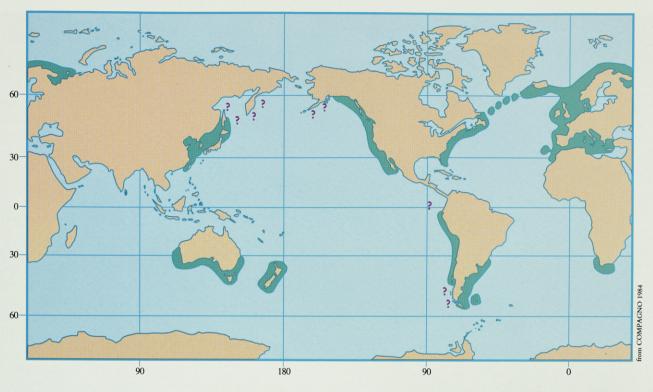
Basking sharks occur in many oceans, but primarily in the cooler temperate waters of the North Atlantic, and the North and South Pacific. They are rarely seen in tropical or polar regions.



Sightings at sea in the spring or summer are often of large schools. These can be a spectacular sight. One evening in January this year, the LPG carrier *Tarahiko* reported sighting a large school south of Banks Peninsula. The skipper of the ship reported "fins as far as we could see" and it took him an hour to steam through the school at a speed of 11 knots. A dense school off Britain was described as being "like a herd of submerged elephants".

Worldwide, little is known about the seasonal movements of basking sharks. Sightings are mainly on the continental shelf, both coastal and well offshore. In most areas they are seen at the surface in the warmer months. Off California, however, basking sharks are more common in the cooler months when the water is rich with plankton.

Around New Zealand and Britain sightings are much less common in autumn and winter and it is assumed most of the sharks go into deeper water. Their biology during this time is virtually unknown. It has been speculated that some hibernate when food supplies are scarce because, on rare occasions, basking sharks without gill rakers have been taken. It is argued that since they could not feed without this apparatus, they may periodically fast, perhaps hibernating or becoming inactive, while the gill rakers are replaced.

Migration may account for appearances and disappearances of basking sharks at some localities. Off the Atlantic coast of North America, they appear in the south in spring (March-May) and apparently shift north in summer (June-August), disappearing for the rest of the year. Off the Pacific coast of North America, basking sharks appear in their greatest num-



Basking sharks are caught as by-catch by large trawlers fishing off the New Zealand coast. This shark was caught in a trawl net in the West Coast hoki fishery. The giant gill slits through which the shark filters water can be seen almost encircling its head.

bers in autumn and winter (September-February) in the south, shifting further north in spring and summer.

Satellite tracking using transmitters attached to the sharks is already underway in the north-east Atlantic. This should help unravel some of the mysteries surrounding the movements of this giant fish. The sharks are no doubt capable of making very long journeys, travelling hundreds or even thousands of kilometres through coastal and international waters.

Basking sharks can reach 12 metres in length, and can weigh up to six to eight tonnes. Most are less than ten metres long. As in most shark species, the females grow larger than males. Out of about 400 species of shark worldwide, the basking

shark is the second largest after the whale shark. It is also the only filter-feeding shark known to occur in New Zealand waters.

HE BREEDING HABITS of basking sharks are largely a mystery but, like other sharks, they probably have a very low reproductive rate. Most sharks are long-lived (12-70 years), grow slowly, and produce small numbers of young (2-50) each year. By comparison, most bony fish produce thousands of eggs each year.

The way young sharks develop varies considerably. Some are hatched from eggs enclosed in horny capsules laid on the sea