### 8.4.1

 Cod in Subdivisions 22-24
## State of the stock

| Spawning biomass <br> in relation to <br> precautionary <br> limits | Fishing <br> mortality in <br> relation to <br> precautionary <br> limits | Fishing <br> mortality in <br> relation to <br> highest yield | Fishing <br> mortality in <br> relation to <br> agreed target | Comment |
| :--- | :--- | :--- | :--- | :--- |
| Increased risk | Undefined | Overexploited | NA |  |

Based on the most recent estimates of SSB, ICES classifies the stock as being at risk of reduced reproductive capacity, with the spawning stock being just below $\mathbf{B}_{\mathrm{pa}}$ in 2007 (22 400 t ). In the absence of defined fishing mortality reference points the state of the stock cannot be evaluated with regard to these. Fishing mortality in 2006 was estimated to be 0.9 . At the present exploitation rate the stock is dependent upon the strength of incoming year classes. The three latest year classes are estimated to be well below average.

## Management objectives

Until 2005, advice was given according to the IBSFC long-term management strategy for cod in the Baltic adopted in 2003 (Resolution XX on the Management Plan for the Cod Stocks in the Baltic Sea). No management plan is implemented at the moment, but the EC is in the process of developing a multi-annual plan for the two cod stocks in the Baltic which is scheduled to be agreed upon during 2007 (see Eastern Baltic cod in Section 8.4.2).

## Reference points

|  | Type | Value | Technical basis |
| :--- | :--- | :--- | :--- |
| Precautionary <br> approach | $\mathrm{B}_{\text {lim }}$ | not defined |  |
|  | $\mathrm{B}_{\mathrm{pa}}$ | 23000 t | MBAL |
|  | $\mathrm{F}_{\text {lim }}$ | not defined |  |
|  | $\mathrm{F}_{\mathrm{pa}}$ | not defined |  |
| Targets | $\mathrm{F}_{\mathrm{y}}$ | not defined |  |

(unchanged since: 1998)
Yield and spawning biomass per Recruit
$F$-reference points:

|  | Fish Mort <br> Ages 3-6 | Yield/R | SSB/R |
| :--- | :---: | :---: | :---: |
| Average last 3 | 1.14 |  |  |
| years | 0.25 | 0.56 | 0.45 |
| $\mathrm{~F}_{\text {max }}$ | 0.15 | 0.77 | 3.37 |
| $\mathrm{~F}_{0.1}$ | 1.44 | 0.53 | 5.19 |
| $\mathrm{~F}_{\text {med }}$ |  | 0.32 |  |

## Single-stock exploitation boundaries

## Exploitation boundaries in relation to existing management plan

There is no agreed management plan for this stock. The proposed multi-annual plan implies landings of 22695 t for 2008. The implied $10 \%$ reduction in fishing effort and fishing mortality compared to last year would result in a catch of 17930 t in 2008 . However, the proposed plan puts a $15 \%$, cap on the deviation of the TACs between consecutive years which results in a TAC of 22695 t for 2008. ICES has not evaluated whether this management plan is consistent with the precautionary approach.

Exploitation boundaries in relation to high long-term yield, low risk of depletion of production potential, and considering ecosystem effects

ICES has previously recommended target fishing mortalities of $0.3-0.6$ which would result in a low risk to reproduction and high long-term yields. This would correspond to landings of 7000-12 000 t in 2008.

## Exploitation boundaries in relation to precautionary limits

A reduction of F by $40 \%$ is needed to bring SSB above $\mathbf{B}_{\mathrm{pa}}$ in 2009. This corresponds to landings of less than 13500 t in 2008.

## Conclusions on exploitation boundaries

In the absence of an agreed management plan, ICES concludes that the exploitation boundaries for this stock should be based on the precautionary limits. Accordingly, the landings in 2008 should be less than 13500 t .

## Short-term implications

## Outlook for 2008

Basis: $\mathrm{F}(2007)=\mathbf{F}_{\mathrm{sq}}(2004-06$ unscaled $)=1.14 ; \operatorname{SSB}(2008)=19.0 \mathrm{kt} ; \mathrm{TAC}(2007)=26.7^{3)} \mathrm{kt}$; Landings $(2007)=$ 22.9 kt ; Discards $=2.3 \mathrm{kt}$

| Rationale | $\begin{gathered} \hline \text { TAC } \\ (\mathbf{2 0 0 8}) \end{gathered}$ | Basis | $\begin{gathered} \hline \text { Total } \\ \text { F } \\ (\mathbf{2 0 0 8}) \end{gathered}$ | $\begin{gathered} \hline \text { Landings } \\ \text { F (2008) } \end{gathered}$ | $\begin{aligned} & \hline \text { Disc F } \\ & (2008) \end{aligned}$ | Discards (2008) | $\begin{gathered} \text { SSB } \\ (2009) \end{gathered}$ | $\begin{gathered} \text { \%SSB } \\ \text { change } \end{gathered}$ | \% TAC change 2) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Zero catch | 0 | $\mathrm{F}=0$ | 0 | 0 | 0 | 0 | 39.07 | +106 | -100 |
| Status quo | 19.17 | $\mathrm{F}_{\mathrm{sq}}$ | 1.14 | 1.10 | 0.04 | 2.48 | 16.78 | -27 | -25 |
| Status quo Precautionary limits | 6.75 | $\mathbf{F}_{\text {sq }} * 0.26$ | 0.30 | 0.28 | 0.02 | 0.68 | 30.94 | 63\% | -75\% |
|  | 9.80 | $\mathbf{F}_{\text {sq }} * 0.4$ | 0.45 | 0.44 | 0.02 | 1.02 | 27.31 | 44\% | -63\% |
|  | 12.26 | $\mathbf{F}_{\text {sq }} * 0.53$ | 0.60 | 0.58 | 0.02 | 1.29 | 24.42 | 29\% | -54\% |
|  | 13.49 | $\mathbf{F}_{\text {sq }} * 0.6$ | 0.68 | 0.66 | 0.02 | 1.47 | 23.00 | 21\% | -49\% |
|  | 15.11 | $\mathbf{F}_{\text {sq }} * 0.7$ | 0.80 | 0.77 | 0.03 | 1.68 | 21.11 | 11\% | -43\% |
|  | 16.58 | $\mathbf{F}_{\text {sq }} * 0.8$ | 0.91 | 0.88 | 0.03 | 1.88 | 19.42 | 2\% | -38\% |
|  | 17.93 | $\mathbf{F}_{\text {sq }} * 0.9$ | 1.02 | 0.99 | 0.03 | 2.07 | 17.88 | -6\% | -33\% |
|  | 19.17 | $\mathbf{F}_{\text {sq }}$ * 1.0 | 1.14 | 1.10 | 0.04 | 2.26 | 16.49 | -13\% | -28\% |
|  | 20.31 | $\mathrm{F}_{\mathrm{sq}}$ * 1.1 | 1.25 | 1.20 | 0.05 | 2.44 | 15.22 | -20\% | -24\% |
| $\begin{gathered} \text { Proposed } \\ \text { management plan } \end{gathered}$ | 22.695 | $\mathbf{F}_{\text {sq }} * 1.34$ | 1.52 | 1.47 | 0.05 | 2.84 | 12.63 | -33\% | -15\% |

Weights in ' 000 t . Shaded scenarios are not considered consistent with the precautionary approach.
${ }^{1)} \operatorname{SSB}(2009)$ relative to $\operatorname{SSB}(2008)$.
${ }^{2)}$ Calculated landings (2008) relative to TAC 2007 ( 26.7 kt )
${ }^{3)}$ Preliminary TAC - if no recovery plan is agreed by 30 June 2007 a further TAC reduction of $9 \%$ will be implemented.

## Management considerations

The fishery is largely based on recruiting year classes. Recruitment has been below average since 1999. Discarding continues to be substantial. The assessment includes discards; the advice refers to landings only.

## Evaluation of a candidate for a multi annual [management] plan

As a response to a request from the EC in 2005, ICES carried out simulations demonstrating that under the current exploitation pattern target fishing mortalities (all catches) close to $0.3-0.6$ (ages 3-6) would result in a low risk to reproductive capacity and high long-term yields. EC is developing a multi-annual plan taking this advice in consideration (COM(2006) 411), which is expected to be agreed upon in 2007. This plan incorporates a target fishing mortality of 0.6 and a reduction in fishing effort of $10 \%$ by year. The plan is intended to cover both the Eastern and the Western cod stocks.

An initial evaluation of this plan was conducted for Eastern Baltic cod (see Section 8.4.2), but ICES is currently not in a position to evaluate whether the proposal is in accordance with the precautionary approach.

## Regulations and their effects

The EC Council Regulation for the Baltic TAC and quota 2007 involves reductions in the effort ( $10 \%$ in terms of number of fishing days) and TACs for all Baltic cod fisheries ( $6 \%$ ), as well as strengthening control measures. If the multi-annual plan 2007 is not agreed by 30 June, the TAC reduction will automatically increase to $15 \%$ (compared to 2006).

A 'Bacoma' codend with a $120-\mathrm{mm}$ mesh was introduced by IBSFC in 2001 in parallel to an increase in diamond mesh size to 130 mm in traditional codends. The expected effect of introducing the Bacoma $120-\mathrm{mm}$ exit window was nullified by compensatory measures in the industry. This was to some extent explained by the mismatch between the selectivity of the $120-\mathrm{mm}$ Bacoma trawl and the minimum landing size. In October 2003, the regulation was changed to a $110-\mathrm{mm}$ Bacoma window which was expected to enhance the compliance by the fishing industry and to be in better accordance with the minimum landing size. The latter was changed to 38 cm in the same year. This appears to have been accepted by the fishing industry, although it has not yet been possible to evaluate its effects.

In addition to this, the fisheries are regulated by a seasonal closure from 1 to 7 January, from 31 March to 1 May, and on 31 December in 2007. Additional 77 days of closure have to be allocated individually by the member states in 2007. This is a total increase in closed fishing days of $10 \%$ compared to last year. In 2006 the seasonal closure was from 15 March to 14 May in 2006 with an additional 30 days of closure, to be allocated individually by the member states. Beside this regulation it is allowed to land a maximum of 20 kg or $10 \%$ cod as bycatch caught within the 12-mile economic zone by vessels below 12 meters with certain gears. It is currently not possible to fully evaluate the effect of these measures, but the TAC for 2006 was not fully taken.

There are actions in progress to improve enforcement and control for both cod stocks in the Baltic (Copenhagen declaration on combating unreported cod fishery in the Baltic Sea, 28 March 2007). However, unallocated landings are not considered to be a major problem in the fisheries on western Baltic cod.

## The environment

Spawning success of Baltic cod appears to be related to the presence of high-saline and oxygen-rich water during the spawning period. The amount of water with these characteristics depends on the inflow of high salinity water from the North Sea. The high cod recruitment from the mid-1970s reflected a relatively high frequency of major inflows of highsalinity water from the North Sea, leading to high oxygen concentrations in the cod spawning areas and hence to high egg survival and good recruitment. Since the mid-1980s there were few major inflows from the North Sea, leading to poorer conditions for recruitment.

## Scientific basis

## Data and methods

The assessment is based on catch data, two commercial cpue indices, and three survey indices. Two new fisheryindependent series were available this year; one series used previously was excluded. Commercial cpue series have been completely reworked.

Discard data have been available since 1996 and are used in the assessment as yearly proportions discarded per agegroup. Before 1996, an average proportion discarded per age-group estimated for 1996-2003 is applied. The season and area coverage of discard sampling requires improvement. A relationship between year-class strength and discard rates cannot be estimated from the available data. Due to recent changes in technical regulations, e.g. the increase of minimum landing size, introduction of BACOMA 110 and varying closures, discard rates may have varied additionally. The discard raising procedure was changed this year: Discards are now raised to the total mixed fisheries landings and not only to cod landings.

## Information from the fishing industry

Some of the information on misreporting between areas came from industry sources, especially with respect to allocating Kattegat cod to the Western Baltic the later years, in the order of 2000-2500 t. However, it is not possible to quantify the total misreporting and this figure was therefore not used.

## Uncertainties in assessment and forecast

The assessment appears to be reasonable, but there is some retrospective bias. The available survey indices give a consistent picture of stock development. The exclusion of misreported catch did not improve the assessment. The
impact that the BACOMA window will have on the selectivity cannot be precisely estimated, and this may increase uncertainty. Age group 2 was excluded from the trawler tuning fleet to account for the likely changed selectivity.

## Comparison with previous assessment and advice

The current assessment uses different input data than the previous one. The reworked data series have improved the diagnostics of the assessment. The SSB estimates are consistent with last year's assessment, but the fishing mortality estimates were revised upwards by $22 \%$ for 2005 .

As the abandoned IBSFC management plan is still not replaced by a new management plan, the advice is again based on precautionary limits.

The recruitment in the recent 3 years has been very low which has led to a lower advice compared to previous years.

## Sources of information

Report of the Baltic Fisheries Assessment Working Group. ICES Headquarters, 17-26 April 2007 (ICES CM 2007/ACFM:15).

| Year | ICES <br> Advice | Predicted landings corresp. to advice | Agreed TAC ${ }^{1}$ | ACFM <br> Landings $(22-24)$ | $\begin{gathered} \text { ACFM } \\ \text { Landings } \\ (22-32) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1987 | TAC | 9 |  | 29 | 236 |
| 1988 | TAC | 16 |  | 29 | 223 |
| 1989 | TAC | 14 | 220 | 19 | 198 |
| 1990 | TAC | 8 | 210 | 18 | 171 |
| 1991 | TAC | 11 | 171 | 17 | 140 |
| 1992 | Substantial reduction in F | - | 100 | 18 | $73^{2}$ |
| 1993 | F at lowest possible level | - | 40 | 21 | $66^{2}$ |
| 1994 | TAC | 22 | 60 | 31 | $124^{2}$ |
| 1995 | $30 \%$ reduction in fishing effort from 1994 level | - | 120 | 34 | $142^{2}$ |
| 1996 | $30 \%$ reduction in fishing effort from 1994 level | - | 165 | 51 | 173 |
| 1997 | Fishing effort should not be allowed to increase above the level of recent years | - | 180 | 44 | 132 |
| 1998 | 20\% reduction in F from 1996 | 35 | 160 | 34 | 102 |
| 1999 | At or below $\mathbf{F}_{\text {sq }}$ with $50 \%$ probability | 38 | 126 | 42 | 115 |
| 2000 | Reduce F by 20\% | 44.6 | 105 | 38 | 128 |
| 2001 | Reduce F by 20\% | 48.6 | 105 | 34 | 126 |
| 2002 | Reduce F to below 1.0 | 36.3 | 76 | 24 | 92 |
| 2003 | Reduce F to below 1.0 | 22.6-28.8 ${ }^{3}$ | 75 | 25 | 94 |
| 2004 | Reduce F to below 1.0 | < 29.6 | 29.6 | 21 |  |
| 2005 | Reduce F to below 0.92 | <23.4 | 24.7 | 22 |  |
| 2006 | Management plan | 28.4 | 28.4 | 23 |  |
| 2007 | Keep SSB at $\mathbf{B}_{\text {pa }}$ | 20.5 | $26.7^{4}$ |  |  |
| 2008 | Rebuild SSB to $\mathbf{B}_{\mathrm{pa}}$ | 13.5 |  |  |  |

Weights in '000 t.
${ }^{1}$ Included in TAC for total Baltic, until and including 2003.
${ }^{2}$ The reported landings in 1992-1995 are known to be incorrect due to incomplete reporting.
${ }^{3}$ Two options based on implementation of the adopted mesh regulation.
${ }^{4}$ If no management plan is adopted before 30 June 2007 the TAC will be further reduced by $9 \%$.





Figure 8.4.1.1 Cod in Subdivisions 22-24. Landings, fishing mortality, recruitment, and SSB.




Figure 8.4.1.2 Cod in Subdivisions 22-24. Stock and recruitment, yield, and SSB per recruit.

Cod in Sub-divisions 22 to 24


Figure 8.4.1.3 Cod in Subdivisions 22-24. Historical performance of the assessments.

Table 8.4.1.1 Cod in SD 22-24. Total landings (tons) of COD in the ICES Sub-divisions 22, 23, 24.

| Year | Denmark |  | Finland | German <br> Dem.Rep. ${ }^{2}$$\|$ | $\begin{array}{\|c\|} \hline \text { Germany, } \\ \text { FRG } \\ \hline 22+24 \\ \hline \end{array}$ | Estonia |  | Latvia <br> 24 | Poland <br> 24 | Sweden |  |  | 22 | 23 | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 23 | 22+24 | 24 |  |  | 22 | 24 |  |  | 22 | 23 | 24 |  |  | 24 | Unalloc. | 22+24 |
| 1965 |  | 19,457 |  | 9,705 | 13,350 |  |  |  |  |  |  | 2,182 | 27,867 |  | 17,007 |  | 44,874 |
| 1966 |  | 20,500 |  | 8,393 | 11,448 |  |  |  |  |  |  | 2,110 | 27,864 |  | 14,587 |  | 42,451 |
| 1967 |  | 19,181 |  | 10,007 | 12,884 |  |  |  |  |  |  | 1,996 | 28,875 |  | 15,193 |  | 44,068 |
| 1968 |  | 22,593 |  | 12,360 | 14,815 |  |  |  |  |  |  | 2,113 | 32,911 |  | 18,970 |  | 51,881 |
| 1969 |  | 20,602 |  | 7,519 | 12,717 |  |  |  |  |  |  | 1,413 | 29,082 |  | 13,169 |  | 42,251 |
| 1970 |  | 20,085 |  | 7,996 | 14,589 |  |  |  |  |  |  | 1,289 | 31,363 |  | 12,596 |  | 43,959 |
| 1971 |  | 23,715 |  | 8,007 | 13,482 |  |  |  |  |  |  | 1,419 | 32,119 |  | 14,504 |  | 46,623 |
| 1972 |  | 25,645 |  | 9,665 | 12,313 |  |  |  |  |  |  | 1,277 | 32,808 |  | 16,092 |  | 48,900 |
| 1973 |  | 30,595 |  | 8,374 | 13,733 |  |  |  |  |  |  | 1,655 | 38,237 |  | 16,120 |  | 54,357 |
| 1974 |  | 25,782 |  | 8,459 | 10,393 |  |  |  |  |  |  | 1,937 | 31,326 |  | 15,245 |  | 46,571 |
| 1975 |  | 23,481 |  | 6,042 | 12,912 |  |  |  |  |  |  | 1,932 | 31,867 |  | 12,500 |  | 44,367 |
| 1976 | 712 | 29,446 |  | 4,582 | 12,893 |  |  |  |  |  |  | 1,800 | 33,368 | 712 | 15,353 |  | 48,721 |
| 1977 | 1,166 | 27,939 |  | 3,448 | 11,686 |  |  |  |  |  | 550 | 1,516 | 29,510 | 1,716 | 15,079 |  | 44,589 |
| 1978 | 1,177 | 19,168 |  | 7,085 | 10,852 |  |  |  |  |  | 600 | 1,730 | 24,232 | 1,777 | 14,603 |  | 38,835 |
| 1979 | 2,029 | 23,325 |  | 7,594 | 9,598 |  |  |  |  |  | 700 | 1,800 | 26,027 | 2,729 | 16,290 |  | 42,317 |
| 1980 | 2,425 | 23,400 |  | 5,580 | 6,657 |  |  |  |  |  | 1,300 | 2,610 | 22,881 | 3,725 | 15,366 |  | 38,247 |
| 1981 | 1,473 | 22,654 |  | 11,659 | 11,260 |  |  |  |  |  | 900 | 5,700 | 26,340 | 2,373 | 24,933 |  | 51,273 |
| 1982 | 1,638 | 19,138 |  | 10,615 | 8,060 |  |  |  |  |  | 140 | 7,933 | 20,971 | 1,778 | 24,775 |  | 45,746 |
| 1983 | 1,257 | 21,961 |  | 9,097 | 9,260 |  |  |  |  |  | 120 | 6,910 | 24,478 | 1,377 | 22,750 |  | 47,228 |
| 1984 | 1,703 | 21,909 |  | 8,093 | 11,548 |  |  |  |  |  | 228 | 6,014 | 27,058 | 1,931 | 20,506 |  | 47,564 |
| 1985 | 1,076 | 23,024 |  | 5,378 | 5,523 |  |  |  |  |  | 263 | 4,895 | 22,063 | 1,339 | 16,757 |  | 38,820 |
| 1986 | 748 | 16,195 |  | 2,998 | 2,902 |  |  |  |  |  | 227 | 3,622 | 11,975 | 975 | 13,742 |  | 25,717 |
| 1987 | 1,503 | 13,460 |  | 4,896 | 4,256 |  |  |  |  |  | 137 | 4,314 | 12,105 | 1,640 | 14,821 |  | 26,926 |
| 1988 | 1,121 | 13,185 |  | 4,632 | 4,217 |  |  |  |  |  | 155 | 5,849 | 9,680 | 1,276 | 18,203 |  | 27,883 |
| 1989 | 636 | 8,059 |  | 2,144 | 2,498 |  |  |  |  |  | 192 | 4,987 | 5,738 | 828 | 11,950 |  | 17,688 |
| 1990 | 722 | 8,584 |  | 1,629 | 3,054 |  |  |  |  |  | 120 | 3,671 | 5,361 | 842 | 11,577 |  | 16,938 |
| 1991 | 1,431 | 9,383 |  |  | 2,879 |  |  |  |  |  | 232 | 2,768 | 7,184 | 1,663 | 7,846 |  | 15,030 |
| 1992 | 2,449 | 9,946 |  |  | 3,656 |  |  |  |  |  | 290 | 1,655 | 9,887 | 2,739 | 5,370 |  | 15,257 |
| 1993 | 1,001 | 8,666 |  |  | 4,084 |  |  |  |  |  | 274 | 1,675 | 7,296 | 1,275 | 7,129 | 5,528 | 14,425 |
| 1994 | 1,073 | 13,831 |  |  | 4,023 |  |  |  |  |  | 555 | 3,711 | 8,229 | 1,628 | 13,336 | 7,502 | 21,565 |
| 1995 | 2,547 | 18,762 | 132 |  | 9,196 |  |  | 15 |  |  | 611 | 2,632 | 16,936 | 3,158 | 13,801 |  | 30,737 |
| 1996 | 2,999 | 27,946 | 50 |  | 12,018 |  | 50 | 32 |  |  | 1,032 | 4,418 | 21,417 | 4,031 | 23,097 | 2,300 | 44,514 |
| 1997 | 1,886 | 28,887 | 11 |  | 9,269 |  | 6 |  | 263 |  | 777 | 2,525 | 21,966 | 2,663 | 18,995 |  | 40,961 |
| 1998 | 2,467 | 19,192 | 13 |  | 9,722 |  | 8 | 13 | 623 |  | 607 | 1,571 | 15,093 | 3,074 | 16,049 |  | 31,142 |
| 1999 | 2,839 | 23,074 | 116 |  | 13,224 |  | 10 | 25 | 660 |  | 682 | 1,525 | 20,409 | 3,521 | 18,225 |  | 38,634 |
| 2000 | 2,451 | 19,876 | 171 |  | 11,572 |  | 5 | 84 | 926 |  | 698 | 2,564 | 18,934 | 3,149 | 16,264 |  | 35,198 |
| 2001 | 2,124 | 17,446 | 191 |  | 10,579 |  | 40 | 46 | 646 |  | 693 | 2,479 | 14,976 | 2,817 | 16,451 |  | 31,427 |
| 2002 | 2,055 | 11,657 | 191 |  | 7,322 |  |  | 71 | 782 |  | 354 | 1,727 | 11,968 | 2,409 | 9,781 |  | 21,749 |
| 2003 | 1,373 | 13,275 | 59 |  | 6,775 |  |  | 124 | 568 |  | 551 | 1,899 | 9,573 | 1,925 | 13,127 |  | 22,700 |
| 2004 | 1,927 | 11,386 |  |  | 4,651 |  |  | 221 | 538 |  | 393 | 1,727 | 9,091 | 2,320 | 9,430 | 13 | 18,521 |
| 2005 | 1,902 | 9,867 | 2 |  | 7,002 | 72 | 67 | 476 | 1,093 |  | 719 | 835 | 8,729 | 2,621 | 10,686 | 9 | 19,415 |
| $2006{ }^{1}$ | 1,899 | 9761 | 242 |  | 7,516 |  | 91 | 586 | 801 |  |  | 1,855 | 9,979 | 1,914 | 10,858 |  | 20,837 |

Table 8.4.1.2
Cod in Subdivisions 22-24.
$\left.\begin{array}{crlll}\hline \text { Year } & \begin{array}{c}\text { Recruitment } \\ \text { Age 1 } \\ \text { thousands }\end{array} & \text { SSB } & \text { Landings } & \text { Mean F } \\ & 262766 & 38045 & \text { tonnes } & \text { tonnes }\end{array}\right]$

