**Stock: Whiting in Division VIIa (Irish Sea)**

**Assessment Quality Control Diagram 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Average F(2-6,u) | | | | | | | | | | | | | | |
| Date of assessment | Year | | | | | | | | | | | | | |
|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| 1990 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1991 | 0.33/1.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 1.35 | 1.21 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1993 | 1.37 | 1.30 | 1.37 |  |  |  |  |  |  |  |  |  |  |  |
| 1994 | 1.32 | 1.28 | 1.99 | 1.45 |  |  |  |  |  |  |  |  |  |  |
| 1995 | 1.18 | 1.11 | 1.60 | 0.98 | 1.27 |  |  |  |  |  |  |  |  |  |
| 1996 | 1.22 | 1.13 | 1.67 | 1.14 | 1.39 | 1.26 |  |  |  |  |  |  |  |  |
| 1997 | 1.23 | 1.13 | 1.67 | 1.14 | 1.28 | 0.91 | 1.08 |  |  |  |  |  |  |  |
| 1998 | 1.02 | 0.99 | 1.22 | 0.92 | 0.81 | 0.78 | 1.09 | 0.59 |  |  |  |  |  |  |
| 1999 | 1.02 | 0.98 | 1.22 | 0.92 | 0.82 | 0.80 | 1.20 | 0.86 | 0.66 |  |  |  |  |  |
| 2000 | 1.02 | 0.99 | 1.22 | 0.92 | 0.83 | 0.80 | 1.27 | 1.06 | 1.37 | 0.78 |  |  |  |  |
| 2001 | 1.02 | 0.99 | 1.22 | 0.92 | 0.83 | 0.80 | 1.27 | 1.08 | 1.40 | 0.99 | 0.89 |  |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2004 | 1.02 | 0.99 | 1.22 | 0.92 | 0.83 | 0.80 | 1.26 | 1.05 | 1.33 | 1.19 | 1.59 | 1.03 | 0.87 |  |

Tuning used. EW/NI. F(2-5,u) F(2-4) F (1-3) Assessment not accepted

**Remarks:** Two assessment presented in 1991.

**Stock: Whiting in Division VIIa (Irish Sea)**

**Assessment Quality Control Diagram 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Recruitment (age 0) Unit: millions | | | | | | | | | | | | | | |
| Date of assessment | Year class | | | | | | | | | | | | | |
|  | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| 1990 | 142 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1991 | 132/135 | 112/114 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 126 | 104 | 110 |  |  |  |  |  |  |  |  |  |  |  |
| 1993 | 127 | 117 | 194 | 113 |  |  |  |  |  |  |  |  |  |  |
| 1994 | 132 | 130 | 208 | 69 | 137 |  |  |  |  |  |  |  |  |  |
| 1995 | 132 | 133 | 243 | 57 | 135 | 147 |  |  |  |  |  |  |  |  |
| 1996 | 131 | 128 | 236 | 48 | 95 | 102 | 106 |  |  |  |  |  |  |  |
| 1997 | 131 | 129 | 239 | 51 | 90 | 69 | 129 | 113 |  |  |  |  |  |  |
| 1998 | 131 | 129 | 238 | 50 | 89 | 65 | 107 | 105 | 116 |  |  |  |  |  |
| 1999 | 131 | 128 | 238 | 49 | 88 | 63 | 98 | 77 | 81 | 98 |  |  |  |  |
| 2000 | 131 | 129 | 237 | 49 | 88 | 62 | 92 | 66 | 59 | 40 | 146 |  |  |  |
| 2001 | 131 | 129 | 237 | 49 | 88 | 62 | 92 | 65 | 58 | 39 | 116 | 56 |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2003 | 131 | 129 | 237 | 49 | 88 | 62 | 92 | 65 | 58 | 31 | 88 | 33 | 55 | 47 |

GM. RCRTINX2. EW/NI. Assessment not accepted

**Remarks:**

**Stock: Whiting in Division VIIa (Irish Sea)**

**Assessment Quality Control Diagram 3**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Spawning stock biomass ('000 t) | | | | | | | | | | | | | | | | | |
| Date of assessment | Year | | | | | | | | | | | | | | | | |
|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | | 2003 | 2004 | 2005 |
| 1990 | 5 | 5 | 4 |  |  |  |  |  |  |  |  |  |  | |  |  |  |
| 1991 | 16/4 | 22/3 | 28/4 | 33/5 |  |  |  |  |  |  |  |  |  | |  |  |  |
| 1992 | 5 | 6 | 6/6 | 6/8 | 6/9 |  |  |  |  |  |  |  |  | |  |  |  |
| 1993 | 5 | 6 | 6 | 8/8 | 6/7 | 5/7 |  |  |  |  |  |  |  | |  |  |  |
| 1994 | 6 | 6 | 7 | 8 | 6 | 7 | 7 |  |  |  |  |  |  | |  |  |  |
| 1995 | 6 | 6 | 8 | 13 | 8 | 10 | 11 | 10 |  |  |  |  |  | |  |  |  |
| 1996 | 9 | 10 | 12 | 17 | 12 | 11 | 14 | 14 | 13 |  |  |  |  | |  |  |  |
| 1997 | 9 | 10 | 12 | 17 | 13 | 11 | 11 | 12 | 11 | 10 |  |  |  | |  |  |  |
| 1998 | 8 | 8 | 9 | 12 | 9 | 8 | 7 | 5 | 8 | 8 | 8 |  |  |  | |  |  |
| 1999 | 8 | 8 | 9 | 12 | 9 | 8 | 6 | 4 | 5 | 6 | 6 | 6 |  | |  |  |  |
| 2000 | 8 | 8 | 9 | 12 | 9 | 7 | 6 | 4 | 3 | 2 | 2 | 4 | 5 | |  |  |  |
| 2001 | 8 | 8 | 9 | 12 | 9 | 7 | 6 | 4 | 3 | 2 | 2 | 4 | 3 | | 3 |  |  |
| 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |
| 2003 | 8 | 8 | 9 | 12 | 9 | 7 | 6 | 4 | 3 | 2 | 1 | 1 | 1 | | 1.7 | 1.6 | 1.5 |

Forecast. EW/NI. No square mesh prediction/with square mesh prediction. New Stock Weights Used Assessment not accepted

**Remarks:** SSB at 1 January.