PHOTOGRAPHING FISH

by Konrad P. Schmidt, St. Paul, Minn.

I first became interested in shooting close-up pictures while taking an introductory course on 35 mm cameras. I soon learned that what I had been calling close-up shots for many years was now known as macrophotography. I was surprised to find this special effect very easy to master and was so impressed with the results of my "homework assignments" that I purchased my first 35 mm camera. I began photographing wildflowers, which proved to be colorful, cooperative subjects. I later sought more challenging subjects such as fungi (mushrooms), insects, and finally fish. At first, photographing these aquatic dynamos was a lesson in exasperation and humility, but I kept trying new approaches that eventually led to a hobby I now find very enjoyable and rewarding.

The eqyupment and methods I use have produced excellent results, but I am very much aware of each photographer's allegiance to specific cameras, accessories, films, and techniques. In this article, I am only offering suggestions that have worked for me. I am sure they can be adapted to satisfy each individual's philosophy towards photography. I have found any single-lens-reflex 35 mm camera will work, provided macro accessories are available for that model. I prefer using close-up filters or extension tubes to produce the macro effect because both of these devices (1) are used in conjunction with the regular lens that comes with the camera, (2) are considerably cheaper than other macro accessories, and (3)--most importantly--do an excellent job. I have tried several different films, but have had my best results with Kodak Ektachrome 200 & 400 slide films and with Kodak Tri-X Pan (black-and-white negative film, ISO 400). I have also had very good results with two relatively new films: Eastman 5294 (ASA 500) and Fuji 8512 (ASA 400). These films are movie films packaged for 35 mm camera use, with both slide and print processing (or both) available. They are available mainly through ads in photo magazines. I have found, however, that only Identicolor Laboratory of North Hollywood, California can provide a high-quality processing service. I have tried two other processors, but have more than once received washed-out results.

I began photographing fish in their aquarium. I thought this would cause less stress than transferring them to a photo tank. I did get some excellent shots from those early days, but it took a great deal of patience, because the subject would constantly have to be coaxed into position. Finally compelled by frustration, I began using a photo tank that really made life with my fish a great deal easier. I made the tank from single-pane window glass, with dimensions of 10"x4"x8". I also used an additional plate to confine fish in a narrow compartment between it and the front glass. This little squeeze play prevents fish from turning away or toward the camera, causing blurred noses or tails. The adjustable backplate will be completely invisible on film as long as it is scratch-free and clean and the bottom edge is driven into the gravel. The light source is a fluorescent desk lamp equipped with two

15-watt bulbs that provide more than ample light; no flash is necessary.

At first,backgrounds and aquascapes were not a high priority to me, but I soon became very sensitive to the monotonous repetition. I began using several different colors for backgrounds, not only to add variety, but also to find the hues that create the best contrast. Generally, darker colors produce the most contrast, but lighter colors add a softer influence that I sometimes find very appealing. Aquascaping proved to be quite a bit more challenging. Ideally, I want to recreate each fish's habitat on a very small scale. Substrates are very important considerations, especially when photographing bottom-dwelling species. One of my favorite all-purpose--but perhaps overly shot--substrates is red flint gravel that I have found available from pet stores in my area. There are many fishes that would be found in distinctly different substrates--sculpins in rocks, for instance, and sand darters, as the name implies, in sand. I also use aquatic plants a great deal, especially when photographing killifish and minnows. Probably my most frequently used plant is coontail because of its abundance and wide distribution, but whenever I am collecting fish that I intend to photograph, I will throw in a few plants from the site to satisfy my purist ideals. I have found that using these "props" not only adds a touch of realism, but also it greatly aids in calming traumatized subjects.

I have run into a few small and simple problems that can develop into larger headaches if they are not taken care of before placing the fish in the photo tank. Dirty gravel and sand seem to be the main cause of poor water clarity and these intended substrates should be rinsed out on a regular basis to keep the water free of silt and other debris. The fine particles may appear very small to the naked eye, but they will really stand out under magnification. Pet hairs also manage to find their way into the substrate, and I usually find them settling somewhere on the fish's body when I begin to focus. Keeping the glass clean of algae films, water spots, finger prints, and air bubbles is a continuous chore, but a quick cleaning with a soft paper towel before each photo session should remove any eyesores.

My original intention for taking up this hobby was to have a small but representative slide collection of fishes commonly found in my area. As my interests grew, I began to branch out into other areas. I now photograph all natives as the opportunities arise. If possible, I try to photograph fish as juveniles and adults of both sexes. I usually have the best slides of each species made into prints for a photo album. I give slide presentations to groups and organizations such as ichthyology classes and naturalists' meetings. My latest pursuit has been black-and-white photography, which gives me the opportunity to submit my prints for possible publication in AMERICAN CURRENTS. I realize this hobby is not for everyone, but it can offer another way to better appreciate and enjoy our native fishes.

/In his letter accompanying the above article, the author writes, "I know my techniques are considerably different than those described in, for instance, Tom Baugh's 1982 AC article. I've been given a great deal of 'razzin'' by other photographers for using these fast films, but I've had very good results with enlargements up to 8X10."/