Saving the great bustard

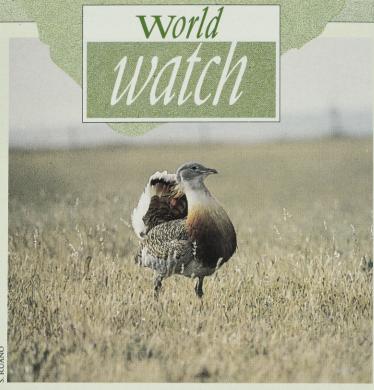
THE GREAT bustard is probably Europe's most spectacular bird. It is also globally threatened. Its last stronghold is the Spanish steppes, where over 65 percent of the world population of 20,000 occur. But the Spanish government is planning to use European Community funds to irrigate four million hectares of the steppes by 2010, and the survival of the great bustard is seriously threatened.

Rolling, open and dry areas of low scrub and grassland, the Spanish steppes are a beautiful and rapidly diminishing habitat with a unique and threatened bird life including two other globally threatened birds, the little bustard and lesser kestrel, and other rare or declining species.

Irrigation effectively destroys the habitat for steppe birds. The all-important mosaic of semi-natural vegetation, extensive crops and fallow land is replaced with monocultures of artificially fertilised, dense and fast-growing crops. Increased pesticide use reduces the invertebrate food supply for birds like the lesser kestrel and bustards. Disturbance from agricultural operations such as aerial spraying prevents shy species such as the great bustard Pilchard plunder from nesting. Great bustards, being large and cumbersome in northern Chile is on the brink flight, also die through collisions with the power lines essential for the schemes.

The planned irrigation schemes make little sense and are overwhelmingly opposed by local farmers. The steppes are essentially dry places, and the water tables are not suitable for extensive exploitation. The schemes are almost certainly unsustainable in the long term.

The ICBP backed by ornithological societies throughout Even the vultures and pelicans Europe, is calling on the European Community to stop financing the irrigation projects. Supporters of the great bustard have won an initial victory with the declaration of two **Environmentally Sensitive**



The great bustard stands up to a metre high and is one of the heaviest of flying land birds. Its population has been halved in the last 20 years, and its main remaining habitat is now threatened with irrigation development.

Areas in the steppes. Farmers in these areas, which contain about 1,500 bustards, will receive subsidies from the Community to maintain the steppes as a traditional patchwork of grazing land and lowintensity cereal farming. However, the threat of irrigation over large areas of the steppes remains.

Source: International Council for Bird Preservation

THE FISHING industry in of collapse. After 15 years of unfettered expansion, pilchard stocks, which once fed the biggest fishmeal industry in the world, are dangerously depleted.

In Iquique, a port perched on the edge of the towering mountains of the Atacama desert, the stench of fishmeal plants has disappeared. The plants are silent, facing an idle fishing fleet moored in the bay. circling overhead look hungry.

The pilchard catch has declined dramatically since a peak of 2.6 million tonnes was landed in 1985. Seiners - fishing vessels which carry long vertical nets - brought back

only a quarter of that last year. The outlook for this year is even more bleak.

At Sernap, the national fishing inspectorate, Eduardo Gil says fishing companies are not prepared to acknowledge their share of the blame. "They tell us that the fish have gone south, gone north, gone further out, but the truth is that all the pilchards have been turned into fishmeal.

"They are not fooling us, only themselves," Gil says. "This is a typical case of overexploitation. It happened to the herring stocks in the North Sea, in Japan and off California. We cannot be the exception."

The average age of the fish caught has been dropping steadily since the mid-1980s. In 1991, fishermen were bringing in pilchards which were just six years old, the age of the sexually mature fish, indicating that stocks were on the border of extinction.

Sernap fears that the fishing industry in northern Chile, which generates 40 percent of the region's gross domestic product and employs 18,000 people, is about to collapse as it did 25 years ago, when anchovies were wiped out.

Gil says it may take 20 to 30 years for pilchard stocks to recover. And because there is

nothing to take their place, many fishmeal plants face closure. The industry, which earned over \$NZ700 million in exports in 1991, risks losing its place at the top of the world

A number of the pilchard fishing companies are partly owned by New Zealand's Carter Holt Harvey. These are currently losing over \$NZ70 million a year.

The scarcity of pilchards is also pitting fishmeal plants against canneries. Rival fishing fleets now employ a whole battery of detective equipment, including satellite photos, ultrasonar equipment and support aircraft, to lead them to the isolated schools of pilchards. Once detected, the race is on to fish as quickly as possible and keep the competition out of the area.

Source: Financial Times

Oyster problems in UK

A NEW threat to Britain's native oysters has shown how hard sometimes it is to win in dealing with the separate environmental problems of pollution and the introduction of pest species.

The alien Pacific oyster was introduced some years ago to British oyster farms. It was given the okay by Britain's fisheries administrators on the grounds that the exotic organism was no threat to other marine life because it "couldn't breed in UK waters".

Unfortunately it now seems that the only reason it couldn't breed was because TBT widely used to keep barnacles off the bottoms of boats and a major marine pollutant - suppressed its reproductive processes.

TBT was banned in Britain in the late 1980s and the country's coastal waters are considerably better for it. However, in the last two years Pacific oysters have escaped from farms and are now breeding in unprecedented numbers in the TBT-free waters of the southwest coast.