

Bountiful ocean requires a conservation plan

BY REESE HALTER, SPECIAL TO TIMES COLONIST APRIL 14, 2010 1:12 AM

The Chinese, Japanese and Russian governments will not support a world measure to stop overfishing sharks and the United Nations will not unanimously protect the endangered Atlantic bluefin tuna. So now it's up to the citizens our of planet to help nature.

Fish is an important source of low-fat protein and vitamins; omega-3 fatty acids are brain food, reduce heart attacks and strokes and slow the symptoms of arthritis and osteoporosis in humans.

Since the 1850s overfishing has changed life under the sea. Northern cod, North Sea skate, marbled rock cod of Antarctica and bluefin tuna are fished out, like the great whales before them, and they are not recovering.

Sharks, rays and seahorses are on the road to extinction. East coast cod has declined 96 per cent over the past 150 years.

Researchers from the University of New Hampshire believe that haddock, herring, mackerel, yellowtail flounder and winter flounder have also declined as much as cod populations. That is, since the mid 19th century more than 90 per cent of the pre-industrial population of large, spawning fish has vanished.

Fish biologists at the University of British Columbia discovered that the United Nations Food and Agriculture Organization, which has reported global catches yearly since 1950, began to see this problem in the 1980s. Yet it took 12 more years in order for this to become public.

The FAO reported 40 million tonnes of catch in 1950 and by the early 1990s it was 80 million tonnes. The trend continued despite the Newfoundland and Grand Banks collapses in the early 1990s. The total world harvest rose to 100 million tonnes by 2000.

The reason for the enormous and grossly unsustainable numbers was due to false reporting by China. Since 1988 the actual decline has been at least 635,000 tonnes a year.

Essentially, the sea is becoming empty of older fish and older fish are vitally important for reproduction. For example, plaice is harvested by the time it reaches six years old, yet one of these flatfish is able to live for 40 years.

Extreme fishing pressures on cod and haddock have resulted in breeding one year earlier -- a rare example of human-induced evolution.

Fishing technology today enables fisherman to hunt anywhere with a high accuracy of catch. Over the

past 30 years humans have begun hunting deep, greater than 1,000 metres, into the ocean. Now ling, tusk, Greenland halibut and blue whiting are all fair game. As a result, all known commercial deep-sea fish populations have fallen to around 20 per cent of the 1970s levels.

One of the most prized and rare fish left on the globe is bluefin tuna. It accelerates faster than a Ferrari and warms its blood through an ingenious heat exchange system. Eastern Atlantic bluefin is an endangered species and western Atlantic bluefin is worse off; it's listed as critically endangered.

The FAO estimates that there are about 1,556 long-line fishing vessels of larger than 90 tonnes with freezing capacity catching tunas around the world. At 3.6 million tonnes of tuna harvested annually the populations are all set to crash.

Conserving the ocean's resources is clearly the only way forward in this century.

An innovative, sustainable approach to harvesting fish in Iceland and elsewhere is that of individual transferrable quotas, which enable boats to own shares of the overall quota determined by scientists.

The Marine Stewardship Council certification of sustainable fisheries that McDonald's (which serves over 275 million fish sandwiches in North America annually), Unilever and Wal-Mart have adopted is helping to protect the oceans from piracy.

Satellite monitoring, naval and marine support with harsh penalties including enormous fines and stiff jail sentences will reduce the large pirate fleets from Spain and Russia.

Underwater reserves in New Zealand, New England, St. Lucia, Florida and the Bahamas clearly show the awesome ability over time of the ocean to regenerate its fish populations. Fish biologists predict that 50 per cent of the ocean will need to be placed in reserves in order to feed 10 billion people by 2050.

Each of us can make a huge difference with our buying habits. As voters and consumers we can exercise a unanimous voice for the conservation of all wild fish stocks and life within the ocean.

Reese Halter is a conservation biologist at California Lutheran University in Thousand Oaks. He is also a public speaker and founder of the international conservation institute Global Forest Science. Follow him at twitter.com/DrReeseHalter.

© Copyright (c) The Victoria Times Colonist