

COLLECTING IN YAMHILL COUNTY, OREGON

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Thinking that having a get-together with other NANFA members would be fun, I planned a fish collecting trip. I went through the NANFA membership directory and sent letters to Oregon- and Washington-based NANFA members. The trip was somewhat of a hurried idea. It was already the middle of July. There was not much time to plan the trip and to offer enough lead time so that others could join me. I chose Sunday, September 4, 1994 as the date for the trip; the date was far enough in the future to make some hurried plans and yet the trip could be undertaken during a time of good weather in Oregon.

NANFA has three Oregon-based members. Of course, I was present on the collecting trip. Neil Armentrout was attending American Fisheries Society meetings during that weekend and could not join us. Norm Edelen called me to say that he was very interested in collecting. He suggested that I invite two of his collecting partners, Ella Pittman and Joe Middleton. Ella is a member of the Greater Portland Aquarium Society and a former NANFA member, and Joe is a member of Club Snail Aquarium Society. I contacted Ella and Joe; both said that they wanted to join us and Ella wanted to bring her husband George too. There are 6 Washington-based NANFA members; none of them could join on the trip. I am sure that my lack of lead time was to blame.

I suggested collecting in the Willamette River. The Willamette is a large tributary of the Columbia River and drains the west side

of the Cascade mountain range and the east side of the Coast Range mountains of northwestern Oregon. Norm recommended Willamette River sites near Grand Island where he had success previously. Also, the sites were near to the homes of the trip participants.

Oregon's native fish fauna, when compared with the fish fauna of the Midwest and eastern United States, is relatively depauperate (Minckley *et al.* 1986). The Willamette River has been inoculated with several exotic species. Most of the exotic species introduced are sport fish, though other nonsporting taxa have been introduced too. The majority of the introductions were made by agencies and the rest by do-gooding members of the public (Lampman 1946). Two publications (Farr and Ward 1993, and Logan 1994) offer species lists that, when combined, generally reflect the fish fauna of the Willamette River and can be used as a surrogate catalog (Table 1). Even with the presence of exotic species, the Willamette River has representatives of most native fish species.

On the day of the trip, we met at Maud Williamson State Park. The park was a pleasant setting: a grove of large Douglas-fir trees surrounded by commercial walnut and hazelnut orchards, row crops, and pasture land. The park was centrally located, and only about a 1-hour drive from our respective homes. I got to the park early and hung a dip net out of the back of my pickup truck as an ensign. Norm and Joe

arrived next, and then Ella and George arrived.

After introductions, we decided that we would begin collecting at the Wheatland Ferry crossing of the Willamette River; this site was about 1 mile from the park. George said that he had been to that site several times and was going to stay at Maud Williamson State Park and use his metal detector to search for buried treasure. George wanted us to pick him up on our way to the second site. So, the rest of us piled into vehicles and headed off to the site and left George at the park.

After a short 5-minute drive, we arrived at the Wheatland Ferry crossing. We unloaded the vehicles and walked about 150 ft upstream of the ferry slip to begin collecting. We used a 20-ft x 6-ft beach seine; I brought along a 100-ft x 6-ft beach seine, but the velocity of the water was too great to use the large seine at the Wheatland Ferry site. I stepped into the river with the 20-foot seine and Norm held the beach end of the seine. We pulled the seine parallel to shore for about 30-40 feet in water up to 2 feet deep. The sediments were large gravels.

When we pulled the seine up onto the beach, we could see hundreds of small fish. The fish that caught my eye first were eastern banded killifish *Fundulus diaphanus* - a life first for me! Well, let me qualify that last statement; it was the first time I saw *live* banded killifish. I work in the Fish Collection Museum at Oregon State University and I had seen preserved banded killifish. The killies we collected were small (1"-4"), attractive, light olive green fish with electric blue bars. There were

scores of killies in the seine. I placed some in a bucket to take back - a few for my aquaria and a few for the museum - and the rest went back into the river. Also, in the seine were: coho salmon *Oncorhynchus kisutch*, chislemouth *Acrocheilus alutaceus*, northern squawfish *Ptychocheilus oregonensis*, peamouth *Mylocheilus caurinus*, redbreast shiner *Richardsonius balteatus*, speckled dace *Rhinichthys osculus*, largescale sucker *Catostomus macrocheilus*, threespine stickleback *Gasterosteus aculeatus*, mosquitofish *Gambusia affinis*, reticulate sculpin *Cottus perplexus*, torrent sculpin *Cottus rhotheus*, and some tiny sculpins left unidentified - not bad for 10 minutes of collecting.

All of the fish were small, less than 4 inches long. Most of the fish were juveniles, except the banded killifish, mosquitofish, and possibly a few of the sculpins. We collected two small coho (3 inches long), two small largescale suckers, a few mosquitofish, and perhaps two or three of each type of sculpin. By far, the most abundant types of fish were minnows; there were scores of minnows in the seine. The most abundant was the redbreast shiner. Northern squawfish was the next most abundant. Peamouth and chislemouth were relatively common. The only minnow that was not abundant in our collection at this site was speckled dace.

We performed a second pull of the small seine about 150 ft downstream of the ferry slip, this time through a patch of submerged aquatic vegetation. We collected many of the same fish at this site as we did at the first site: northern squawfish, peamouth, redbreast shiner, speckled dace, threespine stickleback, mosquitofish, banded killifish,

reticulate sculpin, and more tiny unidentified sculpins. We collected two new species here: largemouth bass *Micropterus salmoides*, and prickly sculpin *Cottus asper*. We did not collect coho salmon or largescale sucker at this site.

For the third pull, we walked downstream about ¼ mile to the mouth of Lambert Slough, the western boundary of Grand Island. Joe stepped out into the current with one end of the 20-ft seine and started walking upstream; I held the beach end of the seine. The current was strong and we made little progress against the current. Norm went into the current, upstream of the seine and tried to dislodge some cobble substrate, hoping to encourage some fish into the seine. We did not collect any specimens in this haul. We rolled up the seine and started back toward the cars.

As we were walking up the beach, a firefighter came running down the beach; he was looking for Ella. He told us that Ella's husband George had had a heart attack at the park. They resuscitated him and were taking him to the hospital in McMinnville. Needless to say, we all hurried the rest of the way to our cars and threw all of the equipment in the back of my pick up truck and sped off to the park. We got there just as the paramedics were loading George into an ambulance.

We stayed at the hospital for a couple of hours waiting to get some update on George. When the Doctor came out and told Ella that George would need to spend some time at the hospital, she went in and spoke to George for a few minutes. Ella came back to the waiting area and said that she wanted to go home. I offered to drive her, but Ella

said that she preferred to drive herself. I drove her back to her truck at Maud Williamson State Park. Ella loaded her equipment into her truck and drove off.

After Ella left the park, Joe, Norm and I decided to make one additional stop to look for fish. Well, we could do nothing else to help George or Ella, and we did have a truck loaded with collecting equipment. We headed for the Yamhill River near its confluence with the Willamette River and stopped at the Yamhill Locks for a little more collecting. We used the 20-ft beach seine to sample in a pool below the antiquated locks.

Norm and Joe picked up the seine and stepped into the pool and made a pull about 75 feet in length. The sediments were generally sands and small gravels. We did not catch as many fish or types of fish at this site as we did at the Wheatland Ferry sites, though we did collect a few "new" species. Well, "new" for the day. The "new" fish collected here were: common carp *Cyprinus carpio*, black crappie *Pomoxis nigromaculatus*, bluegill *Lepomis macrochirus*, smallmouth bass *Micropterus dolomieu*, warmouth *Lepomis gulosus*, white crappie *Pomoxis annularis*, and yellow bullhead *Ameiurus natalis*. These new fish were not abundant. Also, we collected many northern squawfish, mosquitofish, and banded killifish. All fish were returned to the river. As at the Wheatland Ferry site, all of the fish at this site were small, less than 3 inches. The only native species we collected at the Yamhill site was the squawfish. Certainly, other native fishes were present that escaped our gear.

As Norm and Joe were rolling up the seine, I used a 10-inch dip net to "fish" around the rocky stream side and the shallows near gravel bars. I collected more smallmouth bass, mosquitofish, squawfish and banded killifish. These fish, too, were returned to the river. We loaded the gear into my truck, said our "goodbyes" and drove to our respective homes.

On the way home I could think only about George and Ella. George had a triple-bypass surgery a few days after his attack, and, fortunately, he has progressed well.

In a phone call, former *American Currents* Editor Bruce Gebhardt suggested that I write an article describing this trip. I told him that I was reluctant because of what happened to George. Bruce followed up his phone call with a letter encouraging me to submit an article. After all, we did have success collecting fish; we collected at least 20 different species of fish in only four seine hauls (Table 2).

Also, Bruce suggested that George's ordeal may be a useful reminder to NANFA members to collect with a partner. For instance, if someone had an unfortunate accident while collecting, it would be nice if there was someone available to secure help. We had left George alone in the park. He collapsed in the parking area next to the entrance road; a passing motorist saw George laying in the parking area and stopped to help. If that motorist had not seen George and stopped to help him....

I don't mention George's ordeal to discourage collecting. I just hope, that when collecting, members would use the NANFA Membership Directory to find a collecting

partner. Group collecting, or going with at least one buddy is a safer way to collect.

Literature Cited

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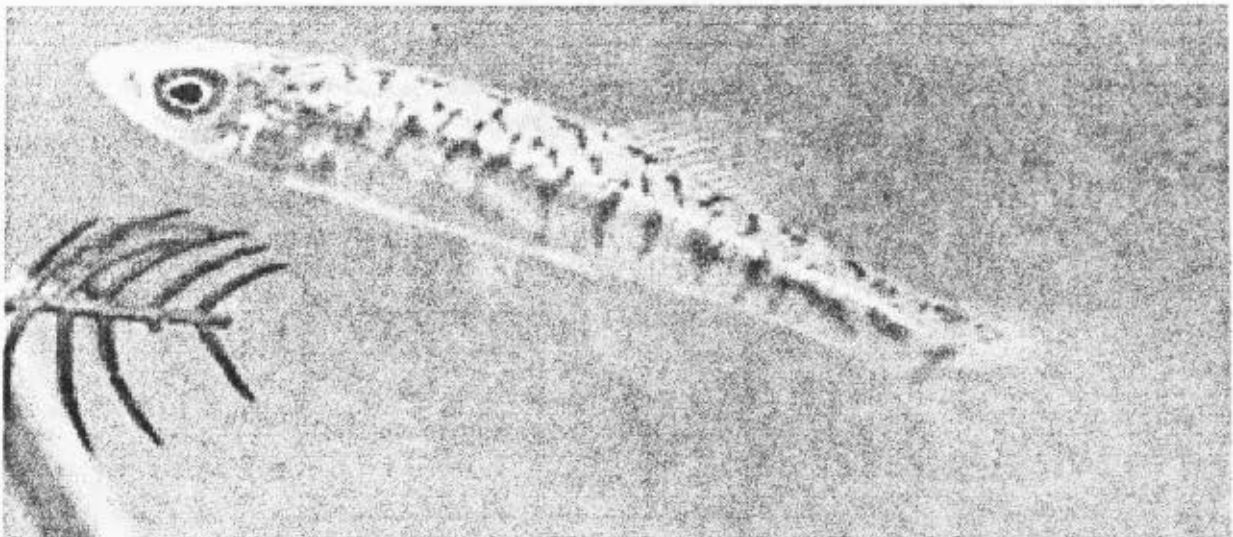
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Table 1. Surrogate catalog of Families and names of fish species from Willamette River, Oregon. This species list was generated by combining efforts of Farr and Ward (1993) and Logan (1994). Nonnative species are marked with an asterisk (*). Names of all fish species follow Robins *et al.* (1991).

Family	Species
Petromyzontidae	Pacific lamprey <i>Lampetra tridentata</i> western brook lamprey <i>Lampetra richardsoni</i>
Acipenseridae	white sturgeon <i>Acipenser transmontanus</i>
Clupeidae	American shad <i>Alosa sapidissima</i> *
Salmonidae	brown trout <i>Salmo trutta</i> * chinook salmon <i>Oncorhynchus tshawytscha</i> coho salmon <i>Oncorhynchus kisutch</i> cutthroat trout <i>Oncorhynchus clarki</i> mountain whitefish <i>Prosopium williamsoni</i> rainbow trout (or steelhead trout) <i>Oncorhynchus mykiss</i> sockeye salmon <i>Oncorhynchus nerka</i>
Osmeridae	eulachon <i>Thaleichthys pacificus</i>
Cyprinidae	chislemouth <i>Acrocheilus alutaceus</i> common carp <i>Cyprinus carpio</i> * goldfish <i>Carassius auratus</i> * grass carp <i>Ctenopharyngodon idella</i> * leopard dace <i>Rhinichthys falcatus</i> longnose dace <i>Rhinichthys cataractae</i> northern squawfish <i>Ptychocheilus oregonensis</i> Oregon chub <i>Oregonichthys crameri</i> peamouth <i>Mylocheilus caurinus</i> redside shiner <i>Richardsonius balteatus</i> speckled dace <i>Rhinichthys osculus</i>
Catostomidae	largescale sucker <i>Catostomus macrocheilus</i> mountain sucker <i>Catostomus platyrhynchus</i>
Ictaluridae	channel catfish <i>Ictalurus punctatus</i> * brown bullhead <i>Ameiurus nebulosus</i> * black bullhead <i>Ameiurus melas</i> * yellow bullhead <i>Ameiurus natalis</i> *
Characidae	pirapatinga <i>Piaractus brachypomus</i> *

Gasterosteidae	threespine stickleback <i>Gasterosteus aculeatus</i>
Poeciliidae	mosquitofish <i>Gambusia affinis</i> *
Percopsidae	sand roller <i>Percopsis transmontana</i>
Percichthyidae	hybrid bass <i>Morone chrysops</i> X <i>Morone saxatilis</i> *
Centrarchidae	black crappie <i>Pomoxis nigromaculatus</i> *
	bluegill <i>Lepomis macrochirus</i> *
	green sunfish <i>Lepomis cyanellus</i> *
	largemouth bass <i>Micropterus salmoides</i> *
	pumpkinseed <i>Lepomis gibbosus</i> *
	redeer sunfish <i>Lepomis microlophus</i> *
	smallmouth bass <i>Micropterus dolomieu</i> *
	warmouth <i>Lepomis gulosus</i> *
	white crappie <i>Pomoxis annularis</i> *
Percidae	yellow perch <i>Perca flavescens</i> *
	walleye <i>Stizostedion vitreum</i> *
Cottidae	paiute sculpin <i>Cottus beldingi</i>
	prickly sculpin <i>Cottus asper</i>
	reticulate sculpin <i>Cottus perplexus</i>
	rifle sculpin <i>Cottus gulosus</i>
	torrent sculpin <i>Cottus rhotheus</i>
Pleuronectidae	starry flounder <i>Platichthys stellatus</i>



One of the many non-native fishes (banded killifish) found by the author. Photo by K. Schmidt

Table 2. Families and names of all fish species collected by NANFA members on 4 September 1995. Nonnative species are marked with an asterisk (*). Species collected in Willamette River are marked with (W) and species collected in Yamhill River are marked with (Y). Names of all fish species follow Robins *et al.* (1991). All activities allowed under Oregon Department of Fish and Wildlife Scientific Collecting Permit #9412.

Family	Species
Salmonidae	coho salmon <i>Oncorhynchus kisutch</i> * W
Catostomidae	largescale sucker <i>Catostomus macrocheilus</i> W
Cyprinidae	chislemouth <i>Acrocheilus alutaceus</i> W common carp <i>Cyprinus carpio</i> * Y northern squawfish <i>Ptychocheilus oregonensis</i> W, Y peamouth <i>Mylocheilus caurinus</i> W reduceside shiner <i>Richardsonius balteatus</i> W speckled dace <i>Rhinichthys osculus</i> W
Ictaluridae	Yellow bullhead <i>Ameiurus natalis</i>
Cyprinodontidae	eastern banded killifish <i>Fundulus diaphanus</i> * W, Y
Poeciliidae	mosquitofish <i>Gambusia affinis</i> * W, Y
Centrarchidae	black crappie <i>Pomoxis nigromaculatus</i> * Y bluegill <i>Lepomis macrochirus</i> * Y largemouth bass <i>Micropterus salmoides</i> * W smallmouth bass <i>Micropterus dolomieu</i> * Y warmouth <i>Lepomis gulosus</i> * Y white crappie <i>Pomoxis annularis</i> * Y
Cottidae	prickly sculpin <i>Cottus asper</i> W reticulate sculpin <i>Cottus perplexus</i> W torrent sculpin <i>Cottus rhotheus</i> W unidentified sculpins <i>Cottus sp.</i> W
Gasterosteidae	threespine stickleback <i>Gasterosteus aculeatus</i> W