

CORAL DESTRUCTION FOR AN AQUARIUM

In a quietly bubbling aquarium, a fire goby, its red tail tinged with black, flits among the clown fish and the coral. This tranquil scene might be in any home or office in the developed world where the tropical fish industry is a multimillion dollar business. But in the Philippines, the source of 70% of the fish favoured by aquarium enthusiasts in North America, the industry is causing environmental disaster and reductions in the food supply.

Cyanide is responsible for the destruction. Although it is illegal, 80% of the tropical fish are caught in the Philippines using the chemical. It is squirted from plastic squeeze bottles into the coral reefs where the fish hide. In addition to stunning the fish intended for capture, the cyanide kills other fish, eggs, larvae, and molluscs. Repeated applications damage the reef and threaten the million of tiny

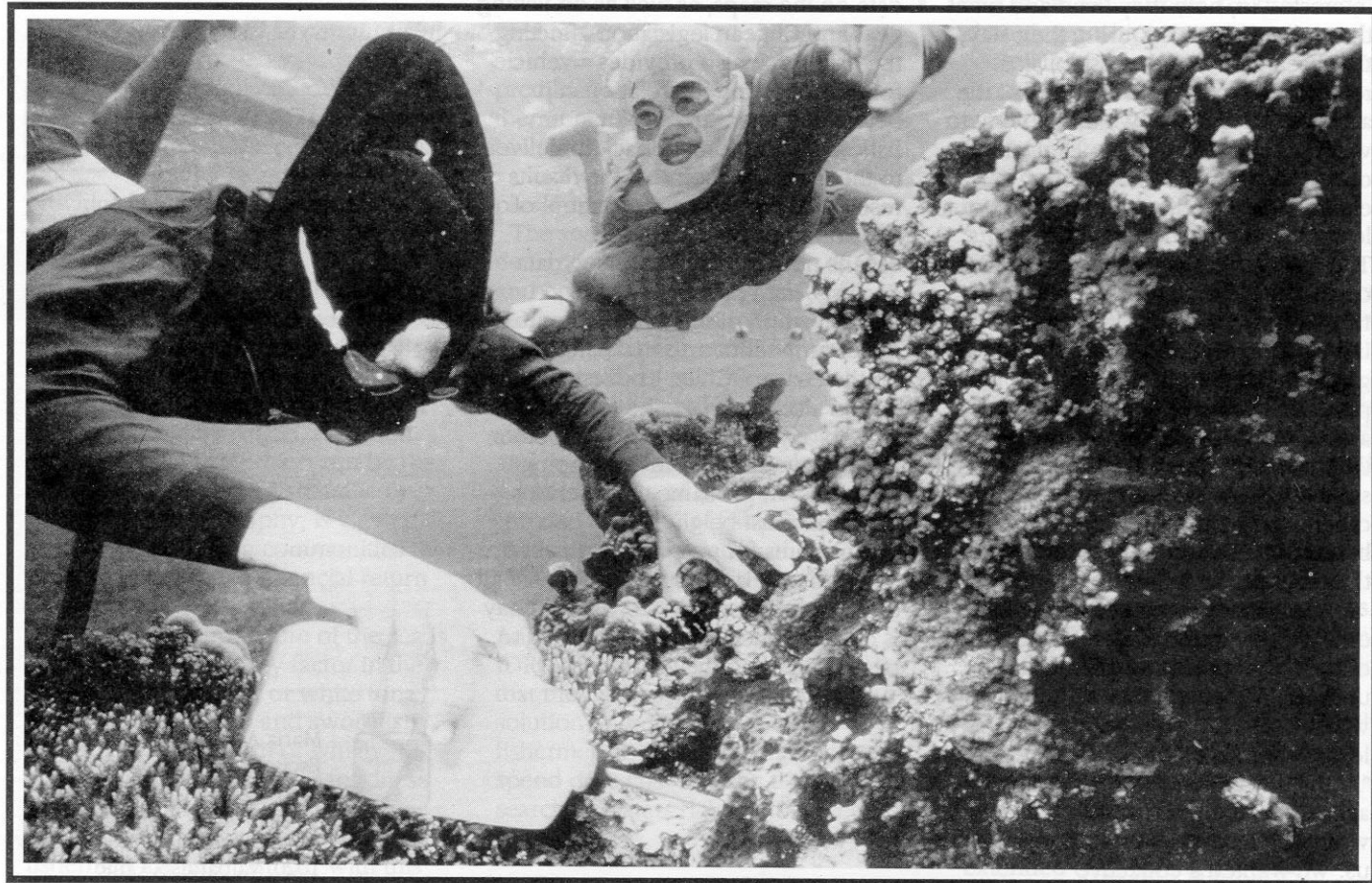
animals that form the coral reef itself. "Killing the reef is like burning the corn crop in your barn," says Don McAllister, "You destroy both food and shelter."

McAllister is one of the coordinators of a project that is teaching Filipino fishermen how to use hand-held nets instead of cyanide to catch tropical fish. The project, which is funded by IDRC, is jointly administered by the International Marinelife Alliance (IMA) of Canada and the Haribon Foundation for the Conservation of Nature in the Philippines.

The Philippines has 33,000 sq km of coral reef, which supports the tropical and food-fishing industry. The reef also attracts tourists and acts as a natural breakwater for coastal settlements. Eighty per cent of the reef is in fair or poor condition, owing to dynamiting (for use in construction) and sedimentation (mainly erosion from deforestation).

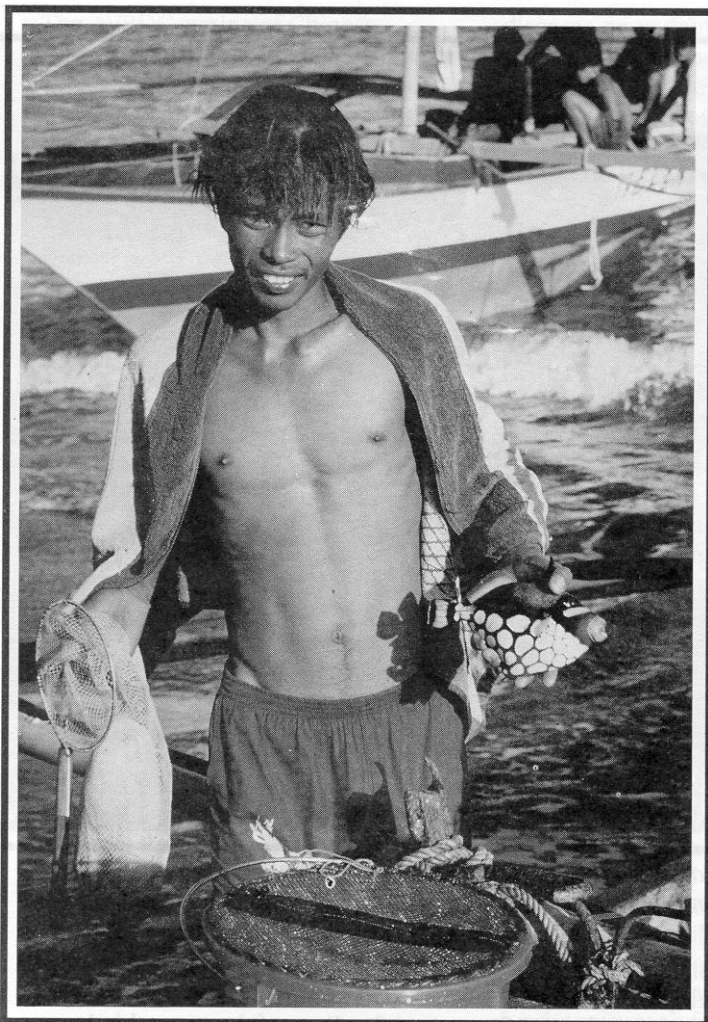
The resulting decline in fish harvests has led to unemployment, rural emigration, and loss of income. A dead reef produces only one-seventh the amount of food of a healthy one and, although a thriving 1000-sq m area of reef can feed 800 people for a year, a reef in ruin can only support 200. In a country where people rely on fish for half their protein consumption, the implications are grave. Already, about 25% of Filipino children suffer from malnutrition.

Substituting small-mesh nets for cyanide will help improve these statistics. The nets are a self-sustaining technology that allows the fishermen to catch only what they need. To encourage their use, the IMA-Haribon project holds net-training courses that are taught by former cyaniders. The instructors also discuss reef ecology, basic fish biology, and underwater safety. The courses are held in the fishing villages, and all residents are



In the Philippines, cyanide is squirted into the coral reefs to stun fish intended for capture, but other fish are affected too, and the damage to the reef endangers future species.

REPORTS



Filipino fishermen are being trained in how to use hand-held nets instead of cyanide to catch the prized tropical fish destined for aquariums around the world.



Courses organized by the IMI-Haribon project teach the fishermen how to use the nets, reef ecology, basic fish biology, and underwater safety.

welcome to attend. Participants are also encouraged to form a community reef management group. "We give them some ideas about how they can control their own affairs and not depend on some so-called expert," says McAllister. At the end of the course, each fisherman receives a certificate and a net.

The economic arguments for using nets are persuasive. A fisherman currently spends US\$500 for cyanide each year, which represents about half his gross income. The nets cost only about US\$25.

There are also health benefits to abandoning cyanide. The fishermen develop rashes after spending hours swimming through clouds of the chemical. They often bring home some fish to eat and whole families develop intestinal problems from ingesting cyanide. The most severe personal risk of cyanide use, however, is accidental inhalation, which can result in death. Moreover, because of the death of the reefs, divers are going deeper with attendant risks from the bends and other deep-sea dangers.

Of the 1500 regular cyanide fishermen in the Philippines, 200 have been successfully taught how to use nets. An important ecosystem is on its way to being restored, along with the health and livelihood of thousands of Filipinos who depend on the riches of the reefs.

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