# Earth Almanac: September/October 2005

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# Fall Fling

"Big night" is the much-celebrated, rain-soaked evening in late winter or early spring when salamanders emerge from their upland haunts and make their way toward vernal pools to breed. But in bottomland hardwood forests from New Hampshire to Florida and west to Texas and Lake Michigan, one species procrastinates. The marbled salamander—a stockier cousin of the spotted, Jefferson, and blue-spotted—breeds in fall on dry land. Courtship takes place on rainy nights and usually under leaf litter. After much circling, nudging, and posturing, the male deposits a sperm-filled sac on a twig or blade of grass. Then, if sufficiently aroused, the female picks it up with her cloaca. She'll lay 50 to 200 tiny, transparent eggs in the mid-depths of what soon will become a temporary pond. This way the eggs won't hatch too early or too late. If the autumn rains don't come, the eggs will overwinter and hatch in spring. It's hard to confuse a marbled salamander with anything else. Both sexes have white bands, but the male's are brighter. Look for adults now in dry basins under bark and fallen limbs. In late fall and early spring, dark larvae can be seen resting on leaves in temporary ponds. They're about an inch or two long, with featherlike gills around their necks.

Fields of Goo

Why are the edges of that dirt road chockablock with big mushrooms, and why are they all turning black? In fall, except in the most arid regions of our nation, you're likely to find shaggy mane mushrooms—a.k.a. "lawyer's wigs"—bursting up through rich soil and woody debris, often by the thousands and with power that can punch through asphalt. Other mushrooms broadcast spores through their gills, but the shaggy mane releases most of its spores by secreting self-digesting enzymes that, within hours, turn the cap into a puddle of black goo, as if it were a witch doused by Dorothy. In George Washington's day this goo was used for ink. Shaggy manes are edible, but, as the 'shroom bloggers counsel: Don't pick when black; don't confuse with the deadly destroying angel; don't confuse with the alcohol inky (which you can't eat with alcohol); don't dillydally before cooking; don't chop into small pieces; don't freeze. Or, as one authority advises about picking shaggy manes: "Don't bother."

# Feisty Falcon

In autumn stocky, jay-size falcons called merlins follow small birds, their main food source, south from boreal forests. In this season you're apt to encounter a merlin almost anywhere in the United States, but you'll have the best luck along both coasts, in places where shorebirds abound. Unlike its larger cousin the peregrine, the merlin doesn't stoop on prey; instead it overtakes it with a burst of speed. Yet this falcon misses so often, one starts to wonder why it doesn't starve. In 50 years of observing merlins, ornithologist William Brewster witnessed successful pursuits only twice. Perhaps the falcons are playing or just cantankerous. Whatever the reason, a merlin seldom passes up a chance to harass large birds that it has no intention of eating. Brewster described a long, raucous confrontation between merlin and crow: "Although the behavior of both birds was rough and aggressive, it seemed to represent mutual participation in a sportive game curiously regulated and much enjoyed. . . . [Each would] flee as if for its life, dodging and twisting; yet it was prompt enough to rejoin the other bird at the end of each bout." Merlins can be distinguished from peregrines and kestrels by their distinctive white tail bars.

#### **Beach Sharks**

In fall, dusky sharks, segregated by sex, ease south along both our coasts. The large, slender dusky—also and just as aptly called bay shark, bronze whaler, and shovelnose—can be seen within a few feet of the beach, sometimes by surf casters who reel in just the heads of fish they've hooked. The dusky's fins are especially prized for soup, a fact that has severely stressed some populations. Recovery is slow because duskies have gestation periods at least as long as humans and bear live pups in dog-size litters. Fortunately, however, the species occurs in tropical and temperate waters around the world, a distribution wide enough to offer some protection. Though the dusky can attain a length of 13 feet, it is not especially dangerous to humans. Still, its inexplicable habit of following vessels has given it a fearsome reputation. Young duskies are preyed upon by even larger sharks, including great whites, bulls, and tigers.

## **Onward Chitin Soldiers**

As the sun's path dips lower over North America, you may observe an army of segmented, bristle-covered worms marching toward your house. These are the larvae of soldier beetles—every bit as fierce as they look but dangerous only to insects, including such garden pests as aphids and spider mites. It may be that they approach human dwellings for warmth. In spring they will pupate and emerge as beetles with soft wing covers. In some species the wing covers are brightly colored and trimmed with brown or black, reminiscent of military uniforms. Adults may also be predacious or, in species such as the ubiquitous Pennsylvania leather-wing, may subsist on pollen. Look for these pollen feeders on yellow flowers such as goldenrod.

### Our Other Deer

White-tailed deer now occur in all 48 contiguous states. But in the western half of our nation, the local deer are likely to have different features. From a distance they seem to be whitetails, but when you train your glasses on them, striking differences emerge. They are bigger, stockier, darker. The ears appear oversize. The tail is smaller, tipped with black, and doesn't flip up to signal alarm. They run like springboks, sometimes leaping eight feet off the ground. They are mule deer—the deer of cowboy song that "played" on the range under cloudless skies. Never is mule-deer watching finer than when foothill aspens go gold and the big bucks drop their guard, lowering swollen necks, pawing frosty earth, tending harems, sparring with rivals. The best viewing is at dawn, dusk, or in moonlight. Enjoy these original deer of the American West when and where you can. In some areas invading whitetails are hybridizing them out of existence.