

SETTING UP A NATIVE FISH & PLANT COLLECTING TRIP

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Introduction

Many clubs set up collecting trips, especially in the spring for freshwater fishes and in the late summer for marines. Sometimes trips are spur-of-the-moment events, but usually the best ones are carefully planned. Having been on many trips, with all kinds of goals, all over the United States and elsewhere, I decided to put in one place a collection of jobs, equipment, plans, approaches, etc. which, in my view, will make a club trip a lot more fun, get more participants, and increase interest and articles on natives.

Groups of NANFA members in a given area could put on a trip. Just use the membership rosters published from time to time in American Currents, and ask the Treasurer or President for any recent additions.

Clothing

If you think this is too obvious to write about, then you weren't on the marine field trip with me where one woman showed up wearing high heels. Clothing should be suitable for the extremes of the season. That means, in early spring, sweaters and heavy outer clothing that can be readily removed as the day and the collector both warm up.

The best footwear is generally a pair of tennis, jogging, or athletic shoes of soft material and rubber bottoms. Socks, while appearing rather silly when wet, help guard your feet from abrasion by tiny rocks and sharp bits of wood. You'd be amazed what mud contains, and how your feet won't be scoured by sand if you wear socks. For persons who want to bring along boots, I recommend hip waders, but not chest waders. Hip waders are good for winter collecting in frigid (icy) water. Chest waders are drowning accidents just waiting to happen. They are dangerous, bulky, and interfere with collecting. They are not made for bending down, whereas hip boots are flexible. If you think you can wear some other kind of boot to avoid getting wet, forget it. The purpose of boots is not to keep you dry, but to keep you warm. Water will get inside hip boots (you always go just a little too deep), but the body heat will be retained. Carry along a bath towel and extra dry socks for changing in the car. Chest waders, on the other hand, can fill up with water and hold you under, especially in a current. They are not made for anything other than fishing in a splash zone, so don't use them for going into the water.

Accessories

Polarized sunglasses are very valuable when collecting fishes, and can save you a headache on a sunny day. Tie a string around the tips so they won't be lost if they slip off your nose. The string will hold them around your neck.

Insect repellents today really work, especially if they contain close to 100% DEET. Check for DEET-containing liquid repellents (not sprays) at sporting-goods stores. The material can smell pretty rank, but it will keep off mosquitos, biting flies, and ticks. Put it everywhere, as some of those bugs can be pretty good at finding that central part of your back where you missed, while many biting flies and mosquitos seem to prefer ankles.

Windex or a similar ammonia-water compound is excellent for all kinds of rashes and bites. It works on bee stings, jellyfish stings, caterpillar and poison-ivy rashes, and many other kinds of irritations.

Dish towels have as many uses as you have problems, and never are wasted. Carry several on any trip.

Containers

An unlined styrofoam fish box is superior to a plastic pail or cooler, in that the foam allows the water to exchange gasses, while a solid plastic does not. The only reason to line your fish box with a big plastic bag is to avoid splashing, but a good cover will accomplish pretty much the same. Check all boxes and covers before the trip, not when you are out in the field. Plastic bags are useful for separating specific small fish that might be eaten, grass shrimp (which will be eaten), snails, or unusual single specimens that might otherwise be lost. Don't forget rubber bands. Take along a whole package of bands from the dime store, rather than old ones or just the right number for the number of bags. If you can bring along a stack of bags, so much the better. My own preference (it costs more) is to bring along a couple of boxes of Zip-loc Storage Bags, in different sizes. I use the quart and gallon sizes, but don't bother with the heavy-duty (and costlier) freezer bags. Also carry along some big trash bags (3 mil) and ties. You never know what you will find. They are also valuable for transporting giant plants, such as two-foot-long Sagittaria with about a gallon's worth of mud for the

roots. They can also be used for enclosing your big dip nets that have to go inside the car because they are too long for the trunk. This will protect your upholstery, and be appreciated by the back-seat riders, especially if you've been collecting in a muddy area. Finally, you can put dirty clothes in them, or enclose large numbers of other plastic bags, and not worry if one or two of them leak. For overnight trips, I recommend each person put his clothing, toiletries, etc. into one of these bags. It's a lot easier to get the bags into your car trunk than get different-shaped suitcases into it.

Aeration Gear

For short trips, collecting only freshwater fishes, when the weather is cool, aeration is really not necessary. For longer or warmer or more saline trips, it definitely helps. For overnight, I always carry along one or two small AC aerators, with at least six feet of air-line tubing, two three-way valves, a couple of clamps, and air stones. The more air-line gear the better, but be sure your pump can run several outlets. Don't use a noisy pump, since it will be in the room where you sleep. Don't use a piston pump, as they often need adjustment. For daytime use in the car, I no longer recommend either 12-volt DC piston pumps that plug into your lighter or those battery-operated disasters made for minnows. The battery pumps produce little air, the batteries run down quickly, the pumps corrode, they don't fit well so that the electric current might be interrupted, and they break. In short, I don't like them and never did, but it was all we had for many years. Forget about O-tabs (worthless) or an oxygen cylinder (dangerous). Nowadays you can purchase bait-aerators made for minnows and the fishing industry. They are supposed to operate off a boat battery, and come with alligator clips. Take off the clips and replace them with a cigarette-lighter plug that you can purchase at Radio Shack. These bait-aerators consist of submersible bilge pumps. They are very reliable, and pump a terrific amount of water (not air). They come with a snorkel tube out of which the water is jet-pumped. That tube is PVC and easily cut to fit inside a five-gallon bucket or a cooler. There are several kinds on the market, starting at about \$18. You can buy them in a discount catalog store or tackle shop, in the sporting-goods department. I have several, one to a cooler, and one each to a couple of five-gallon covered buckets. I also have three cigarette-lighter outlets in my car! These things are really terrific for marines, for crowding large numbers in a small area, and for transporting delicate critters. Be certain to keep your containers

in the back seat, and not in the trunk. Trunks get hot quickly, and will kill everything. The only time I use an aerator in a trunk is when it is placed inside a thermal insulated cooler, and even then I stop often to check the temperature. (I run a long electric cord from the trunk, outside, and into the window of the back seat, then to the cigarette-lighter outlet. With the Radio Shack plug, you can use any length of electric cord you want.) The more expensive Super Saver systems are made for big coolers, and worthwhile. All these bilge pumps are, of course, meant to be dropped into the water. They have built-in plastic foam which prevents gunk, detritus, and fish from getting into the pumpworks.

Photography Equipment & Supplies

Camera: single-lens reflex with automatic exposure, aperture-preferred. Lens: 55 mm macro. Alternative: 50 mm lens with extension tubes or bellows. Film: Kodachrome 64 or Ektachrome 200, the latter for low-light conditions. Carry several rolls of 36 exposures, and shoot, shoot, shoot. You can always give away duplicates or extras. Slide film is cheap, so use high-quality film and lots of it. (Note: if you already have lots of prints, then you can use the negatives to get slides made. Vericolor SO-279 is made to be put into a camera when duplicating, and you will then get slides from your 35mm negatives. If you have such negatives, and they're really good, I'll be glad to make slides for you at cost.)

Photography container: a 2"x 6" x 6" plate glass photo tank can be made by anyone out of scrap glass (from a hardware store) and Silastic. Be neat! Make an additional plate to set inside. It will keep the fish from hugging the bottom when it is angled. Use clothespins to hold the plate where you want it, to keep the fish from running around excessively. Here is another use for those dish towels! When shooting, make sure there are no bubbles on the inside and no water droplets on the outside. The water should be as clean as you can get it. When setting up the shot, make sure you have lots of light, but no glare or shadows, and pay attention that the background is even, blurred, and of a color that doesn't wash out or hide the fish. Change backgrounds as necessary for different-colored fish. Don't shoot a silver fish on a white background.

Nets

If you plan to stay overnight, a couple of wire minnow traps should be set out in a promising area that won't be stranded by a falling tide. (You can take advantage of a falling tide by burying a bucket in the bottom, its lip even with the surface of the bottom. As the tide goes out, that bucket will become a tide pool, and you might find a variety of critters that took refuge in the "pool.") Minnow seines should be no longer than allowed by law for bait-collecting without a collector's permit. That is usually a six- or ten-foot seine. I prefer nylon, which costs more but lasts forever. If you're stingy, get a cotton one. It won't last very long if you don't dry it after each day's use and hang it up where it cannot rot. The minnow seine should be tied to a pair of poles, one at each end. Poles make a seine an easy piece of equipment to operate. Without poles, you'll wear out your back from stooping. Poles are also the only way to handle a strong current, as in mid-river. Dip-nets should have a very long pole made of wood, not aluminum. Aluminum-poled nets are rip-offs. They break almost as soon as you get them full of weeds. Search around for a good net that has no aluminum pole or collar. A big bait-and-tackle shop is your best bet, or a scientific supply house. Equipment useful for special cases are a cast net (if you can throw it) and a lift net (which almost never catches anything pretty, just silvery junk). Carry plastic bags into which you can place these nets after they get soaked and muddy.

Trip Leader

You should count on having at least one SOB who knows what the hell you're doing. This person will register the people who want to go, keep track of vehicles, and assign people to the appropriate vehicle. He will set up an embarkation place and time. He will make sure that one person in the group has a collecting permit (if necessary; he will determine whether a permit is necessary by calling fish & game people). He will make sure that somebody is assigned every job. These jobs include: navigator (determines the route that will cut across the most numerous desirable habitats, maximum number of watersheds, etc.; will provide a map and the laid-out route to the trip leader and all the drivers; and will establish a rough timetable for the trip); photographer (photographs all fish and invertebrates caught to provide a club record, shoots the club in action, provides slides to the club at club expense, but can also keep

any of the pictures he wants for his own use; must provide the photo tank and bag or borrow the lenses and other gear he needs; in return, he is guaranteed a portion of the catch, since he has to stay with the photo gear and won't have time to get wet); journalist (who will pinpoint localities as so-many-tenths of a mile on the car's odometer from one highway intersection in such a direction, and describe the habitat and specimens collected; he will work with the next person described; he will provide a detailed log of what was collected precisely when and where and by whom if possible); biologist (needn't be a professional, only someone with state or national guidebooks to fish and plants who will be responsible for the identifications; if he cannot identify the specimen, he will get it to a university for identification; he may carry some formalin from a drugstore which he will use to pickle a sample of the catch for identification purposes; he may ask the photographer for aid in recording colors). In addition, the trip leader has the responsibility for determining that people are bringing the minimum nets required, the minimum boxes or other equipment required, and making sure that everybody gets a job. What you do not want on a trip is somebody who wants to watch, and then share in the catch. The catch belongs to those who work for it in some way. There are lots of potential jobs, and if the trip leader can't think of a sensible one, then he should make up a silly one. Everybody should have a specific responsibility, and in that way the group will work as a team rather than as a mob. Finally, the trip leader has the responsibility for habitat protection. When you leave a place, it should look as though you were never there. Pick up the area, put all trash in containers, including leaky bags, and don't trample what you don't need to trample. Take breaks as necessary, but don't reward the group until they've earned a reward. I never have a beer until I catch my first fish, and I never go thirsty.

Discussion

There are several items necessary for any good trip. For \$25 postpaid you can order the ATLAS OF NORTH AMERICAN FRESHWATER FISHES, available from P.O. Box 27646, Raleigh, NC 27611. This is the North Carolina State Museum, which produced the ATLAS. Second, you need a good state map, and if you take the time to order county maps from the State Road Department, you will not be disappointed. Finally, take the time to plan your trip well in advance. And then be sure to write it up in your club magazine, so we'll know how you did.