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By Ted Williams

Bittersweet Fruit

If you live from Rhode Island west to Kansas and south to Texas and Florida, autumn is the time to get perspective on the golf ball–size fruits of the persimmon tree. Pick one early in the season when they are not yet ripe, and take a bite—a little bite. If you have a canker sore, the bitterly astringent tannic acid in the fruit may even be curative, but the first question you will ask yourself is: How can such a vile-tasting fruit be so popular? For the answer wait a few weeks and try a ripe persimmon, which you will find sweet, juicy, and delicious. While some persimmons may stay on the tree all winter, most will quickly disappear as opossums, wild turkeys, mockingbirds, deer, raccoons, foxes, squirrels, and countless other wildlife species glut themselves on them.

Gentle Monsters

They purposefully drive away fishermen by smearing their lines with slime; they deliver vicious, venomous bites; they wipe out game fish. All this and more you will learn about the hellbender—America's largest amphibian—if, that is, you conduct your research in bars. Not a word is true. The eastern hellbender—reaching lengths of more than two feet and weights of as much as five pounds, has a flattened head and body, tiny eyes, and folds of loose skin that drip with slime—only looks like it stepped out of hell. Actually, it is shy and utterly harmless. Now these aquatic salamanders are breeding in cold, fast streams from New York to southern Illinois, and south to Mississippi, Alabama, and Georgia. The male hovers over the female in a nest he has recently excavated in bottom rubble, fertilizing her eggs externally (unusual for salamanders). Eastern hellbenders coevolved with trout, which prey on them when they're young. When an eastern hellbender smells a trout it seeks shelter under a rock or log. But a subspecies—the Ozark hellbender, inhabiting southern Missouri and northern Arkansas—did not coevolve with trout, and the scent of these alien predators, recently introduced to their habitat by game and fish agencies, triggers no such escape reflex. This may partially explain why Ozark hellbenders are declining.

Prairie Homemakers

Now, during their mating season, badgers are less shy and solitary than usual, and you have your best chance of seeing one as it waddles across fields or grasslands, from the Great Lakes states to California. Badgers are squat, grizzled mustelids (a family that includes weasels, minks, ferrets, skunks, otters, and wolverines). And like most mustelids, they emit a foul-smelling musk when disturbed. No other animal—even a human with a shovel—can dig faster. Badger holes provide burrowing owls, snakes, and many other species with shelter and den sites. In the West and Midwest coyotes and badgers often form hunting partnerships, pooling their digging and pouncing skills. The ill-tempered badger will reject a coyote's invitation to romp but will allow it to rest beside it and even touch it. At the badger's approach the coyote will wag its tail and roll on its back in delight.

Sharp and Dangerous

Throughout most of North America our smallest forest hawk is moving south toward its winter quarters in the southern United States and Central America. The jay-size sharp-shinned hawk, so named for its thin legs, is a diminutive version of the Cooper's hawk. Mature birds have barred breasts, white-tipped tails, and, frequently, blazing red eyes. Find a high hill and look for large congregations of these stubby-winged, long-tailed forest hawks as they alternately flap and glide or ascend thermal updrafts to coast south. Their migration coincides with that of sparrows and warblers, a major part of their diet. What the sharp-shinned hawk lacks in size it makes up for in spirit, gamely striking birds much larger than itself, including wood ducks, pileated woodpeckers, and even black-crowned night herons. Early 20th-century ornithologist Edward Forbush described it as "bold, swift, impetuous and daring," and quoted a friend as follows: "I have seen one pounce on a chicken, right in the village, and wait till it had very deliberately fixed its claws in the chicken's back, eyeing at the same time a man, just across the street, with the greatest insolence imaginable."

Reverse Course

Many species of North American fish are "anadromous"—that is, they migrate as adults from the sea to freshwater spawning grounds. But the American eel, which reverses the process, is our only "catadromous" fish. The larger females live mostly in lakes; the males mostly in estuaries. In late fall a few mature eels will leave their adult habitat, where they have lived for 10 to 40 years, crawl snakelike around and over dams, and migrate to the Sargasso Sea near Bermuda, where they will spawn and die. As the transparent, leaf-shaped larvae (presumed to be a separate species until 1892) drift toward the coast, they gradually transform into more eel-like elvers. When shad or salmon, for instance, hit a dam, they are out of luck if there is no fish-passage facility. But elvers can climb up the faces of all but the highest dams and waterfalls, which explains why they still abide—albeit in reduced numbers—in most Atlantic and Gulf Coast drainages. Because eggs ripen during migration and therefore aren't seen in adult American or European eels, Aristotle concluded that juveniles arose spontaneously from mud. Four centuries later, however, this explanation was dismissed as fanciful by Pliny the Elder. Juveniles, he declared, actually arose from fragments of skin the adults rubbed off on rocks.

Wing Song

In most of the contiguous states save parts of the extreme Southeast, there is a magical night in late summer when the snowy tree crickets start their concert. Suddenly it breaks forth from backyard shrubs, vines, and trees—melodious, regularly spaced chirps that blend to a trill as the males rub together the rough edges of their wings. Nathaniel Hawthorne described it as "audible stillness," observing that "if moonlight could be heard, it would sound just like that." The warmer the night, the faster the tempo; so precise is the variation, in fact, that you can calculate air temperature in Fahrenheit by counting the number of chirps for 15 seconds and adding 40. An internal "antifreeze" called glycogen allows snowy tree crickets to prolong Indian summer with their haunting music through the first few killing frosts.