

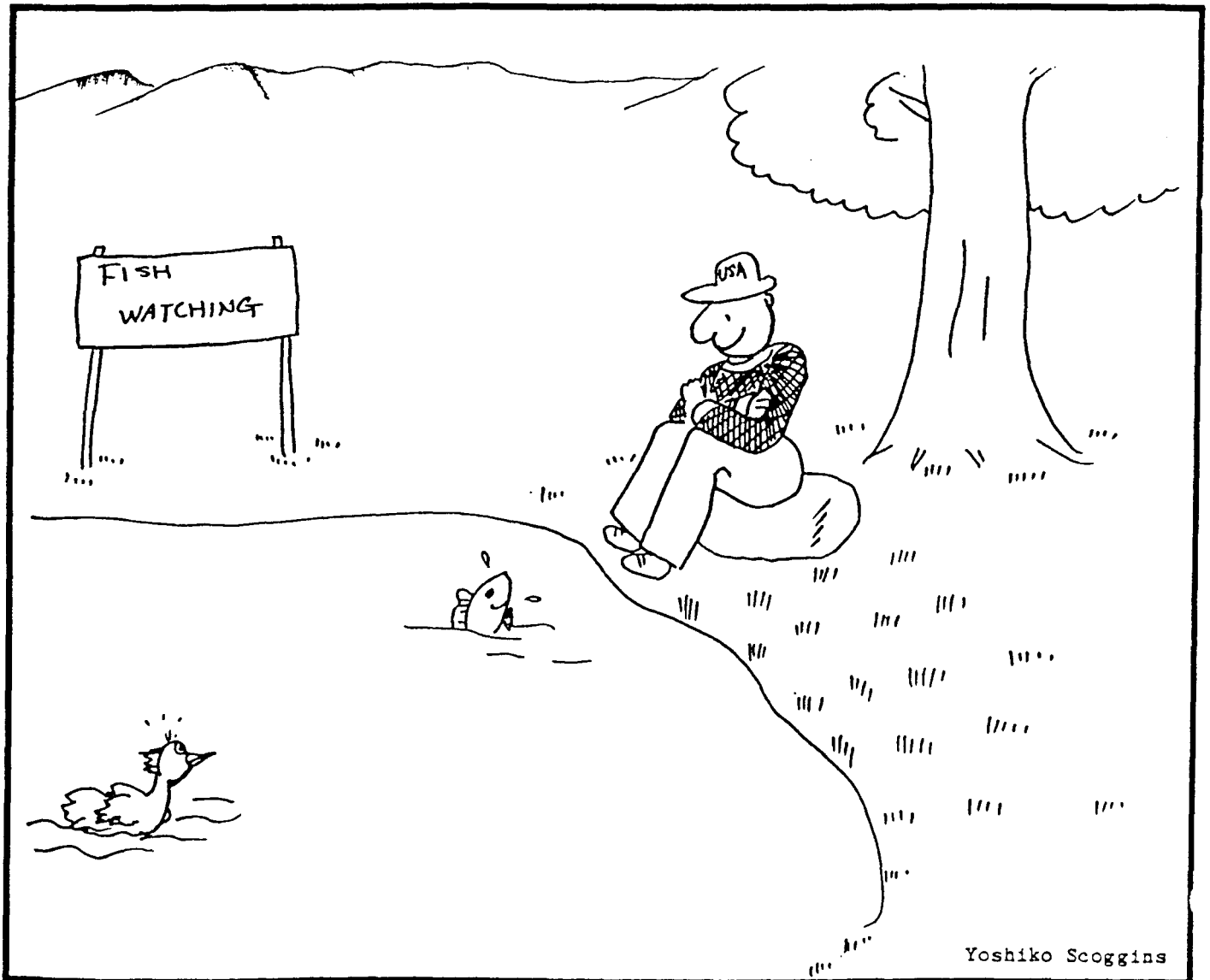
Pumpkinseed Spawning

by Bill M^cLarney

PUMPKINSEED SPAWNING -- A VIEW FROM THE POND'S EDGE

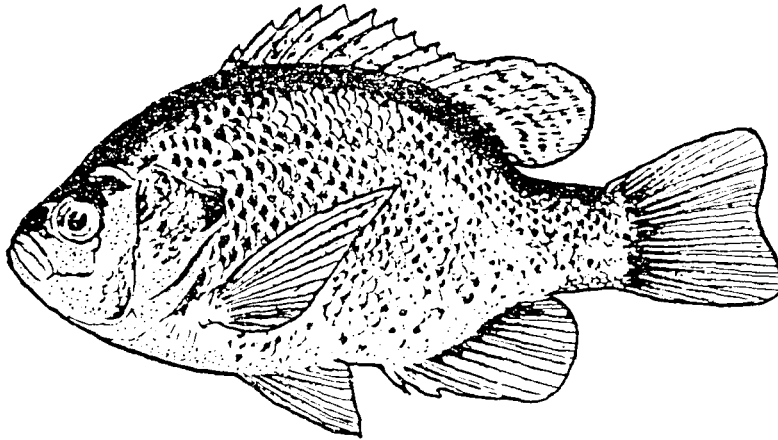
Memorial Day weekend. Lots of tourists and traffic on Cape Cod. We who live here tend to stick close to home. It is my good fortune to live between two ponds -- a deep, cool one and a shallow, weedy one. I have just returned from a delightful morning on the bank of the latter pond, watching the pumpkinseed sunfish (*Lepomis gibbosus*) spawn.

In an inlet perhaps 20 feet long, 10 feet wide and not over a foot deep, 13 circular nests, each about 2 feet across, have been visible for a couple of weeks. Soon after the males finished constructing the nests, a spell of cold weather set in, and the egg and milt-distended fish have had to wait. Yesterday was our first full sunny day. Today the water in the inlet is 74°F, and the fish are ready. Every nest is occupied at least by a hopeful male, if not by a pair. The solitary males are strutting about with fins spread, showing off their style and good looks, while the pairs are actively spawning.



PUMPKINSEED

Lepomis gibbosus



DISTINGUISHING CHARACTERISTICS

Opercular lobe with a spot of orange or red on lower part; cheeks with prominent blue and orange stripes.

The nest best suited for my intimate observation is being used by one of the largest pairs. The female appears to be about 8 inches long and the male perhaps 7. Thanks to a bush which is neither too dense nor too sparse, I can lie on my belly with my nose about 3 feet from the action.

The colors are spectacular; the pumpkinseed is among the showiest of North American freshwater fish. Both fish bear the vertically arranged chain links characteristic of pumpkinseeds under excitement or stress. The female is nearly round in profile and metallic green and chartreuse when the sun catches her. The male is suffused with orange and appears slightly translucent, as if even the muscle tissue were orange. Both display the metallic blue radiating lines on the gill cover and the subtler, but equally lovely, iridescent blue edging of dorsal fin and tail.

They are circling now, clockwise, vents pressed together. First the sun, at my back, catches one fish, then the other, as they rotate. Stop. Change position. Counterclockwise. At the height of their excitement, the female rolls all the way over, horizontal to the bottom, circling, quivering and flashing all the while.

From time to time, one of the solitary males transgresses on another's territory. The offended male dashes to assault the other. Likely as not his helter-skelter flight leads across yet another nest. The result of the chain reaction may be up to half a dozen males dashing and dodging frantically, occasionally breaking the surface.

A pursued male strays into "my" nest. The resident male charges him, extending his dark opercular flaps, with their metallic blue upper edge and bright red tip, until they are almost perpendicular to his body. With the interloper expelled, he lowers his flaps and darts jealously back to the female.

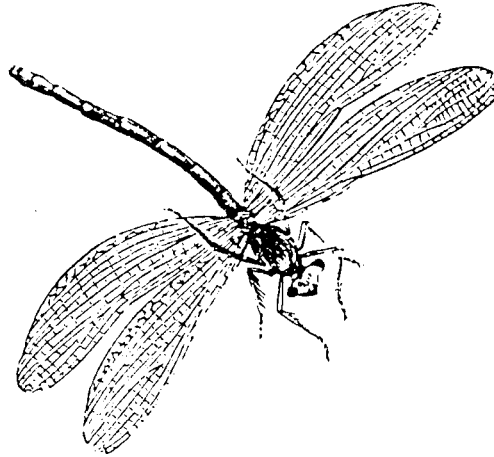
A more serious threat are the yearling pumpkinseeds and bluegills (*Lepomis macrochirus*), distinguished by the dark blotch at the forward base of the soft dorsal fin and solid, unbroken vertical stripes) which cruise the shoreline hoping for a chance at an unguarded egg. These are chased as vigorously as intruding males, as is a 5-inch largemouth bass (*Micropterus salmoides*) which wanders into the party.

From a small brush pile almost under my nose, a new shape emerges -- a 12-inch chain pickerel (*Esox niger*). The pickerel makes virtually no disturbance, propelling itself only by rapid fanning of the perfectly transparent pectoral fins. "I am only a stick," says the pickerel.

The pickerel reaches the edge of the nest. Another threat? For now, no. Its interest is in the small sunfishes which prey on eggs: the relationship with the spawning pair is symbiotic. The male recognizes this, and lets the pickerel pass with only a short intention movement and a perfunctory flaring of the gill covers.

A newly emerged damselfly, blown from its perch, floats over the spawning fish, fluttering weakly. Later, in the summer, its chances would be slim, but at the moment the pumpkinseeds have little interest in food. The damselfly reaches a twig and climbs up to dry its wings in safety.

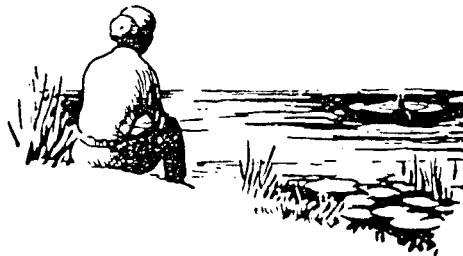
My pair have been circling and trembling for at least a half hour since I arrived. From time to time the male appears to investigate the female's vent, perhaps to see if eggs are still being produced. Finally he seems satisfied that she is spent and, with a savage thrust, mouth open and gill flaps extended, he drives her into deep water.



Perhaps later he will invite another female to share his nest. But from now on he will be responsible at least for this female's eggs and young, and he has already commenced fanning them with fluttering fins and undulating body motions. Nearby a late-starting male is still cleaning out his new nest, vigorously sweeping detritus off the gravel with similar, but more vigorous, undulations.

Soon I will be able to see the wriggling mass of larval pumpkinseeds, then the clouds of tiny but recognizable fish, still guarded by the male. The theme of the drama will change from romance to survival, as the pickerel, bass and other predators do their best to prevent overpopulation.

I could collect some pumpkinseeds from the pond and maintain them in an aquarium. With good diet and attention to lighting I could appreciate their beauty there as well as in the pond, and not have to contend with the vagaries of weather. With some effort, I could perhaps even breed them. But I would have to work much harder than I have this morning, and I assuredly would not observe the drama of the pickerel or the damselfly.



Which brings me to the point of these words, other than simply to share my pleasure in the pumpkinseed. With all due respect to the aquarium hobby, aquatic science and fishing for recreation or food, I wish to remind the reader of yet another way to enjoy our native fishes -- fish watching in the natural environment. Think of the dedication and sophistication with which bird watchers pursue their pleasure, the attention paid to wild flowers and trees, or the people who make expeditions in the hope of just catching a glimpse of some wild mammal. Isn't it surprising that no one ever talks about fish watching? Without denying the limitations and difficulties posed by the aquatic environment, there is still much to be seen and enjoyed in shallow water, and without the expense of aquariums, scientific gear or fishing tackle.

Of course there are knowledge and techniques to be acquired before fish watching can be enjoyed to its fullest. I have been surprised to find that even some good collectors seem unable to see a fish before it is in the net, but some of us must be fish watchers. Why are there no publications or organizations devoted to the art? Might this not be an appropriate task for someone in NANFA? If we are truly concerned with the conservation of North American aquatic life, we will need all the sympathizers we can get. What better way to enlist others than by aiding them to enjoy this delightful and totally non-consumptive way of enjoying the fishes?

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