# A Summer Full of Collecting in Oregon

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Oregon and Washington NANFA members had fun during the summer of 1995. We went on three collecting trips in Oregon. For those of you who haven't gone collecting recently, you can collect vicariously through us.

## Trip #1: Willamette River

Our first trip was Saturday, 15 July 1995. We sampled two sites on the Willamette River that day. We met at 10:00 Saturday morning at the Oregon State University campus. Eight people went on the trip, of which Jay DeLong and Dan Logan were the only NANFA members. Also present were George and Ella Pittman from the Greater Portland Aquarium Society and some friends from Portland and Corvallis. We handed out NANFA applications; who knows, perhaps NANFA got some new members from it.

The first sample site was the Booneville Channel of the Willamette River on Kiger Island near Corvallis, Oregon, only 10 minutes from campus. The Willamette River is a large tributary of the Columbia River; the two rivers join near Portland in northwestern Oregon. The Willamette River flows from the south toward the north, draining both the Cascade Mountains and the Coast Range Mountains. The Kiger Island site was chosen because Dan had previously collected a good variety of native Pacific Northwest fish fauna there, plus examples of sunfish,

catfish and other exotic species. The 20-foot wide channel was shallow enough to easily wade and was clear and flowing. We found a variety of habitat types to collect from. A seine pulled through a 2-foot deep quiet reach full of submerged vegetation yielded hundreds of specimens from seven species: yellow perch (Perca flavescens), largemouth bass (Micropterus salmoides), bluegill (Lepomis macrochirus), warmouth (Lepomis gulosus), mosquitofish (Gambusia affinis), northern squawfish (Ptychocheilus oregonensis), and prickly sculpin (Cottus asper). The squawfish and the sculpin were the only native species. We performed a second pull through similar though deeper habitat. The results were the same, except that we also collected the exotic yellow bullhead (Ameiurus natalis). Then we sampled a shallow riffle with the seine, collecting northern squawfish, largescale sucker (Catostomus macrocheilus), chislemouth (Acrocheilus alutaceus), redside shiners (Richardsonius balteatus), speckled dace (Rhinichthys osculus), reticulate sculpin (Cottus perplexus), and mosquitofish. Using an electrofisher, we sampled around woody debris in some quiet, 4foot deep water and collected species we missed using the nets: larval Pacific lamprey (Lampetra tridentata) and adult sand rollers (Percopsis transmontana). Some large fish slammed, unseen, into our legs, but we were unable to capture them. We speculated that they may have been carp, suckers or trout. We



finished collecting at Kiger Island at 1:30 p.m., went back to Corvallis for a quick lunch, then north to Wheatland Ferry.

Wheatland Ferry was a site on the Willamette River near Salem we had sampled in 1994 with good success. We were disappointed with the Wheatland Ferry site this trip. There was little habitat and few fish. Where previously we had found pieces of woody debris and patches of submerged vegetation to sample through, was now only gravel. At this site, the Willamette River is about 150 yards wide. We saw many fish schooled near the shore, but they were so small that they went through the 3/16 inch mesh of our beach seine. We did, however, have one pull of the seine collect over 100 fish. We collected five "new-for-the-day" species here: smallmouth bass (Micropterus dolomieu), longnose dace (Rhinichthys cataractae), peamouth (Mylocheilus caurinus), threespine stickleback (Gasterosteus aculeatus), and a single eastern banded killifish (Fundulus diaphanus). We also collected lots of largescale sucker, squawfish and chislemouth. In 1994 we collected hundreds of killifish at the same site. This time, after we finished our collecting, we walked along the shoreline and saw several other killifish. At 4:30 p.m. we reflected on the day and decided to meet again. We then headed for our respective homes. It was a good day.

Peter Unmack (NANFA Australia, by way of University of California, Davis) wanted to go on the trip but couldn't make the planned date. Peter was in late June and wanted to go collecting. So Peter called Dan and arranged a date to collect fish. On Monday, 26 June 1995, Peter and Dan collected at the Kiger Island site. They didn't have much time to collect, but enough time to throw a seine in the back of Dan's pickup. They didn't catch as many species as they had hoped for, but they did catch lots of individuals, including largemouth bass, bluegill, warmouth, yellow perch and mosquitofish—all exotic and native northern squawfish, chislemouth, redside shiner, largescale sucker, and prickly sculpin.

#### Trip #2: Siuslaw River

The second NANFA collection trip for 1995 was Saturday, 12 August. We collected at five sites on the Siuslaw River, which is on the central Oregon coast, originating in meadows on the eastern side of the Coast Range mountains near Eugene, Oregon. The river bisects the range and runs into the Pacific Ocean at Florence, Oregon. The river has a different freshwater fish fauna than most other Oregon coastal streams by virtue of the presence of suckers, redside shiners and squawfish. In addition, the Siuslaw River has sculpins, anadromous trouts and salmons, sturgeon, and lampreys—typical freshwater and anadromous fauna of most Oregon coastal streams.

The trip was an all-day affair. NANFA members Neil Armentrout, Dan Logan and Jay DeLong participated. We met in Florence at 7:00 a.m., began our collecting in the estuary and then collected at four sites upstream until we ran out of steam and daylight at 7:00 p.m. about 25 miles from the river's mouth. Neil added much to the day by sharing the natural history of the fishes collected and the history of natural resource management of the area.

Our early-morning collecting at the estuary was timed to coincide with low tide, but the water was still too deep for us to sample beyond about 20 feet from dry ground (well, not exactly *dry* ground; with the tide out, the sand flat was more like quicksand, and we all got mired in it). Our first site was on the southwest side of the estuary, west of Florence. We made several seine hauls through chest-deep water and collected the following species: butter sole (*Isopsetta isolepis*), speckled sanddab (*Citharichthys stigmaeus*), bay pipefish (*Sygnathus leptorhynchus*), shiner surfperch (*Cymatogaster aggregata*), threespine stickleback, an unidentified Irish lord (*Hemilepidotus* sp.), Pacific staghorn sculpin (*Leptocottus armatus*), and unidentified larval smelt (Osmeridae). The Florence Kite Festival was underway while we were there. As we seined, we were treated to a display of bright colors of the many kites against the blue morning sky.

The second site of the day was several miles upstream at C & D Dock, a private boat dock. The water was too deep to sample with seines, so Dan used a cast net from the dock and collected two species: redside shiner and threespine stickleback. Redside shiners were especially abundant at the site. Anglers at the dock told us that they had caught chinook salmon (*Oncorhynchus tshawytscha*), cutthroat trout (*Oncorhynchus clarkii*), and Umpqua squawfish (*Ptychocheilus umpquae*), at this site earlier in the day. Typically, minnows are uncommon in estuarine sites, but both the redside shiners and squawfish are commonly collected in the estuary of the Siuslaw River.



Figure 1. Left lateral view of blacklined form of speckled dace, *Rhinichthys osculus nubilus*. From Carl E. Bond, *Keys to Oregon Freshwater Fishes*. © 1994 OSU Book Stores, Inc., Corvallis, Oregon. All rights reserved. Used with permission.

The third site, Farnham Landing, was the last site within significant tidal influence. Here the river was about 100 feet wide and shallow enough to seine, though the many boulders made seining difficult. We collected several American shad (*Alossa sapidissima*), Umpqua squawfish, redside shiner, speckled dace, largescale sucker, prickly sculpin, reticulate sculpin, and coastrange sculpin (*Cottus aleuticus*). The speckled dace was the blacklined form (*Rhinichthys osculus nubilus*), which differs from the typical speckled dace by having a heavy black line on its lateral flank instead of typical overall speckling (Fig. 1). The water level rose while we were sampling this site, making the return trip across the river challenging. Nimble footwork was necessary as we balanced on submerged boulders which had been above water only a short time before.

The last two sites, one on the Siuslaw and the final one on a tributary called Lake Creek, contained abundant crayfish (*Pacifastacus leniusculus*) and we collected many of the bright red crustaceans in our net. Fish species were similar to those from Farnham Landing, except for the American shad. When we quit, the sun had already dropped below the tops of the trees around Lake Creek. It had been a long and rewarding day.

## Trip #3: Sauvie Island

No Washington members had collecting permits for their home state, so Dan planned a trip that was nearer their homes and still under the jurisdiction of his State of Oregon permits. The island is located at the confluence of the Columbia River and the Willamette River about 10 miles north of Portland. Sauvie Island is large, about 15 miles long and 4.5 miles wide with several shallow lakes and ponds, most of which are connected by sloughs. Originally the island flooded frequently, but flood control dams on the Columbia and Willamette rivers and dikes on the island have reduced flooding. One dike closed the upstream facing slough on the island and siltation of the ponds is now a problem. The downstream facing sloughs are still open and the water level in the lakes is affected by daily tidal activity. The Oregon Department of Fish and Wildlife (ODFW) has purchased much of the island and has created the Sauvie Island Wildlife Area to supply wintering habitat for waterfowl and provide public areas for waterfowl hunting. Besides waterfowl, there are 250 species of birds that visit Sauvie Island, making it a popular destination for bird watchers as well. The island is popular with anglers looking for warm-water species.

Dan spoke with an ODFW biologist at the wildlife area to ask for suggestions for good collecting sites and to ask what species of fish we should expect to collect. The biologist had limited information; we were on our own. When we arrived at the Sauvie Island Wildlife Area office on the morning of 9 September, the ODFW biologist was there with 12 volunteers from the Oregon Bass and Panfish Club (OBPC), a local angling club. Also, there were people from NANFA, Greater Portland Aquarium Society, Club Snail Aquarium Society, and Oregon State University. Representing NANFA were Louise Christensen-Zak and her husband and two children, Jay DeLong, Norm Edelen and Dan Logan. Twentytwo people in all were present.

We sampled six lakes and the deep slough (Multnomah Channel) that borders the western side of Sauvie Island. We used beach seines mainly and to a lesser extent cast nets, dip nets, and hook and line. We were really pleased with the abundance and diversity of fishes—20 species of fish from 10 families! The condition of many adult fish was quite good. In particular, larger bass, crappie, bluegill and warmouth were very thick and deep bodied. We caught warmouth that were the largest we have seen in Oregon.

Steelman Lake was the first site sampled. All of the collecting gear was grabbed by the enthusiastic samplers. The first piece of equipment taken by an overeager group was a 150-ft by 6-ft beach seine. Obviously that team had never pulled a seine before, at least not a seine that big. And they tried pulling the seine through vegetation, to boot. This shallow, very weedy lake yielded no native species and 14 species exotic species: common carp (Cyprinus carpio), goldfish (Carassius auratus), yellow bullhead, brown bullhead (Ameiurus nebulosus), channel catfish (Ictalurus punctatus), mosquitofish, eastern banded killifish, pumpkinseed (Lepomis gibbosus), warmouth, bluegill, smallmouth bass, largemouth bass, white crappie (Pomoxis annularis), black crappie (Pomoxis nigromaculatus), and yellow perch. After identifying all the fish, Dan read a few passages from The Coming of the Pond Fishes, an interesting book written in 1946 by Portland newspaper writer Ben-Hur Lampman. One chapter discussed turn-of-the-century angling and fish stocking on Sauvie Island.

The second site, Round Lake, was similar to Steelman Lake in that it was shallow and weedy. This time, the 150-ft seine was the last piece of equipment to be taken. An interesting find was the abundance of mirror carp. A mirror carp is the same species as common carp though with larger and far fewer scales.

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The fish was a life first for most everyone on the trip. One group collected a largemouth bass that was obviously infested with yellow grub—an interesting parasite that lives part of its life in a snail, then part of its life in a fish, and part of its life in a bird. In addition, we collected goldfish, largescale sucker, yellow bullhead, brown bullhead, mosquitofish, pumpkinseed, warmouth, bluegill, smallmouth bass, largemouth bass, white crappie, black crappie, and yellow perch in Round Lake.

The next site was the Multnomah Channel. Since it was neck-deep it was difficult to sample with our seine, yet we still managed to collect two native species (northern squawfish and threespine stickleback) and five exotics (American shad, white crappie, black crappie, carp and mosquitofish).

After eating lunch, we sampled in Big McNary Lake. Big McNary Lake did not look promising; the 3-foot deep lake was muddy with a silt/clay substrate and lacked visible habitat. We were pleasantly surprised when our seine hauls captured nine species: carp, brown bullhead, mosquitofish, pumpkinseed, warmouth, bluegill, largemouth bass, white crappie, and black crappie. Additionally, we had one very special find—freshwater shrimp. None of us had ever seen freshwater shrimps in this region before—a life first for us all! (See the Fall 1995 American Currents for more information on this shrimp.)

We only needed to cross a 100-foot wide peninsula to go from Big McNary Lake to Little McNary Lake. In Little McNary Lake, we collected the same fish species as from Big McNary Lake, with the addition of yellow bullheads.

Our next stop was at Haldeman Pond. This was an old gravel quarry approximately one acre in size. Its steep sides made it difficult to sample, but a few seine hauls near the bank netted us mosquitofish, white crappie and yellow perch. Nearby anglers were catching yellow perch as well.

Our last stop was Webster Lake. This small, weedy pond was named after Jack Webster—longtime member of OBPC. Jack was present on this trip and was a "big fish" storyteller. But then again, with members of an angling club along on the trip, we expected some yarns. At this site we collected a single native prickly sculpin and several exotics: mosquitofish, pumpkinseed, warmouth, bluegill, white crappie, and black crappie.

Louise took some mirror carp home in a small ice chest. She had no aerator, but did float a small plastic container of ice in the chest. She didn't get home until 24 hours later, yet all the carp survived the trip. Louise placed the mirror carp in the garden pond of a delighted neighbor; during the first night the fish jumped out of the pond and were found dead the next morning. Louise also took home some pumpkinseeds and sticklebacks for use is a school project; she hopes to foster an increased awareness of native fish fauna in the students.

The collecting trip at Sauvie Island was a great success and a good long day. Most of the participants fell by the way by noon or 1:00 p.m., though Jay, Dan and two people from OBPC stayed until 7:00 p.m.! The only disappointing aspect of the trip was the lack of native fishes in the lakes we sampled. We caught a single largescale sucker in Round Lake and a single prickly sculpin in Webster Lake. None of the lakes yielded the native threespine stickleback or northern squawfish we found in nearby Multnomah Channel. The exotic fishes were very common and widespread; we collected hundreds of specimens. Admittedly, our collections weren't exhaustive, as we only wanted to see examples of the local fish fauna. There may have been species present in the lakes which did not appear in our collections. One such species would be walleye, which have been recorded in angler surveys at Steelman Lake.

#### **Final Comments**

We participated in an interesting series of collecting trips during the summer of 1995. We met old friends and made new friends and spent quality time together. We sampled different habitats and the weather was always beautiful. We collected 36 diverse species of fishes. We collected marine fish, freshwater fish and anadromous fish. We strongly encourage you to contact enthusiasts in your area and plan a collecting trip with them. We are sure you will have a great time! We are going on several collecting trips this year in Oregon and Washington and we'll be sure to let you read about our adventures.