ICE-WATER SUNNIES

by Michael Lucas, East Rochester, New York

By the time February arrives here in upstate New York, the cabin fever is just too much to endure. Anything even resembling a thaw is enough to entice me into the frigid streams. The collecting is fairly unproductive—unsurprisingly, since the water temperature is generally near freezing, and cold-stiffened arms and legs greatly reduce the time spent sampling. Another problem is that most waters are frozen over even during short periods of unseasonably mild weather.

This year, 1987, my annual ice-water collecting trip was made to a small stream just east of Palmyra in Wayne County. I had only sampled this site once previously, in late October of 1985. Then the 72-degree (F) air temperature was nearly twice as high as on this most recent trip. On the first visit, I collected Pumpkinseed Sunfish (Lepomis gibbosus), Bluegills (L. macrochirus), Rock Bass (Ambloplites rupestris), Creek Chubs (Semotilus atromaculatus), either Satinfin or Spotfin Shiners (Notropis analostanus/spilopterus), Central Mudminnows (Umbra limi), Johnny Darters (Etheostoma nigrum), Brook Sticklebacks (Culaea inconstans), and White (or Common) Suckers (Catostomus Commersoni).

As I approached the collecting site, heading east on Rt. 31, I wondered: Would the water be open, or iced over? If open, would the water be too high? I also hoped for better luck than on my February, 1986 ice-water trip to another stream, where I suffered through 28-degree (F) temperature, a hole in my waders, and a total catch of one Bluntnose Minnow (Pimephales notatus). Luckily (?), the water was open in most areas, and I was actually catching a fish here and there, though the holding bucket was in no danger of overcrowding. After about an hour in a light freezing rain, I decided to call it quits and take the first Creek Chubs, White Suckers, Johnny Darters, and crayfish home to feed my larger sunfishes.

As I was walking out of the stream onto the 1-1/2"-thick ice ledge over the 6-12" shallows, the ice began to crack. After a few well-placed jumps, a couple large sheets of ice broke loose. Underneath the ice, I found the same thick mass of vegetation as in the fall. It was much too thick to pull my nets through, as I only had a small seine and a 10" dip net. I kicked through a small area, dragging the dip net through the now more open water. This resulted in one White Sucker. In this process, I tangled a mass of plants on my foot. As I shook it off, I noticed a small 1-1/2" Pumpkinseed Sunfish, seemingly frozen stiff, encased in the plants. I picked it out and it didn't move

at all until dropped into the bucket, at which time it barely flicked a fin. My first thought was that this behavior was due to the shock of the cold air...or do fish hibernate? I took off my gloves and pulled up clumps of plants. Shortly I found six more small Pumpkinseeds in the same state of inactivity. No net was needed; if they fell out of the plants, I could calmly reach down and pick them out of the 36-degree (F) water. It couldn't have been the shock from the cold air; a few sunnies were spotted before I lifted the plant mass clear of the water, and I was again able merely to reach into the water and handpick the fish. I also found a more active Brook Stickleback and a Fathead Minnow (Pimephales promelas). Bluegills and Rock Bass were not found, nor were the Satinfin/Spotfins or Central Mudminnows. I was not able to sample any deep pools; perhaps that is where they were. If so, though, why weren't the small sunnies in the pools too?

I called the New York State Department of Environmental Conservation Bureau of Fisheries in Avon, N.Y. and described the incident to a fish-and-wildlife technician. He said he had never heard of such behavior in our local fishes. In fact, the adult Pumpkinseed Sunfish was a frequent catch of the ice fishermen on many of the local lakes. When told there was no noticeable gill movement, he said it sounded as if the fish had been anesthetized, or stunned when I broke the ice, but he really could not be sure, as there is quite a variance in cold-water activity of different species.

Perhaps some other ice-water collectors have some experience or knowledge with native fishes' cold-water behavior and could share it with the rest of us. Unfortunately, the night of my trip, we got hit with a cold spell and a foot of snow. Maybe I should take a hint from the sunnies and curl up in my fish room till spring.