## The Grand Banks

A The Grand Banks is a large area of submerged highlands south-east of Newfoundland and east of the Laurentian Channel on the North American continental shelf. Covering 93,200 square kilometres, the Grand Banks are relatively shallow, ranging from 25 to 100 meters in depth. It is in this area that the cold Labrador Current mixes with the warm waters of the Gulf Stream. The mixing of these waters and the shape of the ocean bottom lifts nutrients to the surface and these conditions created one of the richest fishing grounds in the world. Extensive marine life flourishes in the Grand Banks, whose range extends beyond the Canadian 200-mile exclusive economic zone (EEZ) and into international waters. This has made it an important part of both the Canadian and the high seas fisheries, with fishermen risking their lives in the extremely inhospitable environment consisting of rogue waves, fog, icebergs, sea ice, hurricanes, winter storms and earthquakes.

B While the area's 'official' discovery is credited to John Cabot in 1497, English and Portuguese vessels are known to have first sought out these waters prior to that, based upon reports they received from earlier Viking voyages to Newfoundland. Several navigators, including Basque fishermen, are known to have fished these waters in the fifteenth century. Some texts from that era refer to a land called Bacalao, 'the land of the codfish', which is possibly Newfoundland. However, it was not until John Cabot noted the waters' abundance of sea life that the existence of these fishing grounds became widely known in Europe. Soon, fishermen and merchants from France, Spain, Portugal and England developed seasonal inshore fisheries producing for European markets. Known as 'dry' fishery, cod were split, salted, and dried on shore over the summer before crews returned to Europe. The French pioneered 'wet' or 'green' fishery on the Grand

Banks proper around 1550, heavily salting the cod on board and immediately returning home.

C The Grand Banks were possibly the world's most important international fishing area in the nineteenth and twentieth centuries. Technological advances in fishing, such as sonar and large factory ships, including the massive factory freezer trawlers introduced in the 1950's, led to overfishing and a serious decline in the fish stocks. Based upon the many foreign policy agreements

Newfoundland had entered into prior to its admittance into the Canadian Confederation, foreign fleets, some from as far away as Russia, came to the Grand Banks in force, catching unprecedented quantities of fish.

D Between 1973 and 1982, the United Nations and its member states negotiated the Third Convention of the Law of the Sea, one component of which was the concept of nations being allowed to declare an EEZ. Many nations worldwide-declared 200-nautical mile EEZ's, including Canada and the United States. On the whole, the EEZ was very well received by fishermen in eastern Canada, because it meant they could fish unhindered out to the limit without fear of competing with the foreign fleets. During the late 1970's and early 1980s,

Canada's domestic offshore fleet grew as fishermen and fish-processing companies rushed to take advantage. It was during this time that it was noticed that the foreign fleets now pushed out to areas of the Grand Banks off Newfoundland outside the Canadian EEZ. By the late 1980's, dwindling catches of Atlantic cod were being reported throughout Newfoundland and eastern Canada,

and the federal government and citizens of coastal regions in the area began to face the reality that the domestic and foreign overfishing had taken its toll.

The Canadian government was finally forced to take drastic action in 1992, when a total moratorium was declared indefinitely for the northern cod.

E Over the last ten years, it has been noted that cod appear to be returning to the Grand Banks in small numbers. The reasons for this fragile recovery are still unknown. Perhaps, the damage done by trawlers is not permanent and the marine fauna and ecosystems can rebuild themselves if given a prolonged period of time without any commercial activity. Either way, the early stage recovery of the Grand Banks is encouraging news, but caution is needed, as, after nearly twenty years of severe limitations, cod stocks are still only at approximately ten per cent of 1960's levels. It is hoped that in another ten to twenty years, stocks may be close to a full recovery, although this would require political pressure to maintain strict limitations on commercial fishing. If cod do come back to the Grand Banks in meaningful numbers, it is to be hoped that the Canadians will not make the same mistakes again.

F Further riches have now been found in the Grand Banks. Petroleum reserves have been discovered and a number of oil fields are under development in the region. The vast Hibernia oil field was discovered in 1979, and, following several years of aborted start-up attempts, the Hibernia megaproject began construction of the production platform and gravity base structures in the early 1990's. Production commenced on November 17, 1997, with initial production rates in

excess of 50,000 barrels of crude oil per day from a single well. Hibernia has proven to be the most prolific oil well in Canada. However, earthquake and iceberg activity in the Grand Banks pose a potential ecological disaster that could devastate the fishing grounds that are only now starting to recover.

## Questions 14-20

The reading passage has 6 paragraphs A-F. Which paragraph contains the following information? Write your answers in boxes 14-20 on your answer sheet.

- 14. Many countries could legally fish Newfoundland waters because of treaties Newfoundland had made before becoming part of Canada.
- 15. The establishment of the EEZ did not stop over-fishing in the Grand Banks.
- 16. Natural disasters could cause oil to destroy what is left of the Grand Banks ecosystem.
- 17. The original amount of fish in the Grand Banks was due to different temperature waters mixing.

18. East Canadian fishermen were generally happy with the establishment of the Canadian EEZ.
19. Grand Banks' cod stocks are still 90 per cent lower than what they were in the 1960's.
20. The French were the first to prepare the cod on board their ships before going back to France.
Questions 21-23 Choose the correct letter A, B, C or D.
Write the correct letter in boxes 21-23 on your answer sheet.
21. The first English fishermen to come to the Grand Banks to fish
A) were told about the fishery by Basque fishermen.
B) were sent word about the fishery from the first American colonists.
C) acted on information from previous Viking expeditions.

D) discovered the fishery themselves while exploring.
22. John Cabot's reports of the Grand Banks
A) led to the establishment of the Canadian EEZ.
B) meant the fishery was well known in Europe.
C) led to fighting between rival fishing fleets.
D) were not immediately publicised, so that English fishermen could benefit.
23. The establishment of the Canadian EEZ
A) did not stop foreign fishermen from fishing the Grand Banks.
B) was not ratified by the United Nations.
C) temporarily stopped the over-fishing of cod in the Grand Banks.
D) meant Canadian fishermen were excluded from fishing the Grand Banks.
Questions 24-26
Do the following statements agree with the information given in the text?

In boxes 24-26 on your answer sheet write:

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

- 24. Even now, cod stocks have shown no signs of recovery in the Grand Banks.
- 25. Initial efforts to extract oil from the Grand Banks' Hibernia oil field were unsuccessful.
- 26. Oil exploration companies have to follow strict safety controls imposed by the Canadian government.

NSWER	
4. C	
5. D	
6. F	
7. A	
3. D	
9. E	
). B	
1. C	
2. B	
3. A	
4. FALSE	
5. TRUE	
S. NOT GIVEN	