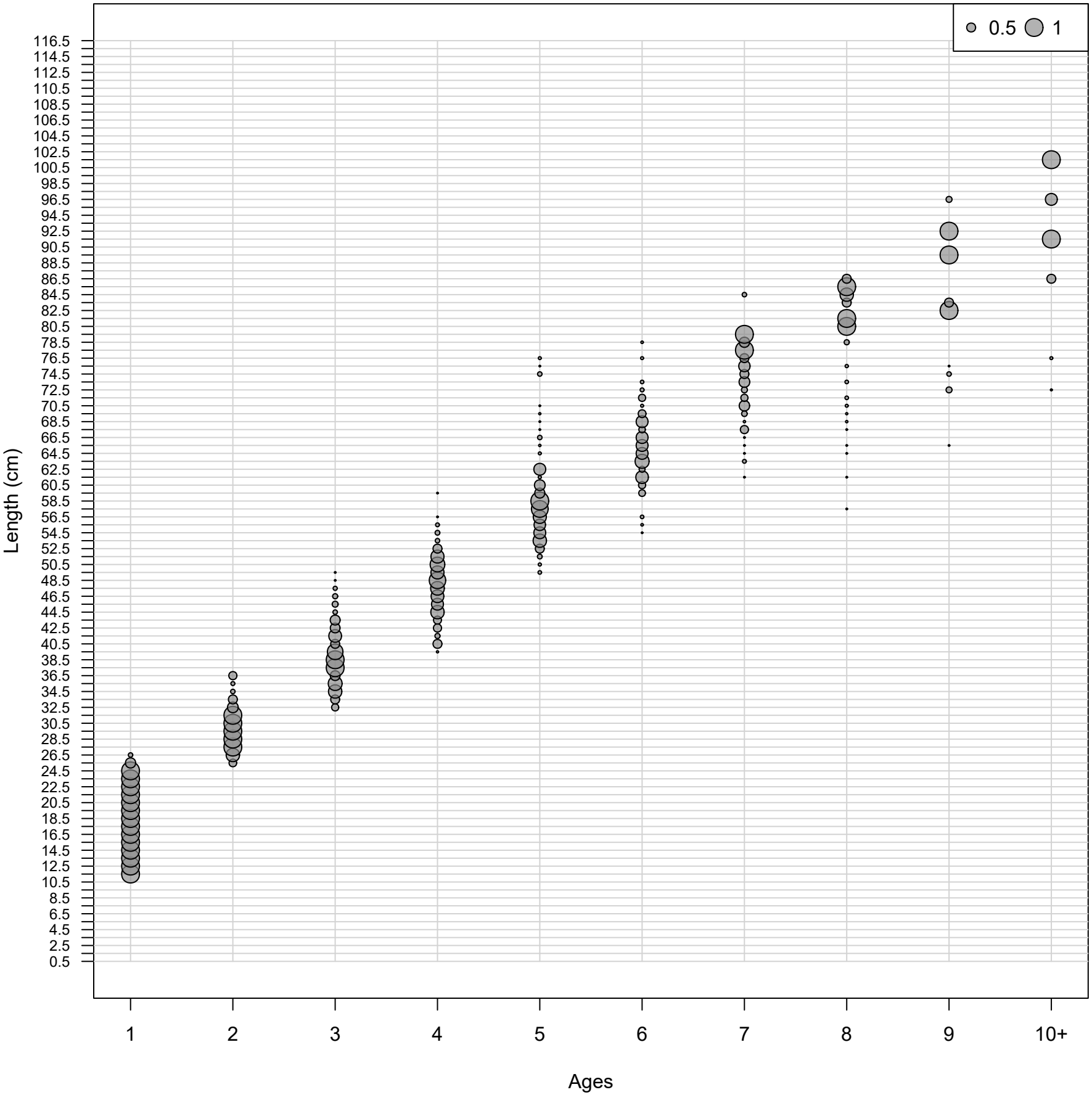
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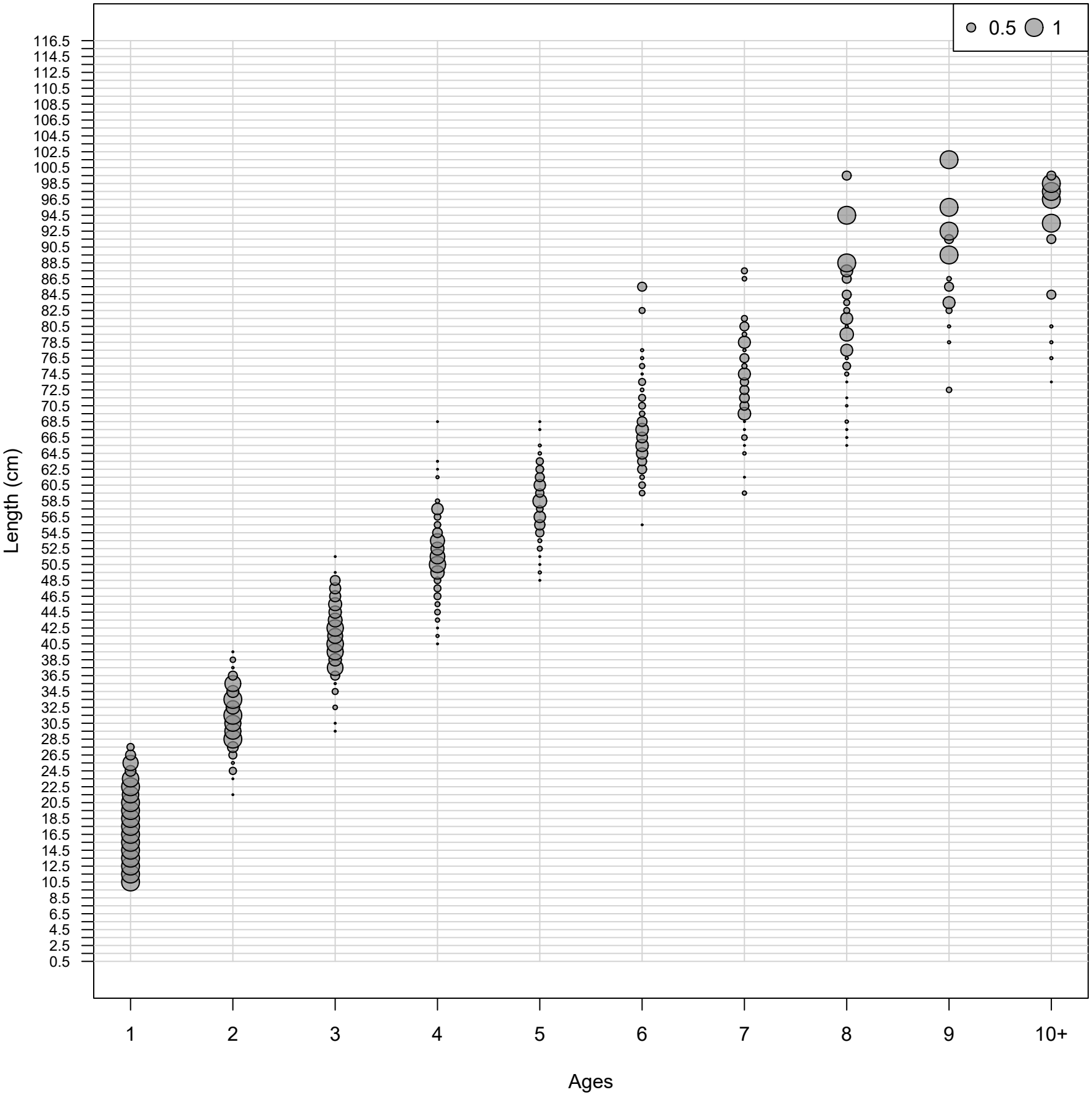
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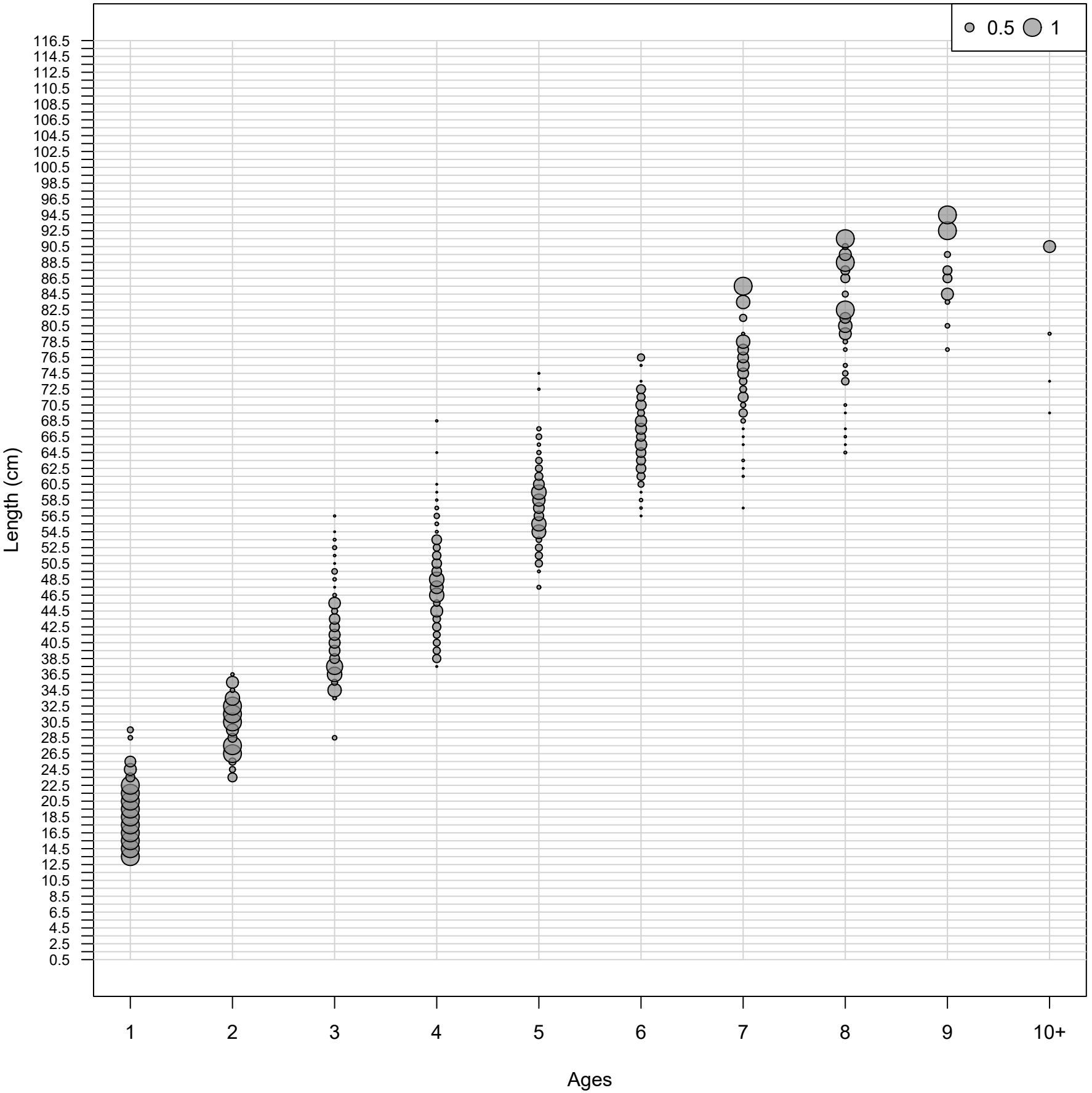
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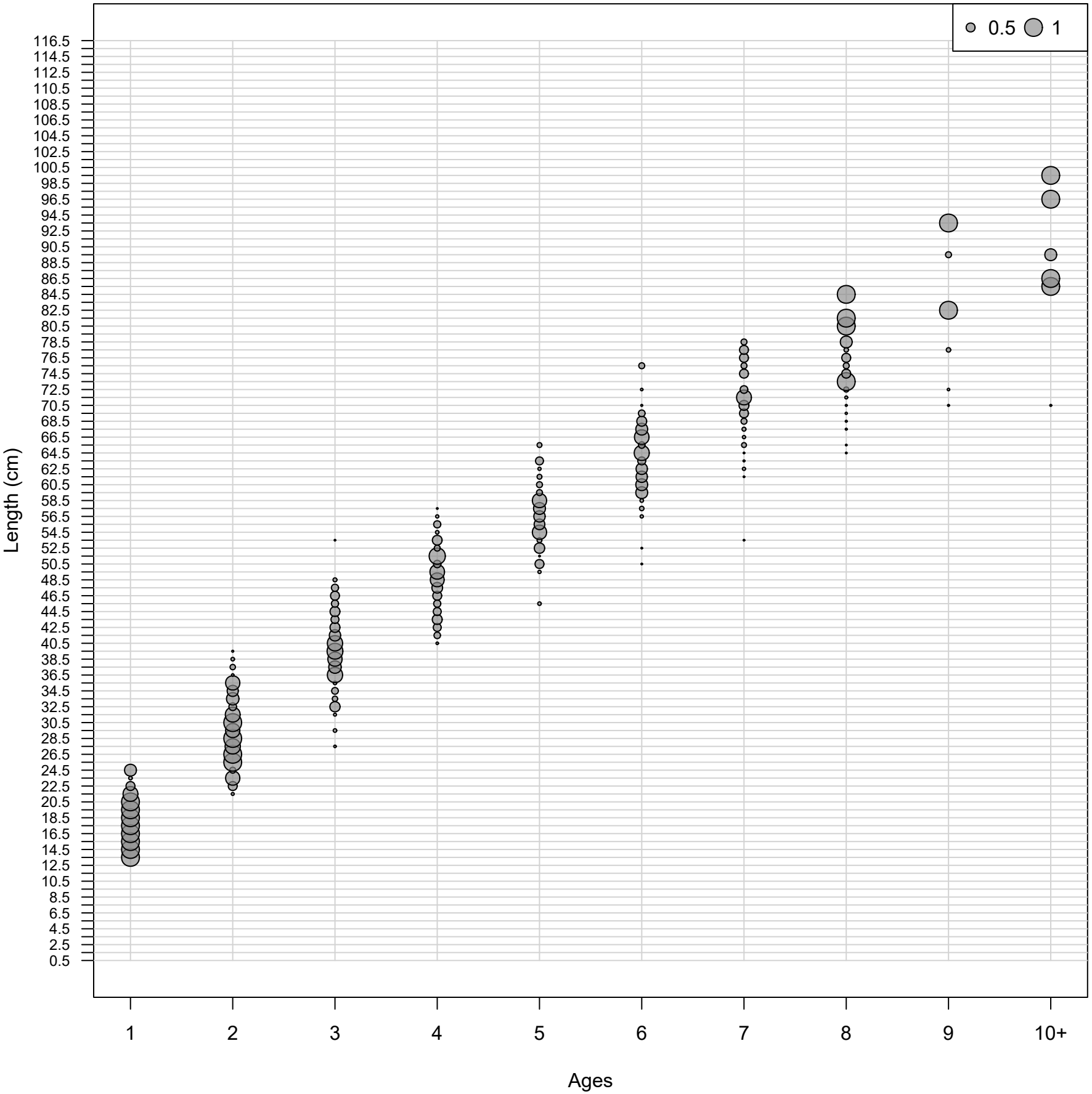
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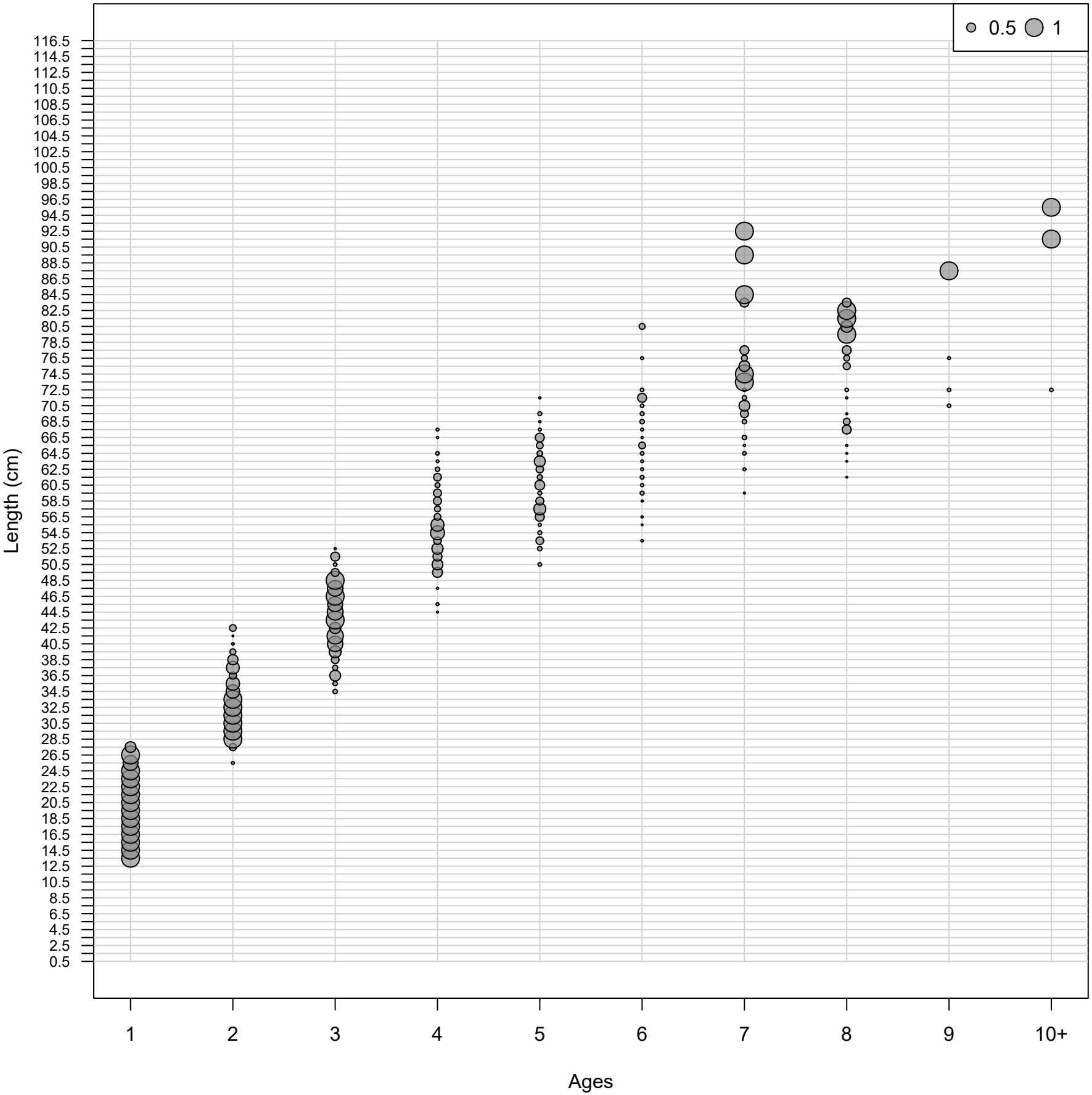
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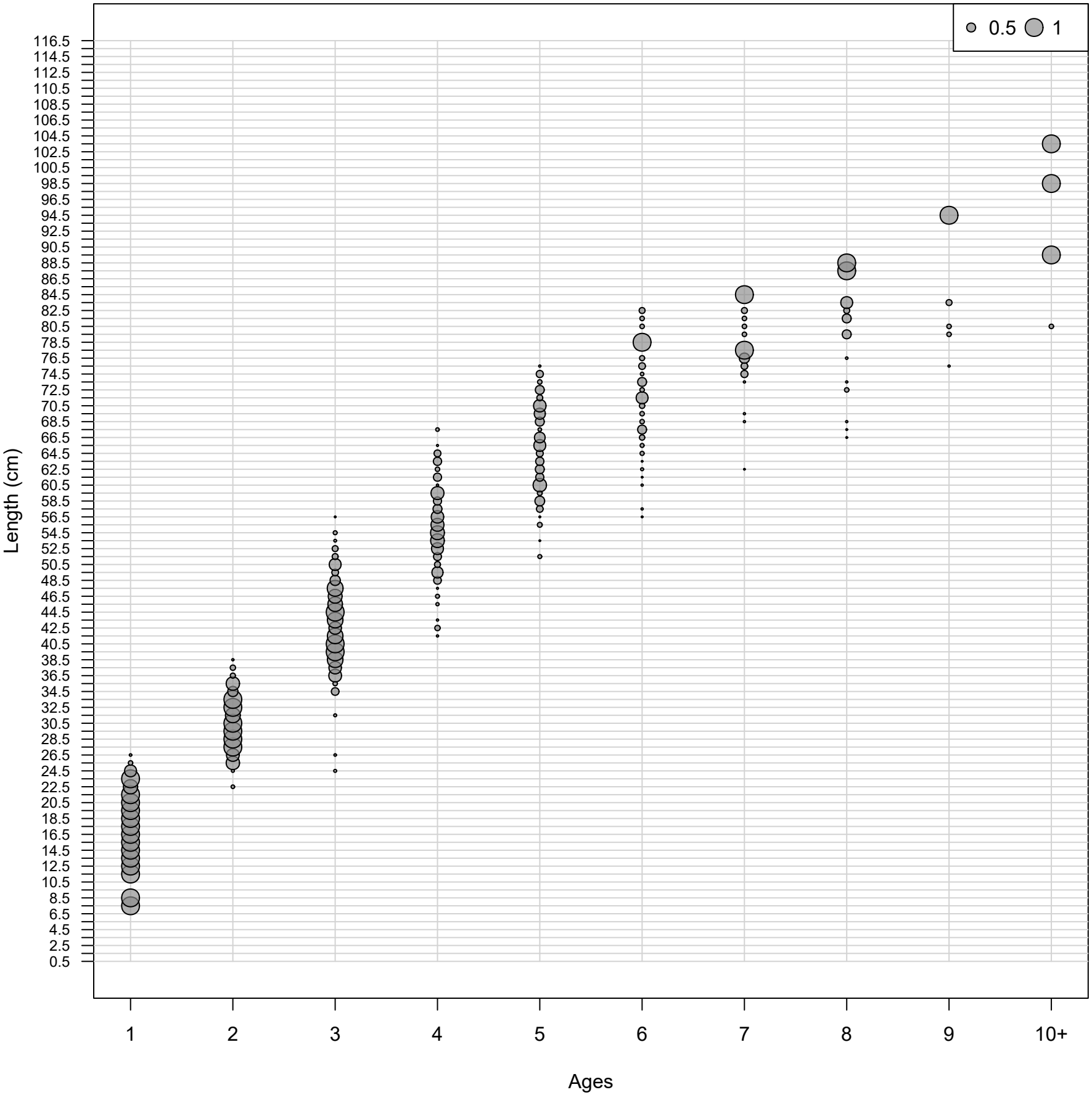
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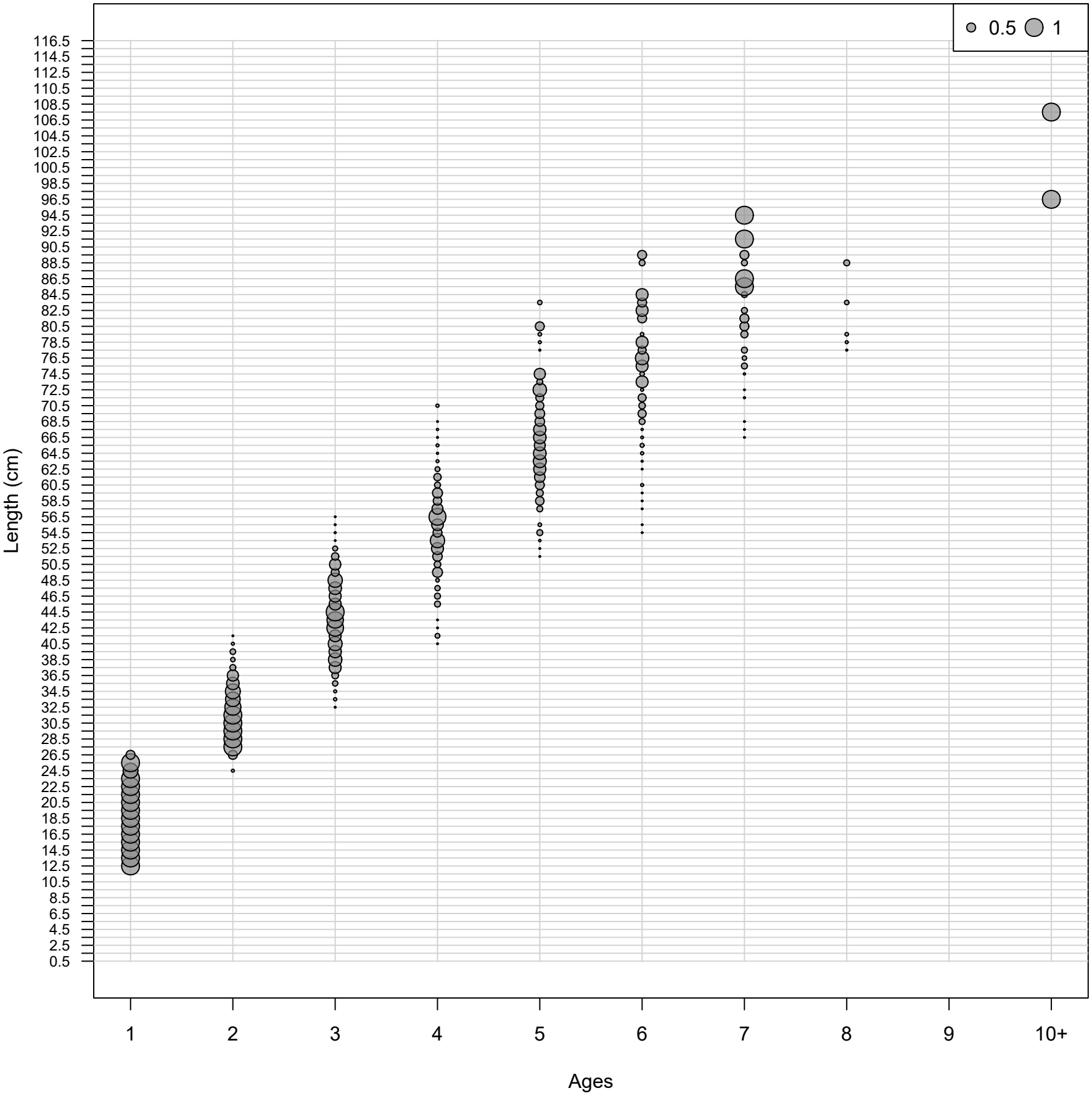
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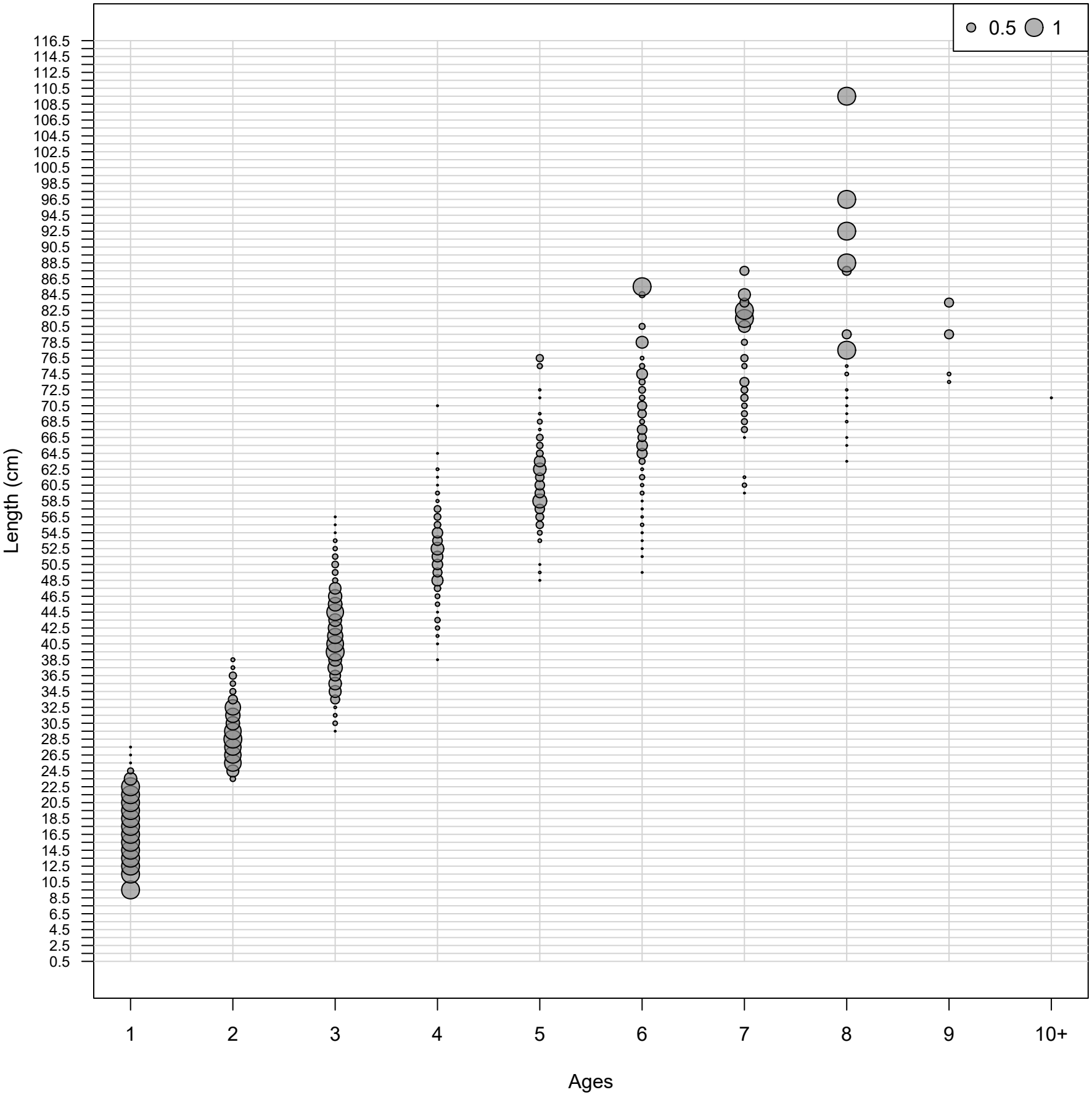
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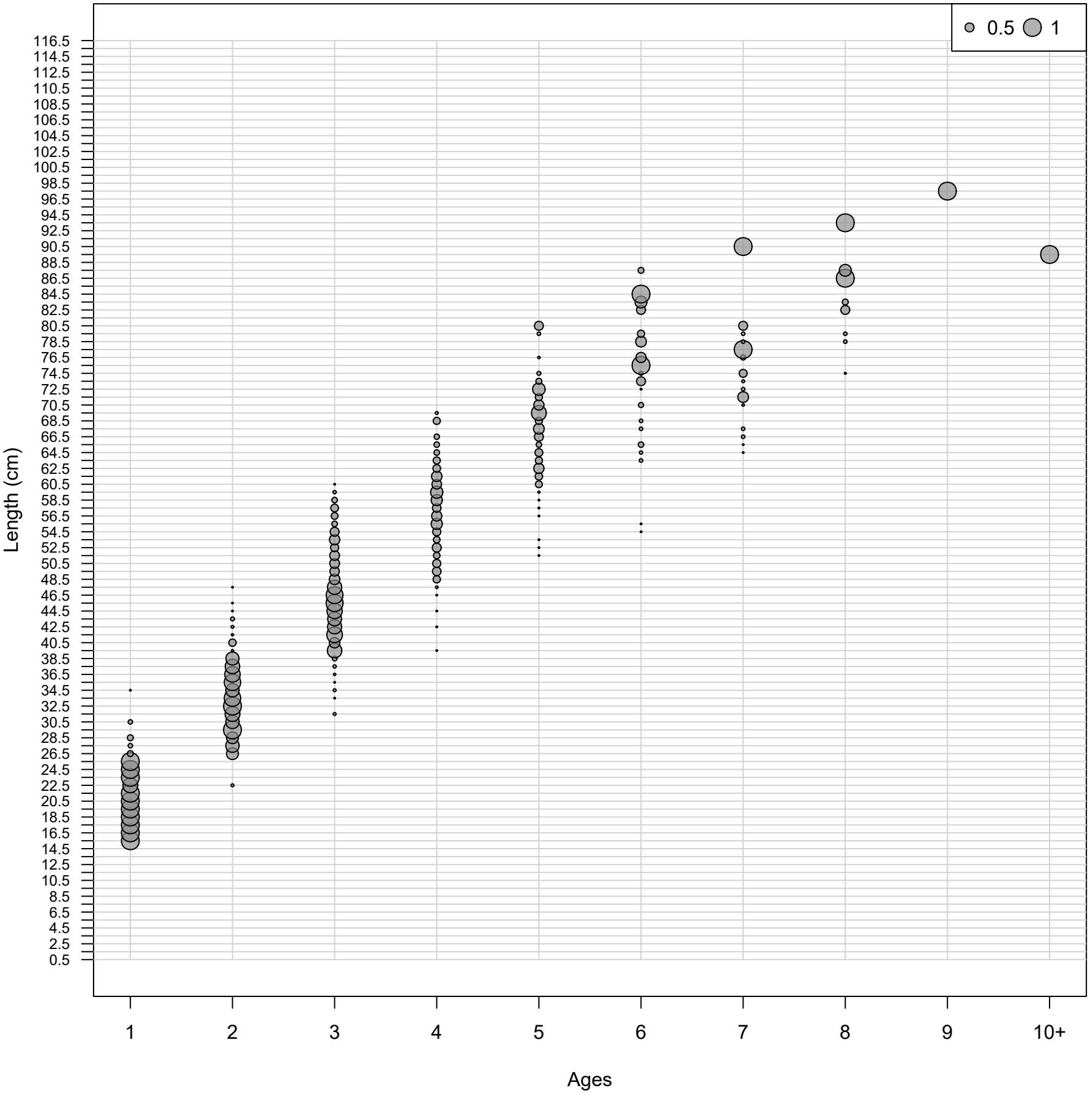
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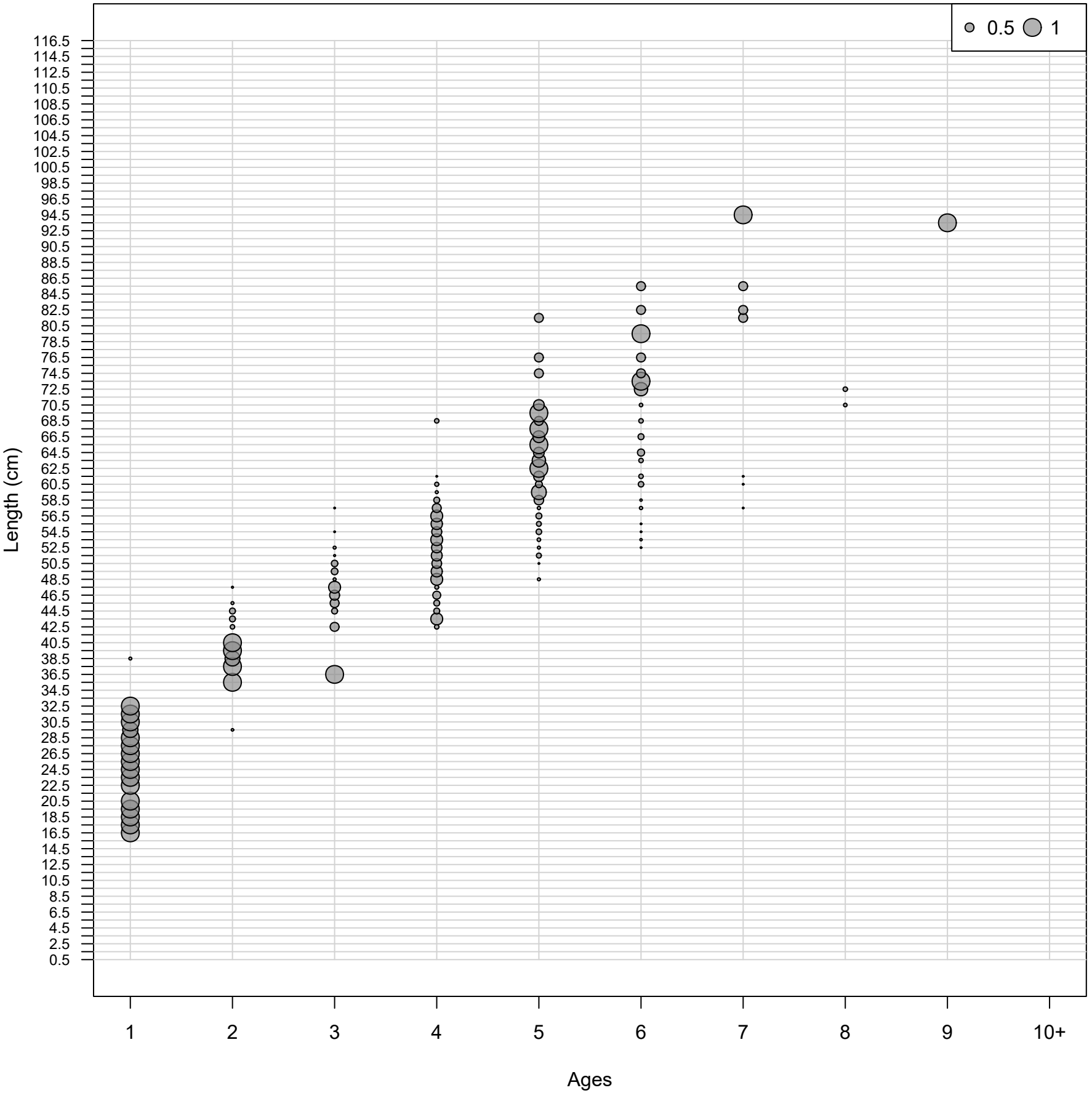
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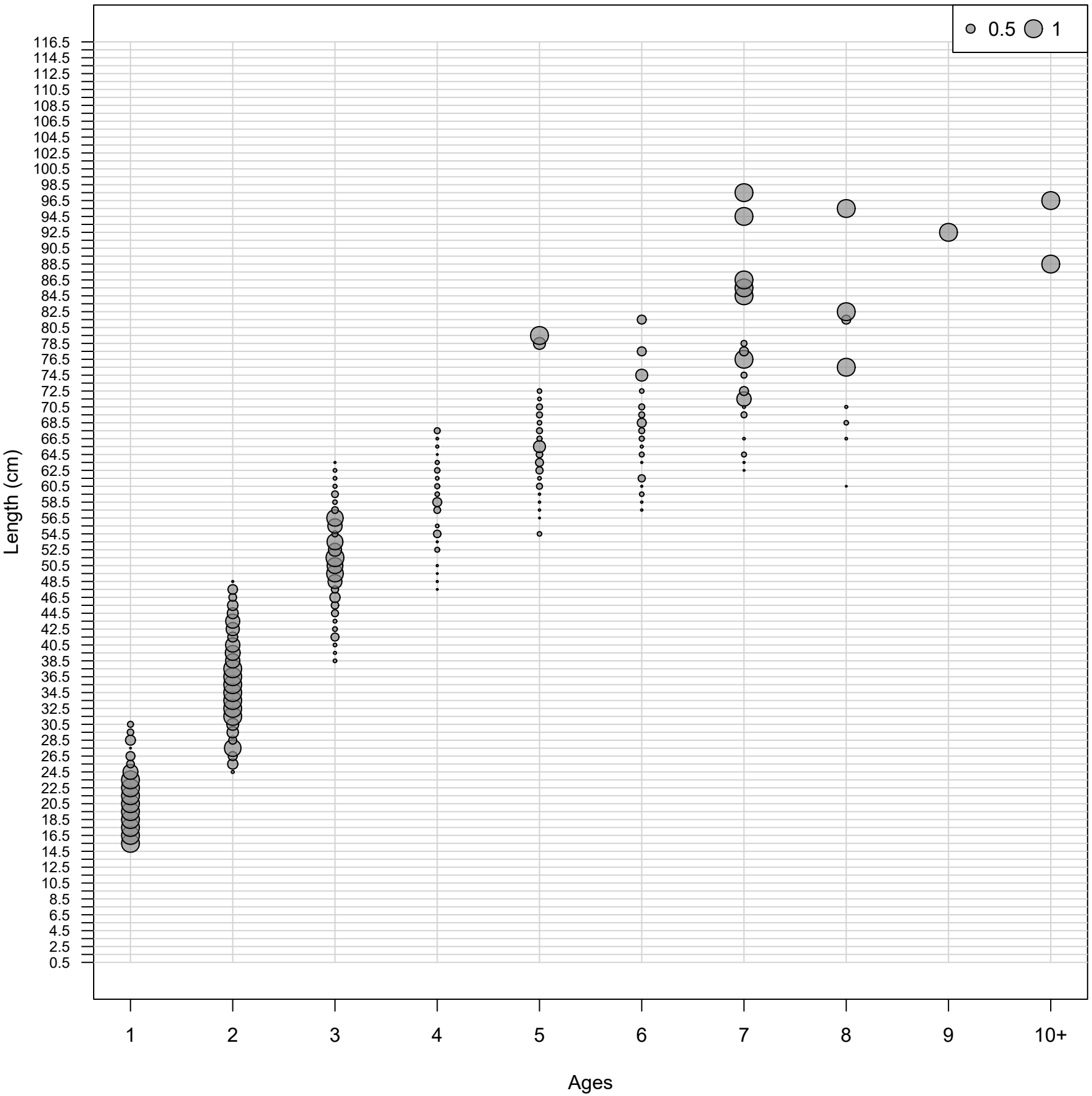
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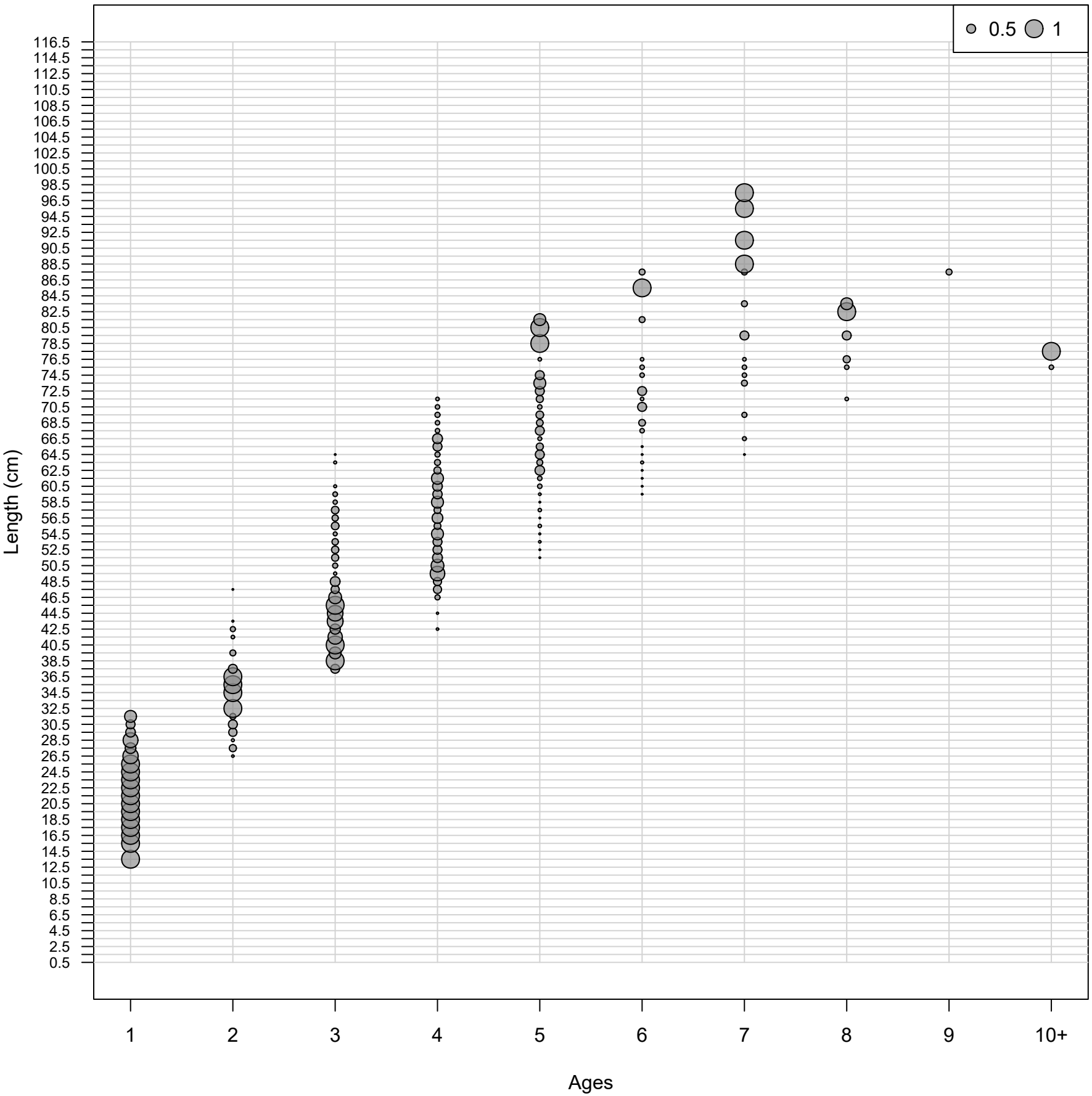
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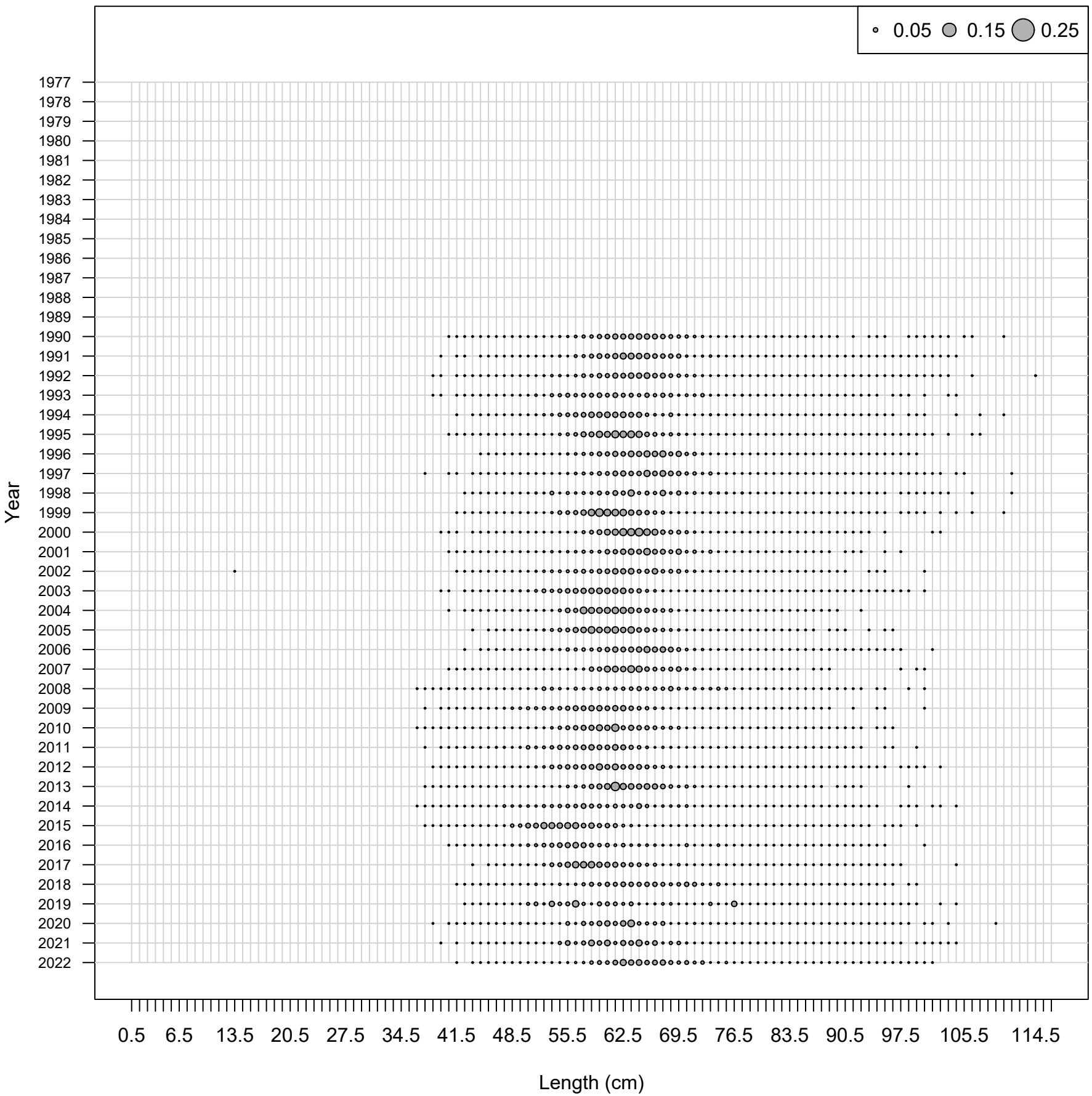
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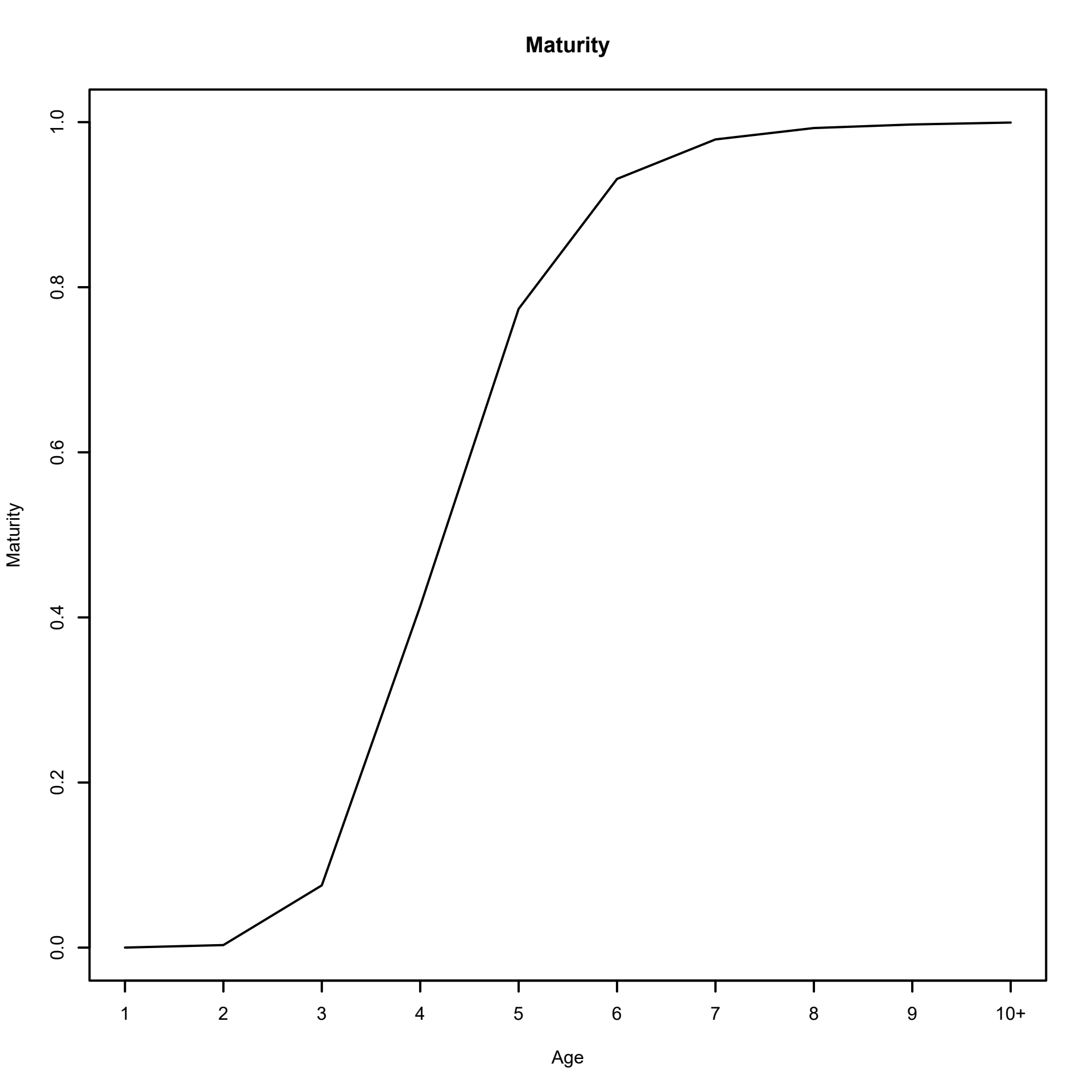
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