COLLECTING IN THE TWILIGHT ZONE
by Konrad Schmidt, St. Paul, MN

About seven years ago, I started collecting at night and was shocked to find a radical difference in species composition and abundance compared to day collections from the same site. I have since integrated this technique into my survey regime and now give almost every stream a thorough nocturnal working-over.

Generally, I find these surveys so engrossing that I am completely oblivious to anything beyond the small world my head lamp illuminates. The only concern I have is tripping over logs or stepping into deep holes which has yet to happen (at night anyway).

There are also some fringe benefits that highlight these experiences, such as spectacular shows of Northern Lights and shooting-stars, or a chorus from the the resident frogs, owls, and coyotes that is regularly interrupted with the "KER-SPLASH" of protesting beavers as I trespass through "their" stream. Along the way, I have also have had a bizarre episode or two that made me question why I get involved in these weird and "submersive" activities.

In August 1989, I was finishing up my survey work at Pipestone National Monument where I was developing a species list of fishes found in the monument's stream and lakes. I let the superintendent know that I wanted to do a "little fishing after hours." He said that was fine and "assured" me that the Sheriff's office would also be informed of the survey.

I arrived at the the stream just after dark and was looking forward to witnessing a coinciding cosmic event--a total lunar eclipse. Between stumbling over boulders and counting many fish, I sneaked a peak here and there at shadow slowly consuming the full moon. When totality occurred, the moon was still visible, but had an eerie, dull copper hue.

Finishing the survey, I headed out to the car feeling nothing could possibly top this special night's performance. But I was wrong! As I pulled around the maintenance buildings, I found the exit blocked by a car with its blinding high beams on. All I could see were the words, TAX EXEMPT, on the bottom edge of the license plate. There we sat for a few seconds. Then the car backed out and let me pass, but my suspicions were confirmed as my lights hit the reflective sheriff's star on the door.

Nobody got out and no flashers went on so I waved as I pulled away believing the sheriff's office did receive the message. I was about a half mile away when I noticed the sheriff's car in my rear view mirror following in hot pursuit.
and of course with the Christmas ornaments on. I pulled over and rolled down the window.

The officer bent over with a big grin and asked, "Would you mind telling me what you were doing in there?" I realized I had some explaining to do.

The next month, I found myself at the opposite end of Minnesota, working on a fish list for Schoolcraft State Park. I was parked down at the boat landing waiting for it to get dark. I was brushing up on some northern fishes in my key when I thought I heard footsteps coming down the road. I turned to look, but my window was completely fogged. Then, I felt a gentle shake like somebody or something had just leaned on my car. I could feel my hair bristle on the back of my neck. My imagination was running wild because I had seen a large black bear lope across a road on the way to town earlier in the evening.

I started the car, turned on the lights, and headed up the road. Was I relieved to see a raccoon scurrying into the brush. Thinking that was the end of that, I sat down the bumper to put on my waders. Something rustled in bushes and the raccoon emerged, waddling straight for me. I thought, "Is this just a campground pest or could it be rabid?"

I decided not to take any chances and tossed some pebbles at the raccoon which stopped in its tracks, snarled, and disappeared once again. I knew my new-found buddy would be back, but just maybe I could finish up before his return. I started seining when I heard the little sneak snaking his way through the grass to the river's edge where he quickly found some clams and began to meticulously clean the tasty morsels.

He was occupied and out of my hair, so I continued sorting and counting fish until I felt something watching me. I looked back over my shoulder and almost jumped out of my waders. Guess who was sitting less than two feet away. I shouted, "That's it! I've had it!" I rolled up my seine and used the poles to broom-ball this guy out of my life.

I returned to the river confident that I'd got my point across, but then I heard something coming from over by the car. I thought, "What's one more delay?" and went to investigate, shining my light under the car and walking around it twice.

Absolutely nothing! I started back and didn't get six feet when I heard the noise again. I pivoted around and jumped back, startled to see Ding-Dong sitting on the car hood. I shooed him off, but realized my nemesis had won and called it a night.
The next morning, I asked the Park Manager about the friendly raccoon. He replied, "Oh, you must have met 'Moe.' My daughters and I raised her from a baby and she is kind of the campground mascot." Suddenly I felt like a child-molester, and quickly changed the subject.

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**TREATMENT FOR PARASITES (FLUKES SPECIFICALLY)**
by Valerie F. Burtson, S. Lake Tahoe, California

The following is a remedy that is widely used by Koi keepers, and is very effective. I recently treated my native-fish tank with the same ingredients, with good results. I had introduced some Lahontan Redside Shiners and Tahoe Suckers, who appeared fine at the time, but subsequently began scratching (flashing) and rubbing their bodies on the gravel. A miniature version of the problem that my Koi had, after spending the summer in an outside pond. Well, the Koi are pretty sensitive to medications, and they came through the treatment fine. I had tried Formalite, and then Clout, but the fish were still flashing.

Treatment is with Formaldehyde (Formalin) in a 37-percent solution, combined with malachite green. Dosage is one teaspoon of Formaldehyde per fifty net gallons, and one drop of malachite green, per gallon. Treat every three days, for three treatments. A water change must be done between treatments; one-third to one-half of the tank water must be changed, to avoid a toxic build-up of chemicals. Three days after the last treatment, do another water change. If the infestation is really severe, treatment may be repeated.

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**NEW MEMBERS. CHANGES. continued from p. 5.**

**CHANGES**

**Florida**
BORGIA, Andrew P., to 3300 Duck Ave., Key West, FL 33040, 305-294-9225, 02-91

**Hawaii.** See Texas.

**Illinois**
PAGE, Lawrence M., to 4 Wildwood La., Mahomet, IL 61853, 217-586-3608, 01-91

**Texas**
BLUM, Bob, to 8692-B Skillman St., #411, Dallas, TX 75243
(from Hawaii)