

how many aquariums in the United States? Are fish slaves? Why do people keep fish? Is it immoral to take fish out of their natural environment and ship them in bags to spend the rest of their lives in captivity? What effect does collecting fish have on the environment? In this paper I examine the tropical fish hobby in light of such questions. I do not intend to present ethical arguments for or against keeping fish.

It is estimated that there are over twenty-two million tropical fish hobbyists in the United States with sales of fish and amounting accessories to approximately \$580,200,000 a year. The state of Florida ships over four million fish a week to wholesale and retail outlets.[1] Why do so many people spend so much time and money keeping and breeding fish? Retailers and hobbyists will explain that watching fish is relaxing. lowers blood pressure, and adds two years to one's lifespan. Keeping fish is also considered a challenge. Many people keep fish for aesthetic reasons; the aquarium is a small ecosystem right in the living room. From the standpoint of fish, hobbyists will argue that they often keep particular fish alive longer than they would manage to survive in their natural environment. Aquarium inhabitants are not subject to natural predators and are by all counts well fed and cared for. Since few species of tropical or marine fish are endangered, what are the ethical problems?

Moral issues arise because of the high mortality rate of fish kept in captivity and because of the exploitation of human beings and the environment. Keeping fish is significantly different from keeping dogs, cats, birds, and other pets. According to Freshwater and Marine Aquarium magazine, 98% of beginning hobbyists will have dropped out The reasons cited by 74% after three years. of those hobbyists fall into the following categories: (1) too hard to care for, (2) lost interest, (3) did not know what to do.[2] Most retailers and hobbyists that I have spoken with over the past five years admit that there are ethical problems with the hobby. They also admit that it is a mystery why anyone would keep fish. type of admission is a well-guarded secret that is not shared with the novice. In spite of the problems, hobbyists are extremely enthusiastic about fish and want to share this enthusiasm with anyone willing to buy their first aquarium. If the truth were

told, not many people would be interested in fish as pets. Fish are hard to care for. The hobby takes a lot of time and a lot of money.

The novice is generally told that it is easy to care for fish; just change one fourth of the water once a month. The truth is that most people overcrowd and overfeed and should change water once a week. The novice is usually not told that fish need a particular type of environment, a particular pH, a particular type of diet, and selected tankmates. Without this knowledge, fish get sick and die. A two-hour visit to an aquarium shop will produce from three to six people talking to the owner about their problems, e.g., cloudy water, fish killing other fish, dead fish (unknown cause), bacteria in the water, parasites on the fish, bacteria on the fish, and scores of other problems. Even under ideal conditions fish will eventually get The cost for treating a 55 gallon aquarium for a bacterial or parasitic disease ranges from \$3 to \$15 per treatment, and it usually requires two or more treatments to rid aquariums of unwanted organisms. medications do not even work. Unfortunately, fish do not get sick once in a while; they get sick most of the time.

If the novice keeps fish alive for a few months, he or she will likely buy another The hobby is addictive. The aveaquarium. rage hobbyist has four to ten aquariums, ranging from ten to two hundred and twenty gallons. People can spend an average of \$800 a year just for medication, water conditioners, and food. Fish are not cheap. A single marine specimen can cost up to \$400; the average marine fish will cost \$40. The average cost to stock a 135 gallon aquarium with freshwater fish is \$250; the aquarium itself and the equipment required to run it will cost approximately \$1000. Since aquariums require air pumps or power heads and heaters, you can add at least \$30 a month to the electric bill and count on having a higher water Many people wish they had simply been content with a ten gallon tank and one goldfish.

There is no doubt that the hobby is relaxing for a small percentage of long time hobbyists, but it is far from relaxing to most. The mental anguish of watching fish die, of trying to keep them alive with tons

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In your hand and in mine
Is the hand of lizard and bear.
And in our eyes is the eye
Of snake, hawk and wolf.
The blueprints of all beings
Overlap and share the same
Intelligent imprint of God's seal—
The double helix of DNA.
We are all of one creation.
Let not our diversity blind us
To this essential unity.

of medication, of spending great amounts of time and money doing this does not add years to anyone's lifespan. When fish die, they are replaced, and the process usually repeats itself.

Fish are probably not better off in an aquarium. In addition to disease, they are often chased, bullied, and sometimes killed by tankmates. Most fish are territorial and are especially vicious when breeding. Many fish simply cannot be kept unless they are fed a diet of live food (goldfish, livebearing fish). At least 100 million goldfish are raised annually to be fed to other fish. One fourth of these usually die in dealers' tanks (a fate better than being eaten by a Piranha or Oscar). The problems for fish begin long before they end up in the home aquarium. Freshwater fish that are not pond or tank raised are collected by natives of various countries. They are taken to a boat, sorted into plastic bags, and shipped to holding areas until bagged again and transported by air to various wholesalers. are then shipped to retailers and finally, if lucky, end up in the home aquarium. Great numbers of fish die before they make it to wholesalers, and many more before reaching the retailer. Hundreds of fish are packed into a single plastic bag, and many die from stress of ammonia. Fish that have a lifespan of ten to twenty years in their natural environment usually die in captivity after a few months or at best a few years. The novice can kill an astonishing number of fish before learning how to keep them alive. A local store owner writes, "I have had so many people come to the shop over the years that I like to refer to as the Saturday fish murderers." These are people who hit six to seven stores on a weekend and take home twenty bags of assorted fish--all for a ten gallon tank.[3]

An article in the Wall Street Journal, "Pity the Pet Fish: It May Be Desired, but It Isn't Loved," seems to capture the attitude of many people who keep tropical In that article, Michael McCarthy fish.[4] points out that "the way fish are treated--or not treated--makes them something more like organic ornaments than pets. Dogs and cats are members of the family; fish are luxuries or hobbies." Most people do not become attached to fish nor consider fish as individual animals with emotions and unique person-McCarthy contends that few people care about the health of their fish. It is usually cheaper to flush them down the toilet than to medicate the aquarium. I know of no law protecting fish from this fate. People who want to get rid of fish either trade them for other fish at a local shop, flush them, throw them out in the snow, junk them in a trash can, grind them in a garbage disposal, etc. In spite of the fact that it is illegal to dump tropical fish into rivers, some people continue to do so. In a few cases this has resulted in the demise of native fish populations.

In an editorial for Tropical Fish Hobbyist, John Quinn disputes most of the views expressed in the Wall Street Journal. Quinn takes McCarthy's major premise to be that "all people who keep fishes regard them merely as casual 'throwaway' organic home decorations or artifacts that have few or no requirements and rights and thus can be disposed of when one tires of them."[5] McCarthy, however, does not say "all." I assume that he means "most" people, but it is not clear whether "most people" would include hobbyists or those not regarded as hobbyists. The dispute in this case could be settled with a definition of "hobbyist." I have not found a definition of this term in the liter-From the use of the term in aquatic magazines and texts, I would assume that a hobbyist is an experienced aquarist, a person who cares about fish and does not keep them as organic ornaments.

Gunther Sterba, author of The Aquarist's Encyclopedia, considers anyone who keeps fish a hobbyist, yet he does think it is important to distinguish a serious hobbyist from those

who are not serious. Those who are not serious usually regard fish in the manner described by McCarthy; serious hobbyists are those described by Quinn, those who do have affection for fish and do relate to them as pets, or those who have a scientific interest in keeping fish. These people tend to make sure that their fish are in the best of health. What percentage of people who keep fish are serious hobbyists? Since there are no studies of this, one can only make an educated guess, and I would guess approximately twenty percent of the twenty million or so aquarists in the United States.

Quinn resents any criticism of the tropical fish hobby. There is probably some reason to be defensive. Sterba, for example, explains, "Increasingly, aquarium-keeping has had an influence on related scientific fields of study, and a great deal of our knowledge of ichthyology has been instigated by aquarists. To a very large extent, aquariumkeeping has contributed information about native and exotic species of fish and aquatic plants. The collective experience of people who have kept and bred aquatic life forms down through many centuries have enabled all the technical problems to be solved. advances in technique have increased the amount of biological research carried out successfully by the aquarist's methods. addition to information regarding care, breeding and reproductive behaviour in aquatic life forms, research regarding the fishing industry, fish disease, chemical and micro-biological problems of water, ecological problems and environmental pollution is also important. Recently, basic information in the field of ethology has been arrived at by watching fish in aquaria."[6] In spite of this, McCarthy's conclusion is correct: most people are simply not sensitive to the needs of fish.

The problems associated with keeping tropical freshwater fish are only exacerbated when keeping tropical marine fish. Only a few hobbyists can keep these fish alive for any considerable length of time. Since marine fish are more sensitive to ammonia than freshwater species, the numbers of fish that one can keep in an aquarium are limited. Nonetheless, people seem to have an obsession with over-crowding marine tanks. Nearly all marine fish are caught in their natural environment and shipped to dealers. Many, including the popular seahorse, need a diet

that cannot be duplicated in an aquarium; they usually die in short order. Some retailers will not sell such fish. Others who are less scrupulous will sell them because of demand.

Many of the beautiful marine fish that we see in aquariums come from the Philippine Islands. Most retailers do not know if the marine fish that they carry are hand caught or caught by poisoning with sodium cyanide. The percentage of fish caught by the use of drugs is very high. The use of cyanide kills up to fifty percent of the targeted fish as well as untargeted corals, anemones, and crustaceans. Fish that are stunned by cyanide are caught, placed in uncontaminated water to recover, and then shipped to various dealers. Dead coral reefs have led to dwindling food supplies for many natives that depend on these reefs for their food. Coral reefs around the world are being destroyed in order to provide people with dead coral for their aquariums.

The use of cyanide in the aquarium industry has been criticized by most concerned hobbyists. The native who catches a marine fish may receive five cents for his or her effort; by the time this fish gets to the hobbyist, it will sell for forty to sixty dollars. An editorial in Freshwater and Marine Aquarium magazine points out that the greatest obstacle to the advancement and constructive evolution of the hobby is the inhumane and unethical practice of drugging fish and the environment for profit. found an industry," says the author, thought little or nothing of taking advantage of the incredible poverty of the Filipino fishermen and hooking them on a drug collecting system that is destructive to their own bodies, to the fish, and to the reef ecology of the Philippine Islands."[7] It is possible to catch marine fish without the use of drugs. Nonetheless, many collectors insist that cyanide does little damage to fish and is more efficient than alternative methods; fish die from ammonia and improper shipping rather than cyanide, they claim.

New filtration systems make it possible to support marine life for a longer period of time, but they are extremely expensive and so far have not made that much of a difference. Some hobbyists are successful; the majority are not. The fact that fish can be caught with nets does not solve the larger ethical

problem—they usually die shortly after they are caught, shipped, or purchased by the consumer. Do we have the right to take fish out of their natural environment, to make them captives for our own entertainment? The answer to this question will depend on one's moral philosophy; some will argue that fish are not moral agents and thus cannot be considered slaves or the bearers of rights. I have not addressed such philosophical disputes and do not wish to argue that it is unethical to keep fish. My intention has been to draw attention to some difficulties of keeping fish in captivity.

Notes

- 1. Most freshwater aquarium fish are raised on tropical fish farms or are tank raised in homes of hobbyists. Most marine species are caught in the wild and transported by air to the united States.
- 2. Freshwater and Marine Aquarium magazine, September, 1986, vol. 9, no. 9.
- 3. Fort Wayne Cichlid Association <u>Bulletin</u>, September, 1985, Vol. III, no. 9.
- 4. Michael J. McCarthy, "Pity the Pet Fish: It May Be Desired, but It Isn't Loved," Wall Street Journal, October 23, 1986: 1.
- 5. John R. Quinn, "Now Wait Just a Minute, There!," <u>Tropical</u> <u>Fish Hobbyist</u> magazine, January, 1987: 6.
- 6. Gunther Sterba, The Aquarist's Encyclopedia (Blandsfor Press, 1983): 61.
- 7. Freshwater and Marine Aquarium magazine, editorial, July, 1983: 93.



"I am life-that-willsto-live in the midst of life-that-wills-to-live."

Albert Schweitzer

BOOKS RECEIVED

Jim Nollman

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