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An observation on the age and length at maturity of cod in the Georges and Browns stocks

by

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One of the biological parameters needed in stock assessment is age and length at maturity. Such data is unavailable for cod from Georges and Browns Banks. We found in reviewing the literature one reference to the fishery off Cape Ann, Massachusetts (ICNAF Subarea SY) in 1878-1879 (Earle, 1880). He reported that males reached maturity at age 3 and females at age 4.

In spring 1972 (Albatross IV Cruise 72-5, February 26-March 2, and Cruise 72-2, March 8-April 24) we collected maturities and age and length data for several hundred cod from Georges and Browns Banks. From these data we calculated the age and length at which 50 percent were mature as tabulated below.

<table>
<thead>
<tr>
<th>Area</th>
<th>Sex</th>
<th>Number of individuals</th>
<th>50 percent point</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Age (years)</td>
<td>Length (cm)</td>
<td></td>
</tr>
<tr>
<td>Georges Bank</td>
<td>M</td>
<td>336</td>
<td>2.6</td>
<td>44.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>414</td>
<td>2.9</td>
<td>51.5</td>
<td></td>
</tr>
<tr>
<td>Browns Bank</td>
<td>M</td>
<td>59</td>
<td>3.5</td>
<td>data inadequate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>84</td>
<td>3.5</td>
<td>&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Although these observations are preliminary and represent a short time period, they do show that for the Georges Bank stock cod do mature at a slightly younger age than they do in the Gulf of Maine as reported by Earle (1880).

References

N = 336
MALE

N = 444
FEMALE

COD FROM GEORGES BANK, SPRING 1972