# Earth Almanac: May/June 2007

By Ted Williams

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James Gritz/ Getty Images

#### **Fairest Flower**

All manner of Rocky Mountain habitats—from hot, dry talus slopes to moist aspen groves—are brightening with blooms of Colorado columbine. Petals vary widely in color, from blue to white to purple. The word *columbine* derives from the Latin "columba," for dove. Turn the blossom upside down and you'll see a circle of doves drinking. Now look at one of the spurs at the base of each of the five petals and see if you can make out an eagle's talon. The resemblance is thought to have given rise to the plant's generic name, *Aquilegia*—presumably from the Latin "aquila," for eagle. On April 4, 1899, the

Colorado General Assembly adopted the plant as the official state flower and, 26 years later, made it the legal duty of all Coloradans to protect the species.



Tom Vezo

#### **Swinging Eggs**

In old orchards and open woodlots throughout the eastern two-thirds of our nation, female orchard orioles are weaving their swinging, baglike nests out of grass, yarn, animal hair, feathers, plant down, and any other soft material they can clutch in their long, thin bills. Construction takes the better part of a week, and as many as a dozen females may build in the same tree. This, our smallest oriole, frequently takes advantage of neighboring kingbirds, whose aggressive behavior toward predators benefits both species. After the female finishes her nest she lays two to seven eggs and incubates them alone for about 12 days. Both parents brood and feed the hatchlings. Because of its subdued color you are likely to hear an orchard oriole before you see it. Listen for the call note, a blackbirdlike *chuck* or a rattling *tarrrrr*, and the song, a quick, robinlike burst of whistled notes, ending with a downward slur.



Joel Sartore

## **Bum Wraps**

In New England northern water snakes are killed because they are mistaken for copperheads. This, explained Massachusetts naturalist Wayne Hanley, is aberrant behavior—elsewhere in their range (south to North Carolina and west to Nebraska and Missouri) they are killed because they are mistaken for water moccasins. Northern water snakes come in a bewildering array of colors and patterns; backs and flanks can be brown, gray, red, or black. Crossbands are usually visible on necks, dark blotches on bodies. Young may be brilliantly marked with reddish-brown saddles. Look for these beautiful, thick-bodied reptiles as they bask on muskrat houses or beaver lodges or wrap around each other in mating embraces. While northern water snakes are non-venomous, there are two excellent reasons to admire them only from afar: When handled they douse you with foul-smelling feces; then they bite.



Norbert Wu/Minden Pictures

# **Paddling Upstream**

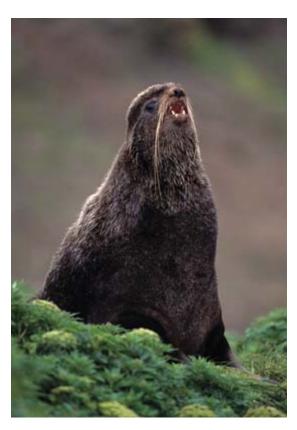
Fifty million years before the first dinosaurs, cartilage-framed fishes with long proboscises plied Devonian rivers and freshwater seas. Two species, grievously diminished by human river manipulations, are with us still—one in the Mississippi River watershed, from Montana to Louisiana and adjacent Gulf drainages, and one in China's Yangtze River system. The paddlefish of North America can attain a weight of 200 pounds; China's, which has a cone-shaped proboscis, can be three times that size and is much rarer. Normally, paddlefish are found in mid-depths, where they use their electro-sensing paddles to home in on the plankton they strain with their gill rakers. But at this time of year, when they're on their spawning runs, they're often in shallower water. You may even see them leaping, perhaps to dislodge silver lampreys. Like most big-river species, paddlefish require long, unobstructed river reaches and gravel bottoms for egg deposition—the very habitats dams destroy. Moreover, if they don't sense rising, fast-flowing water, which dams frequently eliminate, they may reabsorb their eggs. Still, the future of North American paddlefish is brighter than it has been for decades. Efforts to reconnect rivers to their floodplains are restoring old spawning and nursery habitat.



James Carmichael Jr./NHPA

## **Beauty and the Bite**

"Nearly all spiders are good looking," explained Charlotte the spider to Wilbur the pig, in E.B. White's Charlotte's Web. If you can look at a black widow—among the flashiest (and most poisonous) of all our native spiders—and have the same thought, you have arrived as a naturalist. Three species—the western, southern, and northern black widow—are found (rarely by people who wanted to) most everywhere in the contiguous states save the far north. Now black widows are courting. The much smaller male, whose venom sac never developed and who doesn't eat during adulthood, spins a web, deposits semen on it, anoints two penislike appendages called palpi, then inserts sperm into the female's sperm-storage sac. The myth that the female always consumes her mate probably derives from observations of captive specimens in which cages prevented escape. Although the black widow's venom is about 15 times more potent than a rattlesnake's, it injects so little that people rarely die from it. Indoor plumbing has greatly improved the safety of restrooms as well as the language one hears from them—about 90 percent of all black widow bites reported in the first four decades of the 20th century were inflicted on male genitalia by spiders living under outhouse seats.



Rod Planck/NHPA

## **Seals With a Kiss**

Now, along rocky islands of the Pacific Rim, from Japan to California, there's frenetic activity as northern fur seals haul out for mating. The big-necked males, some weighing 600 pounds, arrive first, barking, posturing, fighting, staking out territories. Then come the much smaller females, pregnant from the previous season. They'll give birth within 48 hours, and less than a week later will mate again. Then, within several days, they will leave for extended feeding forays that may last 10 days and take them 100 miles from the beach. When a female returns she will find her pup by listening for its distinctive voice. (In one study, female fur seals were seen to recognize their pups after four years of separation.) The fur seal derives its name from its luxurious coat, which has 300,000 hairs per square inch and which was so coveted by humans that the species only narrowly escaped extinction at the hands of 18thcentury sealers.