**Stock: Celtic Sea Plaice**

**Assessment Quality Control Diagram 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Average F(3-6 ,u) | | | | | | | | | | | | | |
| Year | | | | | | | | | | | | | |
| Date of assessment | 1988 | 1989 | | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| 1989 | 0.75 |  | |  |  |  |  |  |  |  |  |  |  |  |  |
| 1990 | 0.45 | 0.39 | |  |  |  |  |  |  |  |  |  |  |  |  |
| 1991 | 0.64 | 0.59 | | 0.58 |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 0.76 | 0.73 | | 0.88 | 0.79 |  |  |  |  |  |  |  |  |  |  |
| 1993 | 0.77 | 0.75 | | 0.88 | 0.78 | 0.81 |  |  |  |  |  |  |  |  |  |
| 1994 | 0.78 | 0.74 | | 0.86 | 0.73 | 0.74 | 0.77 |  |  |  |  |  |  |  |  |
| 1995 | 0.75 | 0.72 | | 0.83 | 0.68 | 0.62 | 0.57 | 0.83 |  |  |  |  |  |  |  |
| 1996 | 0.69 | 0.68 | | 0.76 | 0.64 | 0.54 | 0.45 | 0.51 | 0.59 |  |  |  |  |  |  |
| 1997 | 0.70 | 0.68 | | 0.77 | 0.65 | 0.54 | 0.45 | 0.50 | 0.61 | 0.56 |  |  |  |  |  |
| 1998 | 0.80 | 0.76 | | 0.87 | 0.69 | 0.59 | 0.51 | 0.57 | 0.67 | 0.59 | 0.85 |  |  |  |  |
| 1999 | 0.75 | 0.73 | | 0.83 | 0.66 | 0.56 | 0.48 | 0.53 | 0.65 | 0.55 | 0.74 | 0.73 |  |  |  |
| 2000 | 0.65 | 0.67 | | 0.78 | 0.60 | 0.53 | 0.46 | 0.53 | 0.66 | 0.55 | 0.73 | 0.67 | 0.68 |  |  |
| 2001 | 0.64 | 0.66 | | 0.78 | 0.60 | 0.52 | 0.46 | 0.53 | 0.66 | 0.54 | 0.71 | 0.64 | 0.69 | 0.50 |  |
| 2002 | 0.64 | 0.66 | | 0.78 | 0.60 | 0.52 | 0.46 | 0.53 | 0.66 | 0.54 | 0.70 | 0.63 | 0.69 | 0.55 | 0.40 |

**Remarks:**  XSA treatment of ages 1-5 different in assessments from 1996 onwards

**Stock: Celtic Sea Plaice**

**Assessment Quality Control Diagram 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Recruitment | | | | | | | | | | | | | | | | | | | | | | | | |
| Year-class | | | | | | | | | | | | | | | | | | | | | | | | |
| Date of assessment | | 1988 | | 1989 | | 1990 | | | 1991 | | 1992 | | 1993 | | 1994 | | 1995 | | 1996 | | 1997 | | 1998 | | 1999 | | 2000 | | 2001 | |
| 1989 | | 5578 | |  | |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| 1990 | | 6400 | | 6400 | |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| 1991 | | 6128 | | 6128 | | 6128 | | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| 1992 | | 3601 | | 6080 | | 6080 | | | 6080 | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| 1993 | | 2571 | | 1558 | | 5827 | | | 3603 | | 5737 | |  | |  | |  | |  | |  | |  | |  | |  | |  | |
| 1994 | | 2664 | | 1700 | | 4361 | | | 4903 | | 4955 | | 5210 | |  | |  | |  | |  | |  | |  | |  | |  | |
| 1995 | | 2814 | | 1925 | | 4847 | | | 3907 | | 1856 | | 5246 | | 5246 | |  | |  | |  | |  | |  | |  | |  | |
| 1996 | | 3028 | | 2227 | | 5109 | | | 4588 | | 3080 | | 5508 | | 4573 | | 5246 | |  | |  | |  | |  | |  | |  | |
| 1997 | | 3028 | | 2298 | | 4995 | | | 4550 | | 2664 | | 3909 | | 5566 | | 4477 | | 5119 | |  | |  | |  | |  | |  | |
| 1998 | | 2936 | | 2215 | | 4895 | | | 4421 | | 2869 | | 3839 | | 5254 | | 3810 | | 3390 | | 3643 | |  | |  | |  | |  | |
| 1999 | | 3024 | | 2214 | | 4896 | | | 4558 | | 2853 | | 4042 | | 5349 | | 3756 | | 3429 | | 3594 | | 3663 | |  | |  | |  | |
| 2000 | | 3053 | | 2197 | | 4881 | | | 4531 | | 2902 | | 4004 | | 5382 | | 4041 | | 3691 | | 3140 | | 3680 | | 3663 | |  | |  | |
| 2001 | | 3065 | | 2198 | | 4885 | | | 4534 | | 2943 | | 4045 | | 5370 | | 3946 | | 3578 | | 3062 | | 3335 | | 3883 | | 3614 | |  | |
| 2002 | | 3063 | | 2197 | | 4884 | | | 4533 | | 2942 | | 4074 | | 5324 | | 5324 | | 3555 | | 2692 | | 2473 | | 4365 | | 3537 | | 3537 | |

GM recruitment assumed.

GM recruitment (recent)

**Remarks:** XSA treatment of ages 1-5 different in assessments from 1996 onwards

**Stock: Celtic Sea Plaice**

**Assessment Quality Control Diagram 3**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Spawning stock biomass (tonnes) | | | | | | | | | | | | | | | | |
| Year | | | | | | | | | | | | | | | | |
| Date of assessment | 1989 | | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| 1989 | 2700 | | 2136 | 1825 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1990 | 5613 | | 5111 | 4742 | 4595 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1991 | 2822 | | 2725 | 2289 | 1995 | 1924 |  |  |  |  |  |  |  |  |  |  |  |
| 1992 | 2437 | | 2410 | 1883 | 1612 | 1633 | 1638 |  |  |  |  |  |  |  |  |  |  |
| 1993 | 2457 | | 2474 | 1837 | 1491 | 1218 | 1202 | 1277 |  |  |  |  |  |  |  |  |  |
| 1994 | 2476 | | 2504 | 1889 | 1557 | 1177 | 1225 | 1213 | 1234 |  |  |  |  |  |  |  |  |
| 1995 | 2510 | | 2581 | 2020 | 1811 | 1394 | 1315 | 1078 | 1002 | 1086 |  |  |  |  |  |  |  |
| 1996 | 3086 | | 3259 | 2566 | 2613 | 1839 | 1931 | 2047 | 2082 | 2052 | 2001 |  |  |  |  |  |  |
| 1997 | 3039 | | 3163 | 2511 | 2623 | 1869 | 1873 | 1934 | 1767 | 1911 | 1994 | 2027 |  |  |  |  |  |
| 1998 | 2876 | | 2918 | 2237 | 2016 | 1693 | 1706 | 1656 | 1580 | 1733 | 1538 | 1451 | 1392 |  |  |  |  |
| 1999 | 2922 | | 3027 | 2367 | 2202 | 1793 | 1802 | 1822 | 1757 | 1816 | 1686 | 1540 | 1470 | 1441 |  |  |  |
| 2000 | 3118 | | 3322 | 2718 | 2383 | 2000 | 1910 | 1919 | 1787 | 1794 | 1719 | 1486 | 1449 | 1372 | 1361 |  |  |
| 2001 | 3135 | | 3347 | 2751 | 2399 | 2026 | 1929 | 1943 | 1817 | 1811 | 1727 | 1478 | 1405 | 1465 | 1456 | 1468 |  |
| 2002 | 3134 | | 3347 | 2750 | 2400 | 2025 | 1928 | 1942 | 1815 | 1808 | 1717 | 1451 | 1305 | 1513 | 1553 | 1583 | 1576 |

Forecast.

**Remarks:** XSA treatment of ages 1-5 different in assessments from 1996 onwards

SSB at 1 January in assessments from 1996 onwards.

New maturity ogive used in assessments from 1997