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

**Assessment Quality Control Diagram 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Average F( 2-4 ,u) | | | | | | | | | | | | | | |
| Date of assessment | Year | | | | | | | | | | | | | |
|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
| 1990 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1991 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1997 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1998 |  |  |  | 0.57 | 0.49 | 0.66 | 0.53 | 0.55 |  |  |  |  |  |  |
| 1999 |  |  |  | 1.22 | 1.03 | 1.29 | 1.05 | 1.19 | 1.06 |  |  |  |  |  |
| 2000 |  |  |  | 1.22 | 1.03 | 1.30 | 1.07 | 1.25 | 1.24 | 1.13 |  |  |  |  |
| 2001 |  |  |  | 1.23 | 1.04 | 1.34 | 1.11 | 1.32 | 1.36 | 1.73 | 1.27 |  |  |  |
| 2002 |  |  |  | 0.53 | 0.68 | 1.58 | 1.46 | 1.58 | 1.43 | 1.26 | 0.62 | 0.42 |  |  |
| 2003 |  |  |  | 1.22 | 1.04 | 1.32 | 1.08 | 1.29 | 1.36 | 1.58 | 0.80 | 1.02 | 0.89 |  |

**Remarks:**  Assessment using separable VPA (RCSEP); XSA assessment

**Stock: Haddock in Division VIIa (Irish Sea**

**Assessment Quality Control Diagram 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Recruitment (age 0) Unit: thousands | | | | | | | | | | | | | |
| Date of assessment | Year class | | | | | | | | | | | | |
|  | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| 1990 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1991 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1997 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1998 |  | 501 | 4127 | 14814 | 2391 | 26164 | 5368 | 1228 |  |  |  |  |  |
| 1999 |  | 4364 | 16105 | 2106 | 25880 | 4456 | 10925 | 7022 | 7022 |  |  |  |  |
| 2000 |  | 4353 | 15963 | 2050 | 24146 | 2048 | 4274 | 11485 | 5882 | 5882 |  |  |  |
| 2001 |  | 4324 | 15902 | 2026 | 22448 | 1583 | 3172 | 9459 | 3047 | 5977 | 5481 |  |  |
| 2002 |  | 4250 | 15790 | 2061 | 22888 | 1898 | 7480 | 25241 | 6493 | 12335 | 7328 | 7328 |  |
| 2003 |  | 4339 | 15895 | 2029 | 22765 | 1747 | 4676 | 10215 | 2804 | 8531 | 3710 | 5461 | 5461 |

**Remarks:**  RCT3 estimate GM Assessment using separable VPA (RCSEP); XSA assessment

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

**Assessment Quality Control Diagram 3**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Spawning stock biomass (tonnes) | | | | | | | | | | | | | | | | |
| Date of assessment | Year | | | | | | | | | | | | | | | |
|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| 1992 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1993 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1994 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1995 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1996 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1997 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1998 |  |  |  | 1202 | 1462 | 2138 | 5734 | 5962 | 11014 | 11926 | 7853 |  |  |  |  |  |
| 1999 |  |  |  | 1057 | 1185 | 1526 | 4353 | 3817 | 7071 | 7423 | 5625 | 4717 |  |  |  |  |
| 2000 |  |  |  | 1057 | 1184 | 1521 | 4313 | 3734 | 6556 | 5757 | 3117 | 3964 | 3999 |  |  |  |
| 2001 |  |  |  | 1137 | 1339 | 1664 | 4500 | 3990 | 4929 | 3855 | 1321 | 2287 | 2155 | 1830 |  |  |
| 2002 |  |  |  | 1300 | 1500 | 1616 | 4533 | 4106 | 5148 | 4174 | 2352 | 6386 | 9418 | 10435 | 11093 |  |
| 2003 |  |  |  | 1341 | 1473 | 1732 | 4766 | 4255 | 5240 | 3981 | 1705 | 2743 | 2324 | 2729 | 2609 | 2200 |
| 2004 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Remarks:** Forecast. Assessment using separable VPA (RCT3); XSA assessment