



CHAPTER 8

BIG EAT SMALL (predator-prey)

The rising sun brightens the shallow waters of the pond making the **nocturnal** insects and animals retreat to the depths, or hide in the dense plant growth close to shore. As the sky lightens and the air above the pond begins to warm, another day starts for the **diurnal** species, or those active during the day. Insects become active, birds begin to sing and the creatures of the aquatic world start their day prowling for prey.

Dragonflies and damselflies fly above the water, some hunting, some mating, and some depositing their eggs on the surface film.

A rainbow trout swims along the outside weed edge looking for a meal. Rainbow trout are opportunistic predators; they eat scuds (a fresh water shrimp), small fish, or damselflies.

The trout effortlessly goes to the surface and eats a passing damselfly. Although the northern pike was 10 feet away it noticed the sun light reflecting off the silvery rainbow trout as the trout caught its meal, the damselfly. The pike with its torpedo-shaped body and rearward placed fins was able to reach the trout in not much more than a second. The trout, with its eyes on the sides of its head, saw the approaching northern pike and darted away to the safety of the weeds.

The pike, not ready to give up on the potential meal, stares into the plants. By using its pectoral and pelvic fins, it is able to hover in place, waiting for the trout to accidentally give its hiding place away.

After a while the trout feels safe enough to continue its search for more food. As soon as the trout leaves the protection of the weeds the pike resumed its attack. The pike missed when the trout quickly turned to its right and missed again when the trout turned to the left. This was when the trout made its final mistake. It tries to out run the pike.

The trout's body, round and thin, makes it very maneuverable, but it is no match for the speed of the pike. With its forward-placed eyes, the pike zeroed-in like a heat-seeking missile and quickly overtook the trout.

In its simplest form the predator-prey relationship can be explained in three words: Big Eats Small.

As with most rules of nature, this isn't written in stone. For instance, with teamwork, a pack of wolves can take down a moose which is much bigger than the individual wolves. Or a human with rod and reel, can catch something as large as a great white shark.

As anglers, our success depends on how well we understand what goes on below the surface. If we know where a fish lives (its habitat), what a fish eats (its prey), and how it reacts to seasonal changes, our chances of success are greatly increased.