

ily by conservationists. All ceeds go to the Fish and ldlife Service, which uses the ney to buy and preserve wet- ds. Since 1934 more than 3.5 llion acres in some 175 re- ve have been set aside for terfowl.

By contrast, the £250,000 a ar raised by the British £6 ne licence, instead of going ect to the inadequately funded ture Conservancy Council, is allowed into general revenue.

TONY SOPER



WIGEON

h Morris, feature on this p. Winning the annual arries great prestige. Selling d conservation.

## Fisheries ignore Nature's warning

Are the fishery management experts entirely right when they blame El Niño—the feared periodic invasion of warm water from the western to the eastern Pacific—for catastrophic crashes in fish populations? It now seems that a lack of foresight leading to overfishing may well have contributed to at least one recent crash in fish stocks.

No two El Niño events are alike. They vary in intensity, duration and magnitude. Big ones—the last three occurred in 1957–58, 1972–73 and 1982–83—can last for years, preventing the upwelling of cold, nutrient-rich deep water that attracts huge numbers of fish and which provides the Pacific fisheries with their bountiful catches. The result is that the fish either disperse or go deeper.

The most cited example of El Niño's disruptive impact on fish stocks has been that of the Peruvian anchoveta fisheries. The exploitation of anchoveta—small, surface-dwelling fish which live around the cold-water upwellings found along the coast—made Peru the world's top fishing nation in the late 1960s, with a huge fleet of fishing

boats and a chain of factories processing the catch into meal.

When the 1972–73 El Niño arrived, great numbers of fish congregated in the few remaining upwellings, where they became easy prey to the boats. For several weeks, fishermen were able to catch anchoveta at phenomenally high rates, little realising that they were destroying the potential for future generations. Peru's anchoveta fishery and its economy has not yet recovered.

When the 1982–83 El Niño arrived, Peruvian and Ecuadorian fishing vessels were treated to a sharp increase in shrimp and scallops, as well as demersal fish such as hake and tropical and subtropical fish such as yellowfin tuna.

But it was Chile which received the real bonus: a sharp increase in the numbers of anchoveta and sardines, that has made it one of the world's top fishing nations.

The problem is that, come the next El Niño, Chile's fishing industry could follow in the footsteps of Peru.

Research has shown that fish caught by Chile in 1983 were smaller and yielded less than those taken in 1982, even though more fish were caught in 1983. Clearly too many adult fish have

already been taken.

Chilean authorities are, however, already worried about their fishing industry, and may well support good management practices to ensure stocks of fish for the future.

Canada, however, seems intent on ignoring the facts. The salmon fisheries along the Pacific Northwest coast had been economically depressed for a few years preceding the 1982–83 El Niño, in part because competition from Norwegian and Alaskan salmon fisheries had driven the price of salmon to low levels.

But in May 1983, already several months into the worst El Niño of a century, the Pacific Fishery Management Council issued its forecast and quotas for salmon, taking no account of the effects of El Niño, even though its impacts had been discussed for months in newspapers around the world.

When the Council published its March 1984 report, it stated that "the oceanographic conditions associated with El Niño were believed responsible for severely impacting ocean salmon production" and that "the average size of salmon was reduced and ocean natural mortality increased". Little reference was made to the effects of overfishing. MICHAEL GLANTZ

## Italy confers chaos on wilderness

When the regionalisation of Italy's national parks went ahead 10 years ago, conservationists did not dissent because, given that national control left a lot to be desired, they thought it would be the lesser of two evils. They were mistaken. Italy's national parks are now even more open to abuse by hunting and tourism.

Francesco Framarin, a member of IUCN's Commission on National Parks and Protected Areas, explains why.

When the parks were entirely state-controlled there was never enough money and no unified service to run them properly. Shifting control to the regions was expected to make administration more efficient.

The creation of new parks was to go hand-in-hand with regionalisation, with a target of 10 per cent protection. In addition to

the four old national parks, eight new ones would be created, covering 3 per cent of the country. Regional parks and reserves would cover the other 7 per cent.

None of this has happened. Management controls have been lifted and no new national parks have been formed, reflecting the regional authorities' fierce opposition to any state control and the general disregard for Nature prevalent in Italy.

Some of the most spectacular sites proposed as parks still have no protection. Existing parks have been sullied by, for example, construction of roads and ski-lifts. Hunting was even temporarily allowed in the Stelvio National Park.

What has happened in Italy could well be repeated in countries such as France and Spain, which have also adopted policies of regionalisation. A workshop to discuss the problem is to be held in Spain in November. (IUCN Press Service.)

## Eagle may lie down with the lamb

If Lord Burton of Dochfour were to be granted permission to shoot the golden eagle which Highland crofters claim has killed more than 30 lambs, the RSPB and National Conservancy Council fear that this would set a disastrous precedent.

Golden eagles are protected and a licence has never been granted to kill one. Although they do have a reputation for taking livestock, eagles in fact rarely kill large prey, preferring to scavenge.

According to the Species Protection Office of the RSPB, this spring's drought caused a shortage of grazing, which resulted in high lamb mortality. The likelihood is that the eagle in question was merely removing carcasses.

The fear is now that a crofter may illegally shoot the bird, risking a fine of up to £1,000.

## Burnt fingers through toxic waste

The Gulf of Mexico has been saved, for the moment, from the pollution caused by burning toxic waste aboard ships operating in its waters (see BBC WILDLIFE March 1984).

Last October, the Environmental Protection Agency (EPA) approved the burning of waste in a specially-designated area 300km off the Texas coast. But the protests from fishermen and the public have been so great that the EPA has overruled its own inspectors, and the company involved—Chemical Waste Management—has been refused a permit to burn 15 million litres of toxic waste at sea.

While the decision does not mean a total ban in US waters, the EPA has called for extensive research into ocean incineration, and is drawing up regulations before issuing any more permits.