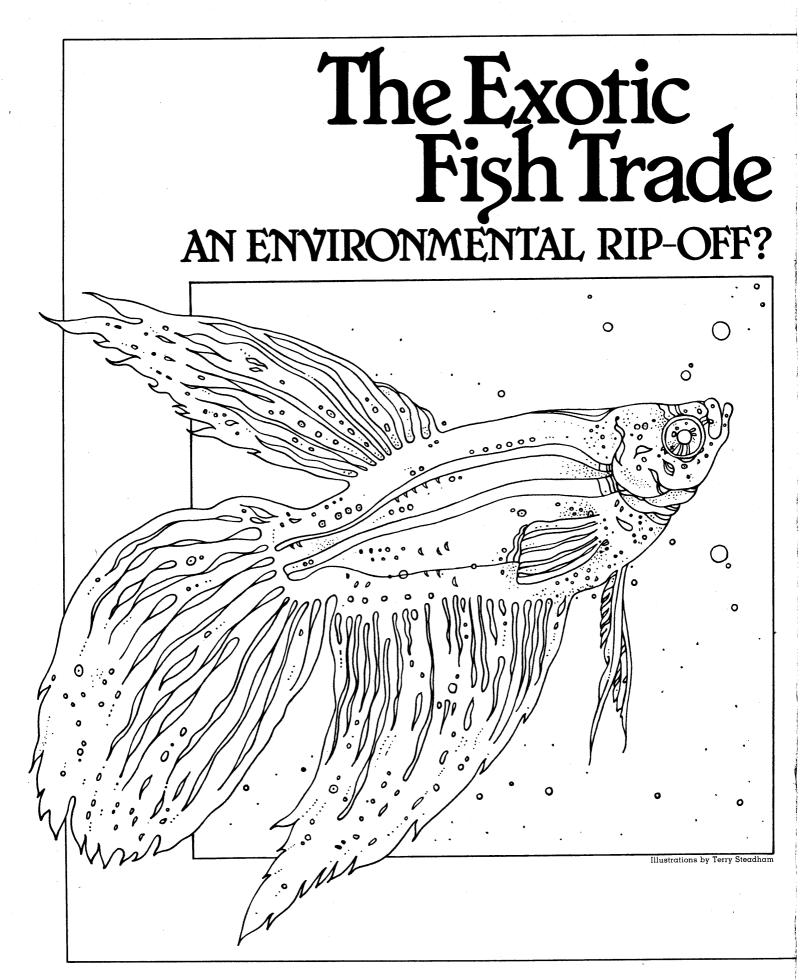
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Collecting Exotic Fish EDUCATIONAL HOBBY OF ENVIRONMENTAL RIP-OFF?



BY PAMELA WEINTRAUB

Many creatures of river, lake, and sea are beautiful and interesting. So, people often place these water animals in aquariums where they can be observed easily.

This practice is not new. Rich homeowners in ancient China and Japan kept goldfish in shallow basins and glass globes. Ancient Romans often built small fish ponds within their homes.

Goldfish were brought to Europe in 1611. And, in a sense, that was the beginning of the modern exotic fish trade. Today, magnificent underwater scenes normally encountered off the coasts of Africa, Asia, or South America can be seen in private aquariums. And the job of providing the animals and equipment for such scenes has become big business.

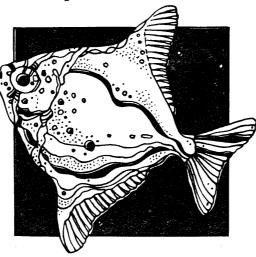
Simple aquariums of the type found in many homes, classrooms, and restaurants usually hold freshwater plants and animals. Air pumps, special food, cleaning filters, and fluorescent lights are included to help keep the water animals healthy. But that's just a small part of the aquarium hobby business.

More expensive saltwater aquariums exhibit brightly colored fish and dazzling coral from tropical reefs. Only ten years ago, the comic antics of an orange clownfish, or the dazzling yellow of a moorish idol, would have been rare sights indeed. But today, fish enthusiasts can buy a great variety of fish and equipment to learn about the tropical environment. In fact, aquarium keeping has become the third largest hobby in America. Tropical fish collectors in the U.S. and Canada spend only slightly less money on their hobby than coin or stamp collectors spend on their hobbies.

Few people realize that the tropical fish business has become a multi-million dollar industry. Tens of millions of serious collectors and casual hobbyists throughout the world buy fish of more than 6,000 different species. The United States alone imports over \$100 million worth of exotic fish and aquarium accessories each year.

Exotic fish are now an important export item in many developing nations—especially in Asia and Latin America. Even the state of Florida has begun to sell fish abroad.

The exotic fish trade is big and getting bigger. But it has an environmental price. According to British ecologist Tony Loftas, entire fish populations have been wiped out in South America, Ceylon and Africa. Rare fish imported from Peru and other places are often dead on arrival at their destination. In coastal areas of Kenya, Indonesia, and Florida, coral-reefs-homes of many tropical fish-are being blasted to bits so that the pieces can be used to decorate aquariums. Poisons used to stun certain fish have resulted in the slaughter of other, non-target animals.



Many of the less expensive freshwater fish found in home and classroom aquariums are raised by fish farmers. Collection of those fish doesn't harm the animals' original home. However, costlier fish and other saltwater animals are usually collected from the wild. And for every one of these creatures that reaches an aquarium many others die along the way. Environmentalists charge that people in the exotic fish trade are often ruthless and have little regard for protecting fish and their

natural surroundings.

Since the creation and operation of farms for the breeding of saltwater animals would require much time and money, scientists predict that the collection of wild fish will continue. Although experts in Florida now breed neon gobies and clownfish, widespread success in re-creating life conditions found in the sea appears to be a long way off.

Some people suggest that international regulations would control the "rip-off" of exotic fish resources. But Dr. Robert Valenti, author of Saltwater Aquarium, claims that "no government agency will get very far in condemning the tropical fish industry. Importers have a great deal of influence in Congress. And a licensing or permit system could triple the cost of fish for millions of hobbyists."

Marine tropical fish are collected at the rate of thousands per week. But while environmentalists protest the destruction of natural resources, fish collectors claim that no substantial data on such destruction exists.

Dr. Valenti adds that most massive damage can be traced to destruction of the coral reef. Fish collectors—usually individual divers—inject drugs into underwater reefs. This stuns fish and makes it easy for a diver to capture them. But the drug also eats into coral necessary for the survival of remaining fish.

In Florida and similar places, says Dr. Valenti, "a lot of young individuals figure there's a fast dollar to be made. They go out and take as many fish as they can. Essentially, they're destroying their resources.

"But the person who collects fish 365 days a year realizes that his or her living depends upon maintaining the habitat. That person won't use drugs, leave eggs unprotected or damage the reef. When an import company hires a new collector, it's taking a chance."

Once captured, fish stay in holding facilities (pools or fish tanks with running water) until (Continued on next page)

The Exotic Fish Trade

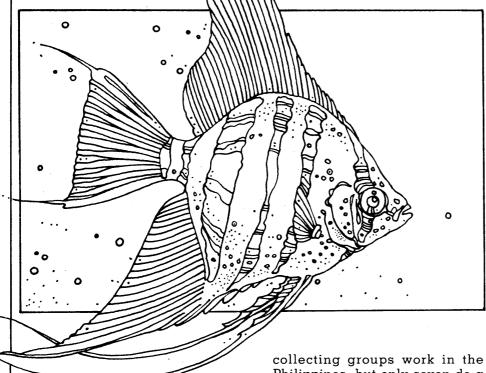
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it's time to ship them to the importer, or middle-man. Middle-men buy fish from all areas of the world and sell them to pet shops.

Some importers are reputable and some are not. Trustworthy importers will usually seek out good collectors and pay them The best collectors use nets and stay away from drugs, Murphy says. But some collectors are so bad that they use cyanide. They may also ship injured and bleeding fish.

Mr. Murphy points out that it is impossible for New York importers to investigate collectors in the Philippines. The only way is to see how the fish do in an aquarium.

"You must bring these fish into the aquarium and see how they survive," Mr. Murphy explained. "If they do poorly, you know the collector has been using shoddy methods. So you place no more orders with him. Fourteen fish

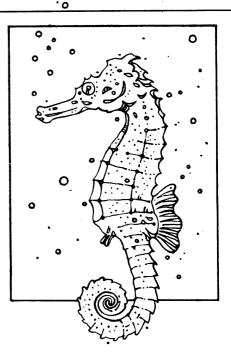


more per fish.

U.S. Marine Tropical Imports in Brooklyn is the largest fish importer in the New York metropolitan area. It sends supplies to the New York Aquarium. This company has become increasingly concerned with destructive catching and packaging methods used by collectors. Vice President Edward Murphy says that importers who encourage poor collectors "give the industry a bad name." collecting groups work in the Philippines, but only seven do a good job."

Divers also save money by shipping fish in packages filled with less water than legally required. Lighter packages mean lower air-freight costs. But fish shipped that way become braindamaged during the trip and later they may bang into aguarium walls.

About 50 companies in the exotic fish trade have emerged in the New York area in recent years. Edward Murphy claims that: "These companies last 15 to 18



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months, just long enough to make a quick buck. They make up about half of the import business in New York at any one time."

Sometimes, people who have been in the fish business for a short period just don't know what they're doing. The result? More damage to marine habitats in the faraway waters of Asia, Africa and South America. This lack of knowledge may also mean poor treatment for fish once they arrive in the U.S.

For example, fish are very sensitive to stress. Dr. Valenti says that many importers place undue stress on newly arrived marine life. That's because they transfer them from natural sea water to man-made aquarium water without an adjustment period.

Murphy says that fish must rest in a dark bucket of native sea water while aquarium fluid enters slowly, drop by drop. The entire process should take about nine hours. If it isn't done this way, 50 percent of the fish can die of shock.

He added that importers just entering the business often ship fish to the U.S. on airplanes taking a cold, polar route.

"It saves seven hours of travel time, but if a compartment opens by mistake the fish will freeze and die. We would take that route if we were shipping ice cream. But we're not. The tropical route we use guarantees that at least 25 percent more fish will be alive upon arrival."

Right now, environmentalists say, half of all fish captured in tropical waters die before reaching a hobbyist's tank. And those fish left behind often find that half their homes have been destroyed. They too will perish.

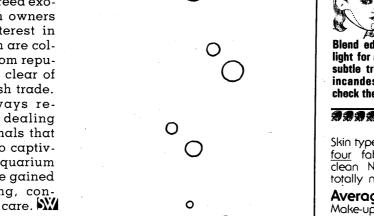
A handful of major dealers in the U.S. express concern that get-rich-quick "sea pirates" will destroy valuable resources. But even fish imported by the most respected companies are subject to the perils of travel and stress.

And importing countries are subject to environmental dangers too. Accidental release of strange fish can wipe out less hardy local animals and spread disease.

People in the tropical fish business say the hobby is an educational way for people to study nature. Environmentalists point to death of fish populations and destruction of their natural homes. In the middle is the exotic fish enthusiast, who wants to continue his or her interest without disturbing the environment.

Dr. Valenti suggests that until scientists learn how to breed exotic fish, home aquarium owners should take greater interest in where and how their fish are collected. They must buy from reputable dealers who steer clear of the seamy side of the fish trade.

Hobbyists must always remember that they are dealing with delicate, wild animals that need help in adapting to captivity. Knowledge of the aquarium and fish within it must be gained slowly, through reading, constant trial, and extreme care.



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(((**SSH!**)))

Do you envy all those models with perfect skin? Here's a secret: they don't all have perfect skin—but they do wear foundation make-up to get that look. And you should too!



Match your natural coloring as closely as possible. Exceptions: neutralize ruddy skin with a creamy ivory or beige, warm up sallow skin with a rosy tone.



Use make-up a shade or two lighter where you want features (like a shy chin) to come forward; darker where you want to minimize (a full jaw, wide nose). Blend edges so they disappear. You need good light for any making up - and especially for this subtle trickery. Daylight is ideal. Second best: incandescent (not fluorescent) bulbs - but check the finished look at a window.

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Average skin? Cover Girl Liquid Make-up is the beautiful basic. Just enough color and just enough coverage make skin look terrific.

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Oily skin? Cover Girl Oil Control Make-up helps hold down oily shine on the skin's surface. All day!

Great skin? Cover Girl SuperSheer gives just a touch of cover, a trace of color, for a flawless finish.