#### Earth Almanac: September/October 2001

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Puffballs Ruffed Grouse Copperheads Tropical Fish House Mice Daddy Longlegs

### Puff the Magic Fungus

Puffballs, those fungi that appear throughout most of North America after autumn rains, on rich humus and over buried stumps, seem made for kids. The smoke that spews from the hole atop the dry, leathery husk when you tap it or step on it is spores from the already-dead fruit. So fine are these spores that they can drift to elevations of five miles and travel between continents. The giant puffball, which sometimes reaches four feet in diameter, may produce 7 trillion spores annually. But the magic doesn't end here. Depending on which of the 270 species you encounter, a puffball may grow from the size of a golf ball to the size of a baseball in a single night. Moreover, the main part of the plant--the mycelium--lives underground and extends in all directions through the soil, sometimes creating a circle of puffballs above. A much older--and, some would argue, better--explanation has it that these circular growth patterns are set by the feet of dancing fairies; hence the popular name "fairy rings." Since this theory cannot be disproved, why hasten its extinction when you are afield with young companions?



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# **Crazy Flights**

Ruffed grouse, which abide in all the Canadian provinces and the north country or high country of 36 U.S. states, are the most widely distributed native gamebirds on the continent. For all but a few hours of their lives, they are secretive and retiring, haunting brushy, forgotten places near stone walls and ancient cellar holes, bursting out of ripe touch-me-nots and grape tangles at the first, distant crunch of boot or paw. But on some unknown autumnal signal--folklore says it's the full moon--broods disperse in "crazy flights," striking out on all compass points, buzzing into places where none of their

tribe, save themselves, would be caught dead. Look for them in such places as the rug in front of your picture window, amid the broken glass. One of the unpardonable sins for any outdoors person is to let a dead grouse go to waste. If you want to be completely legal about it, get a hunting license (a good investment for conservation anyway) and pick up crazy-flight victims during the hunting season ONLY. Saute the breast fillets with onions and mushrooms, then simmer everything in sherry and condensed mushroom soup.

## **Poisonous Hope**

"Don't worry, there are no poisonous snakes in this state."

Unless you live in Maine, Rhode Island, or Alaska, that persistent reassurance is incorrect--at least the second half of it. Don't worry--in fact, rejoice--but from Florida to Massachusetts and west to southern mid-America, you've at least got copperheads. You are unlikely to encounter these shy, docile, beautiful pit vipers unless you go looking for them, and early fall is the time. Now they congregate at the entrances of their dens on rocky hillsides with southern exposures. But watch where you step, because copperheads respond to danger by going motionless. When the nights turn cold, they settle in for the winter, often sharing their quarters with timber rattlers and black rat snakes. It is well that the outdoors still contains an element of danger, however slight. Creatures like copperheads impart hope to those who care about wildland, reminding us that we have not entirely sterilized it, that in a few places, forces other than humanity remain in charge.

### Stranded in Summer

As summer wanes, larvae of tropical fish, many associated with coral reefs, drift north on the Gulf Stream, settling into tepid bays and estuaries along the Eastern Seaboard, where they metamorphose into miniature replicas of their parents. Offshore shelves are arranged in such a pattern that the south of Cape Cod seems to be the barrier. Drag a fine-mesh net across the shallows, and you may find barracuda, butterfly fish, angelfish, triggerfish, snowy grouper, rock hind, orange-spotted filefish, coronetfish, blue runner, jack crevalle, permit, mullet, and bigeye. For a few weeks these southerners thrive in ideal habitat, but they are stranded in the summer of an alien world. When the year's first nor'easters chill the North Atlantic, they all die.

#### **Polterguests**

House mice--ship stowaways from Europe--infest human dwellings. Our cleaner natives--the ubiquitous white-footed mouse and the closely related deer mouse--visit. They arrive in camp by moonlight and starlight, entering like poltergeists through openings unseen and unknown when the first hoarfrost silvers understory leaves and the swamp maples match the embers in your woodstove. East of the Rockies, save in Florida, you may see at least one of these creatures in the light of the dying fire, flowing over floor and hearth, pausing to preen its luxuriant fur and impossibly long tail, fixing you with huge, obsidian eyes. White-footed mice tend to be woodland dwellers, but you're likely to encounter deer mice in most any terrain. Neither species hibernates, so they need your place more than you do. They might shred some paper and poop on the counters; otherwise, they're easy guests. In spring they always leave.

#### How to Find Cows

When grass goes gold and the bright, still air is full of milkweed silk and cricket song, the daddy longlegs goes a-courting. Now sexually mature and fully grown, these gangly arachnids leave their summer haunts amid dead and living vegetation. Suddenly they seem to be everywhere, which is why farmers of yore called them "harvestmen." Worldwide, there are at least 7,000 species of daddy longlegs, all of which lack the spiders' fangs, poison, and silk glands. Where a spider has two distinct body parts, a daddy longlegs has one, and instead of having eight eyes like a spider, it has two, mounted on a small turret near the front of its body. A male spider must transfer its sperm to the female on the tip of an armlike appendage called a pedipalp. Daddy longlegs, on the other hand, can copulate. A daddy longlegs chews and swallows its prey instead of sucking out the body fluids, and it also consumes fruit and plants. Its second pair of legs--the longest--is used more for sensory perception than locomotion. These are waved at whatever the creature happens to be investigating and always, say country folk, in the direction of cows.