Earth Almanac: March/April 2009

By Ted Williams

Robert Royse

Pelican Brief

Now, on the ground or in bushes or trees along all three coasts north to southern California and North Carolina, brown pelicans are building nests of sticks, reeds, and grass. The next time bad news about native fauna plunges you into a funk, consider this bird's recent history. Because brown pelicans incubate eggs with their feet, the shells were especially vulnerable to breaking when thinned by DDT and other hard pesticides. By 1966, the year Louisiana made it its official bird, the brown pelican had essentially vanished from the state. Recovery in the post-DDT era has been spectacular. In Alabama and the Atlantic states, the brown pelican has been removed from the endangered species list, and delisting in the other Gulf states and California may have happened by the time you read this. Though rarely celebrated for his scientific acuity, poet Dixon Lanier Merritt had it right when he observed, "A wondrous bird is the pelican / His bill holds more than his belican." The capacity of the brown pelican's pouch, in fact, exceeds that of its belly by a factor of three. But Merritt erred with, "He can take in his beak enough food for a week." The bird uses its pouch merely as a net.

Joel Sartore

Easy Riders

In the deserts of our Southwest and into Mexico, ancient beasts with elephantine hind limbs are waking from hibernation. Now is your best chance to encounter desert tortoises, well-adapted reptiles that spend 90 percent of their lives underground. By May some will be out and about as early as 6 a.m., but stressed by the fierce sun, they'll be back in their dens by mid-morning. Desert tortoises can usually survive on moisture from the plants they eat. But as insurance against prolonged drought they drink copiously after a rain, storing water in their bladders and gradually reabsorbing it while excreting uric acid, sometimes in semi-solid form. As a last, desperate defense, a tortoise will void the contents of its bladder, so never pick one up, even if you encounter it in the middle of a road. Instead, gently herd it to the side it was headed for. This time of year males are vying for females, jousting with "lances" that protrude from the front of their plastrons. Combatants try to flip the opponent on his back. A tortoise thus vanquished can usually right itself with head and a forelimb. If not, it may overheat and die.

Tom Vezo

Vireo and Juliet

From the northeast corner of British Columbia, east across Canada, and south through New England and the Appalachians, blue-headed vireos are courting. But for males, winning a mate only starts with filling the forest with a broken series of sweet, slurred whistled notes extolled by ornithologist Edward Forbush as "a charming cadence of the wooded wilderness." The bigger the male's territory, the better his chance of winning a female. He then must build her a "courtship nest," presumably to demonstrate that he is capable of constructing the real item—a cup of down and bark, hung from a forked twig. If she approves, his work still is not finished, because he has to help her incubate three to five white, brown-spotted eggs, uncommon behavior for passerines. Only recently has the blue-headed vireo attained species status. Previously, it was considered part of the solitary vireo complex.

Ron Niebrugge

Hummer Pit Stops

In our desert Southwest, spectacular foot-long clusters of red blooms are hanging from the branch ends of the cactuslike ocotillo, a.k.a., “devil’s walking stick.” And just in time, because flights of northbound hummingbirds, one of the plant’s pollinators, are in desperate need of energy fixes. Few, if any, insects can reach the nectar, but carpenter bees “cheat” by cutting through the inch-long flowers. A prime ocotillo may be close to 200 years old and have 100 spiny stems rising from its base. For this plant, fall may come half a dozen times a year, when dry spells cause it to shed its leaves. They grow back fast after a rain. In addition to sustaining hummingbirds, the ocotillo is an important food source for mule deer, white-tailed deer, bighorn sheep, and antelope ground squirrels. The Apaches used the powdered roots to treat wounds. In frost-free parts of its range, ocotillo can be easily propagated by jamming cuttings into the ground.

Charlie Tower

Cheeky Chaps

The response most often elicited in humans by chipmunks is a smile. And none of North America's 15 species brings more smiles than the smallest and most widely distributed—the perky, noisy, cocky least chipmunk. In our north-central and western states, least chipmunks are coming out of winter dormancy, pushing corn snow from the entrances of their cozy subterranean dens, and dashing around woods, pastures, and sagebrush deserts in mad mating chases. Least chipmunks announce their presence with monotonously repeated *chips,* and real or imagined danger with loud trills. A large least chipmunk might weigh two ounces, but what it lacks in size it makes up for in chutzpah. For instance, even as it jealously watches its own hoard, it will dash in and fill its cheek pouches from a neighbor's seed cache or with food from your plate or even your fingers. In addition to vegetable matter, least chipmunks consume a good deal of meat, including adult and larval insects, bird eggs and hatchlings, and the young of small mammals.

Doug Von Gausig

Get Along, Little Toadies

The “dogies” you hear bawling now in low, wet places from Montana to western Iowa and down to Louisiana aren’t necessarily bovines. If they sound a little hoarse and if they start up at dusk or in the dark, they’re probably Woodhouse’s toads. Named for the 19th century explorer, surgeon, and naturalist Samuel Woodhouse, who collected the first one, these large amphibians can be distinguished from the more familiar American toad by their white bellies. After a hard spring or summer rain they move into puddles, where the males inflate their balloonlike vocal sacs and call in females. A female will lay as many as 28,000 eggs held together in long, intertwined strands that glue themselves to submerged objects and plants. Because breeding puddles can be short-lived, tadpoles must emerge from eggs and transform to adults quickly—sometimes in as little as two weeks. The skin of Woodhouse’s toads has the dual function of allowing them to take on water (through the rich capillary system on their bellies) and exuding a toxic mucus that repels most predators, though it doesn’t appear to lessen their popularity with hognose snakes. Like most other members of the toad and frog order, Woodhouse’s toads are voracious predators, eating virtually anything that moves and isn’t too big to stuff into their mouths. Look for them hunting insects under lights.

George Grall/Getty Images

Killer Breeches

In moist, rich, undisturbed woodlands throughout most of the eastern half of the United States and in the Pacific Northwest, a vast army of ancient, elfin soldiers have hung out their pantaloons to dry. Or so it seems in early spring, when Dutchman's breeches, a perennial herb in the poppy family, bear their double-spurred white flowers. From naked stalks that can stretch 10 inches from beds of fernlike leaves, they nod in the April winds. Because honeybees' proboscises are too short to reach the nectar, pollination is left to bumblebees. Ants distribute seeds, carrying them to their nests to feed on the attached fruit. It's best to admire Dutchman's breeches from afar because they're so poisonous that even touching one can cause dermatitis. And unless you're a sheep, eating the plant will cause you to convulse, vomit, and stagger (hence its alternate name "staggerweed"). Most victims, however, are cows, and if you happen to be worried about yours, the University of Illinois Veterinary Medicine Library suggests that you "let sheep graze infested pastures first."

Hans Christoph Kappel

Silver Wings

The “exclamation point” would be a more fitting name for the eastern comma butterfly, abundant east of the Rockies, because it never ceases to startle. For one thing, you’re apt to see it when you least expect insects—in early spring or even late winter as it dances over snow and ice after a slug of southern air has rousted it from hibernation in a hollow log, an old building, or a dirt crevice. For another, when it opens its wings it instantly transforms from what looked to be a dead leaf to a gaudy scrap of orange and black silk. And finally, it is likely to buzz you, light on your coat, or give furious chase to a rival male or even a bird. It’s called a comma because of a silver mark on the outside of each hind wing that looks as if it had been inscribed by a person who had just flunked a breathalyzer test. The closely related and almost identical question mark butterfly has longer tails on its hind wings, and the silver mark has a dot underneath it. A good way to attract both species to your yard is to set out animal dung, one of two favorite food items. Should family members object, try the other—rotten fruit.