**Stock: Cod in Sub-divisions 22-24**

**Assessment Quality Control Diagram 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Average F(3-6,u) | | | | | | | | | | | | | | | | |
| Date of assessment | Year | | | | | | | | | | | | | | | |
|  | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| 1989 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1990 | 0.68 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1991 | 0.81 | 0.86 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 0.92 | 0.98 | 0.73 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1993 | 1.03 | 1.31 | 1.25 | 0.88 |  |  |  |  |  |  |  |  |  |  |  |
| 19941 | 1.08 | 1.18 | 1.37 | 0.63 | 0.80 |  |  |  |  |  |  |  |  |  |  |
| 19951 | 1.15 | 1.34 | 2.07 | 1.54 | 1.85 | 1.53 |  |  |  |  |  |  |  |  |  |
| 1996 | 1.15 | 1.30 | 1.96 | 1.30 | 1.25 | 0.57 | 1.07 |  |  |  |  |  |  |  |  |
| 1997 | 1.15 | 1.30 | 1.97 | 1.31 | 1.25 | 0.57 | 1.07 | 1.36 |  |  |  |  |  |  |  |
| 1998 | 1.15 | 1.29 | 1.96 | 1.34 | 1.32 | 0.54 | 1.00 | 1.15 | 1.15 |  |  |  |  |  |  |
| 1999 | 1.14 | 1.29 | 1.96 | 1.33 | 1.40 | 0.61 | 1.04 | 1.23 | 1.61 | 1.13 |  |  |  |  |  |
| 2000 | 1.15 | 1.30 | 1.96 | 1.33 | 1.41 | 1.61 | 1.05 | 1.21 | 1.54 | 0.92 | 0.98 |  |  |  |  |
| 2001 | 1.14 | 1.29 | 1.98 | 1.36 | 1.43 | 0.64 | 1.04 | 1.19 | 1.53 | 0.97 | 1.28 | 1.11 |  |  |  |
| 2002 | 1.14 | 1.29 | 1.98 | 1.36 | 1.44 | 0.64 | 1.04 | 1.19 | 1.52 | 0.97 | 1.27 | 1.15 | 1.21 |  |  |
| 2003 | 1.15 | 1.30 | 1.99 | 1.37 | 1.45 | 0.66 | 1.05 | 1.20 | 1.53 | 0.98 | 1.28 | 1.18 | 1.31 | 1.16 |  |
| 2004 | 1.15 | 1.30 | 1.99 | 1.37 | 1.46 | 0.66 | 1.06 | 1.20 | 1.53 | 0.98 | 1.29 | 1.20 | 1.36 | 1.38 | 1.11 |

**Stock: Cod in Sub-divisions 22-24**

**Assessment Quality Control Diagram 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Recruitment (age 1) Unit: millions | | | | | | | | | | | | | | | | |
| Date of assessment | Year class | | | | | | | | | | | | | | | |
|  | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 2000 | 2001 | 2002 | 2003 |
| 1989 | 19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1990 | 11 | 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1991 | 12 | 23 | 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 14 | 20 | 14 | 24 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1993 | 13 | 19 | 20 | 25 | 55 |  |  |  |  |  |  |  |  |  |  |  |
| 1994 | 13 | 18 | 15 | 23 | 48 | 54 |  |  |  |  |  |  |  |  |  |  |
| 1995 | 12 | 18 | 15 | 21 | 45 |  |  |  |  |  |  |  |  |  |  |  |
| 1996 | 12 | 18 | 15 | 25 | 53 | 35 | 58 | 82 |  |  |  |  |  |  |  |  |
| 1997 | 14 | 20 | 18 | 32 | 73 | 41 | 71 | 110 | 20 |  |  |  |  |  |  |  |
| 1998 | 14 | 20 | 18 | 32 | 74 | 42 | 73 | 122 | 16 | 105 |  |  |  |  |  |  |
| 1999 | 14 | 20 | 18 | 32 | 74 | 41 | 71 | 110 | 15 | 91 | 155 |  |  |  |  |  |
| 2000 | 14 | 20 | 18 | 32 | 74 | 41 | 71 | 110 | 18 | 83 | 147 | 63 |  |  |  |  |
| 2001 | 14 | 20 | 18 | 32 | 74 | 41 | 71 | 109 | 17 | 74 | 98 | 48 | 61 |  |  |  |
| 2002 | 14 | 20 | 18 | 32 | 74 | 41 | 71 | 109 | 17 | 73 | 93 | 46 | 49 | 57 |  |  |
| 2003 | 18 | 26 | 24 | 40 | 93 | 47 | 80 | 126 | 42 | 98 | 128 | 58 | 66 | 45 | 94 |  |
| 2004 | 18 | 26 | 24 | 40 | 93 | 47 | 80 | 126 | 42 | 98 | 128 | 58 | 63 | 41 | 76 | *39* |

**Remarks.**

**Stock: Cod in Sub-divisions 22-24 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 | 2005 | 2006 | |
| 1989 | 20 | 131 | 101 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1990 | 30 | 27 | 271 | 241 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1991 | 24 | 17 | 16 | 151 | 171 |  |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1992 | 23 | 16 | 14 | 14 | 171 | 231 |  |  |  |  |  |  |  |  |  |  |  |  | |
| 1993 | 22 | 14 | 11 | 11 | 19 | 191 | 341 |  |  |  |  |  |  |  |  |  |  |  | |
| 1994 | 22 | 14 | 11 | 9 | 14 | 22 | 341 | 371 |  |  |  |  |  |  |  |  |  |  | |
| 1995 | 22 | 14 | 9 | 7 | 10 | 16 | 21 | 281 | 351 |  |  |  |  |  |  |  |  |  | |
| 1996 | 24 | 16 | 11 | 10 | 19 | 31 | 31 | 38 |  |  |  |  |  |  |  |  |  |  | |
| 1997 | 24 | 15 | 11 | 9 | 18 | 31 | 31 | 37 | 38 | 261 | 241 |  |  |  |  |  |  |  | |
| 1998 | 25 | 14 | 10 | 9 | 16 | 29 | 30 | 37 | 42 | 30 | 361 | 441 |  |  |  |  |  |  | |
| 1999 | 26 | 14 | 10 | 9 | 16 | 29 | 30 | 37 | 37 | 18 | 26 | 461 | 481 |  |  |  |  |  | |
| 2000 | 26 | 14 | 10 | 9 | 16 | 29 | 30 | 37 | 38 | 20 | 37 | 60 | 60 | 47 |  |  |  |  | |
| 2001 | 26 | 14 | 10 | 9 | 16 | 29 | 30 | 37 | 38 | 19 | 24 | 31 | 30 |  |  |  |  |  | |
| 2002 | 26 | 14 | 10 | 9 | 16 | 29 | 30 | 37 | 38 | 19 | 24 | 29 | 25 | 21 |  |  |  |  | |
| 2003 | 26 | 15 | 11 | 9 | 17 | 30 | 31 | 37 | 38 | 19 | 24 | 30 | 25 | 18 | 19 |  |  |  | |
| 2004 | 26 | 15 | 11 | 9 | 16 | 30 | 31 | 37 | 38 | 19 | 24 | 30 | 24 | 17 | 14 | 17 |  |  | |

1Forecast.

**Remarks:**