Stock: North-East Arctic Haddock

**Assessment Quality Control Diagram 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Average F(4-7,u) | | | | | | | | | | | | | | | |
| Date of assessment | Year | | | | | | | | | | | | | | |
|  | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | |
| 1989 | 0.51 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1990 | 0.49 | 0.34 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1991 | 0.40 | 0.24 | 0.10 |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1992 | 0.50 | 0.40 | 0.20 | 0.34 |  |  |  |  |  |  |  |  |  |  |  | |
| 1993 | 0.59 | 0.50 | 0.21 | 0.31 | 0.45 |  |  |  |  |  |  |  |  |  |  | |
| 1994 | 0.54 | 0.43 | 0.18 | 0.26 | 0.38 | 0.55 |  |  |  |  |  |  |  |  |  | |
| 1995 | 0.51 | 0.38 | 0.16 | 0.23 | 0.31 | 0.44 | 0.63 |  |  |  |  |  |  |  |  | |
| 1996 | 0.49 | 0.40 | 0.17 | 0.25 | 0.32 | 0.42 | 0.57 | 0.33 |  |  |  |  |  |  |  | |
| 1997 | 0.53 | 0.42 | 0.18 | 0.26 | 0.32 | 0.41 | 0.50 | 0.34 | 0.33 |  |  |  |  |  |  | |
| 1998 | 0.50 | 0.38 | 0.15 | 0.23 | 0.27 | 0.35 | 0.43 | 0.31 | 0.30 | 0.41 |  |  |  |  |  | |
| 1999 | 0.52 | 0.41 | 0.16 | 0.24 | 0.29 | 0.38 | 0.48 | 0.38 | 0.39 | 0.48 | 0.47 |  |  |  |  | |
| 2000 | 0.52 | 0.40 | 0.16 | 0.24 | 0.29 | 0.37 | 0.47 | 0.39 | 0.43 | 0.52 | 0.49 | 0.55 |  |  |  | |
| 2001 | 0.52 | 0.39 | 0.16 | 0.25 | 0.30 | 0.39 | 0.47 | 0.36 | 0.39 | 0.52 | 0.47 | 0.61 | 0.46 |  |  | |
| 2002 | 0.54 | 0.42 | 0.17 | 0.26 | 0.31 | 0.40 | 0.49 | 0.41 | 0.46 | 0.57 | 0.53 | 0.70 | 0.47 | 0.50 |  | |
| 2003 | 0.54 | 0.41 | 0.17 | 0.25 | 0.31 | 0.40 | 0.49 | 0.40 | 0.45 | 0.56 | 0.52 | 0.69 | 0.47 | 0.53 | 0.44 | |

Assessment not adopted by ACFM. As revised by ACFM.

**Remarks:**

**Stock: North-East Arctic Haddock**

**Assessment Quality Control Diagram 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Recruitment (age 3) Unit: millions | | | | | | | | | | | | | | | |
| Date of assessment | Year class | | | | | | | | | | | | | | |
|  | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | |
| 1989 | 14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1990 | 11 | 8 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1991 | 22 | 10 | 30 |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1992 | 16 | 17 | 34 | 118 |  |  |  |  |  |  |  |  |  |  |  | |
| 1993 | 13 | 18 | 72 | 164 | 254 |  |  |  |  |  |  |  |  |  |  | |
| 1994 | 15 | 17 | 66 | 160 | 272 | 153 |  |  |  |  |  |  |  |  |  | |
| 1995 | 17 | 19 | 75 | 193 | 520 | 235 | 74 |  |  |  |  |  |  |  |  | |
| 1996 | 16 | 23 | 82 | 264 | 955 | 350 | 104 | 88 |  |  |  |  |  |  |  | |
| 1997 | 16 | 24 | 85 | 223 | 815 | 317 | 94 | 130 | 109 |  |  |  |  |  |  | |
| 1998 | 18 | 25 | 86 | 238 | 757 | 324 | 87 | 97 | 92 | 36 |  |  |  |  |  | |
| 1999 | 18 | 25 | 85 | 212 | 719 | 303 | 85 | 93 | 105 | 41 | 125 |  |  |  |  | |
| 2000 | 18 | 25 | 84 | 205 | 681 | 291 | 78 | 91 | 111 | 50 | 143 | 62 |  |  |  | |
| 2001 | 17 | 22 | 81 | 206 | 636 | 272 | 76 | 80 | 98 | 45 | 124 | 59 | 290 |  |  | |
| 2002 | 17 | 24 | 81 | 195 | 626 | 274 | 74 | 85 | 99 | 44 | 180 | 58 | 265 | 241 |  | |
| 2003 | 17 | 24 | 82 | 196 | 634 | 277 | 80 | 90 | 99 | 43 | 180 | 61 | 309 | 330 |  | |

Assessment not adopted by ACFM. As revised by ACFM.

**Remarks:**

**Stock: North-East Arctic Haddock**

**Assessment Quality Control Diagram 3**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Spawning stock biomass ('000 t) | | | | | | | | | | | | | | | | |
| Date of assessment | Year | | | | | | | | | | | | | | | |
|  | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | |
| 1989 | 89 | 84 | 58 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1990 | 89 | 103 | 116 | 110 |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1991 | 112 | 141 | 176 | 167 | 183 |  |  |  |  |  |  |  |  |  |  |  | |
| 1992 | 67 | 66 | 77 | 85 | 99 | 115 |  |  |  |  |  |  |  |  |  |  | |
| 1993 | 58 | 57 | 66 | 82 | 94 | 117 | 162 |  |  |  |  |  |  |  |  |  | |
| 1994 | 67 | 69 | 85 | 107 | 117 | 60 | 85 | 89 |  |  |  |  |  |  |  |  | |
| 1995 | 66 | 71 | 88 | 105 | 142 | 78 | 100 | 175 | 160 |  |  |  |  |  |  |  | |
| 1996 | 68 | 72 | 87 | 100 | 148 | 83 | 158 | 331 | 513 | 375 |  |  |  |  |  |  | |
| 1997 | 63 | 65 | 78 | 95 | 139 | 72 | 119 | 187 | 255 | 231 | 171 |  |  |  |  |  | |
| 1998 | 70 | 76 | 94 | 117 | 163 | 94 | 146 | 212 | 215 | 219 | 188 | 122 |  |  |  |  | |
| 1999 | 66 | 71 | 91 | 100 | 144 | 78 | 113 | 163 | 163 | 149 | 121 | 104 | 89 |  |  |  | |
| 2000 | 65 | 72 | 91 | 102 | 143 | 78 | 109 | 153 | 147 | 128 | 118 | 89 | 84 |  |  |  | |
| 2001 | 67 | 74 | 89 | 100 | 150 | 80 | 103 | 151 | 148 | 130 | 123 | 70 | 79 | 64 |  |  | |
| 2002 | 65 | 67 | 79 | 89 | 134 | 75 | 96 | 137 | 133 | 103 | 91 | 54 | 90 | 67 | 98 |  | |
| 2003 | 62 | 68 | 86 | 95 | 136 | 70 | 97 | 141 | 134 | 108 | 93 | 52 | 91 | 86 | 120 | 133 | |

Forecast. Assessment not adopted by ACFM.As revised by ACFM.

**Remarks**