

KUNG PAO POWER | FIGHTING ALIENS | TOURING HIGH-TECH HELL | THE BEE TEAM

# Audubon

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SINK *or* SWIM  
ANOTHER ASSAULT  
*on the* ARCTIC  
AND HOW YOU CAN  
HELP STOP IT

{ AND KEEP THIS POLAR BEAR AFLOAT }

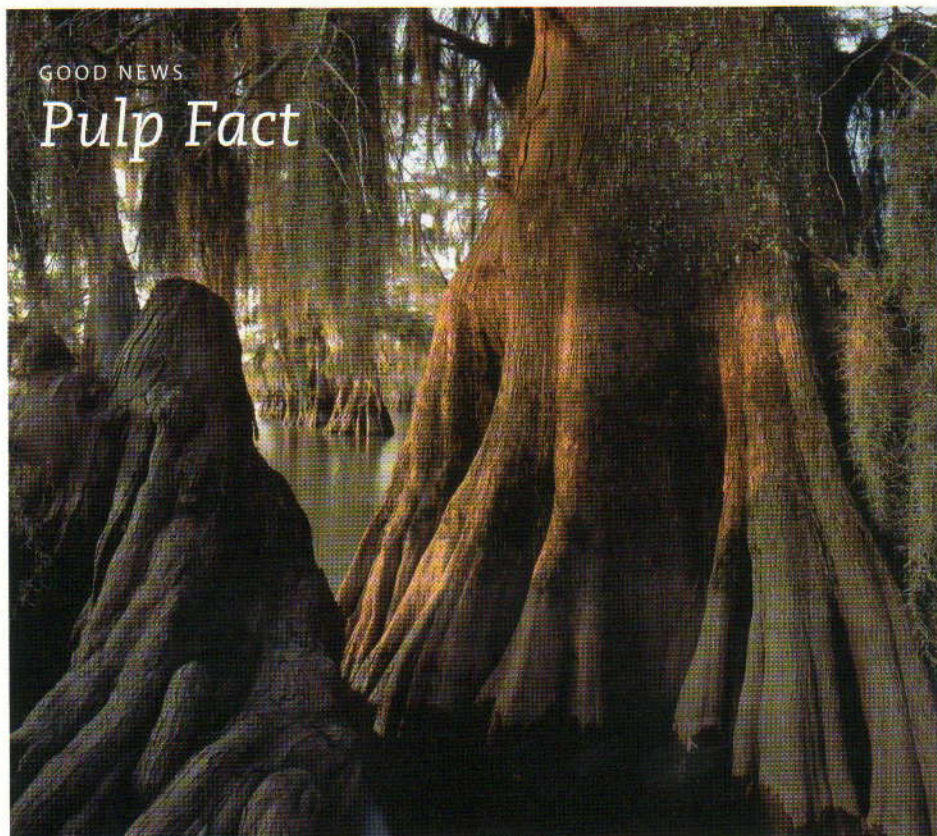
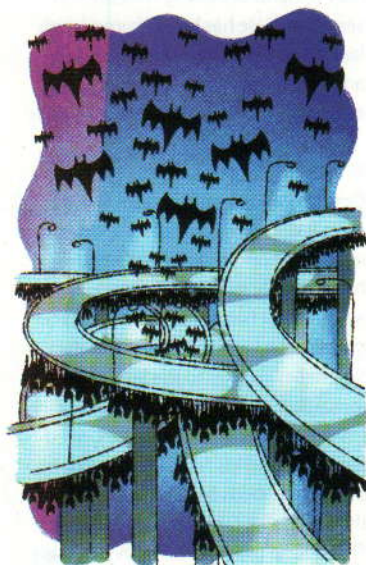




are raising little fluffs of joy and help ensure that the family genes will be passed on for generations by sitting on the eggs and bringing supplies to the nest. "You're helping a relative, so therefore your genes are being passed on through your relatives," says Richardson. There may be an evolutionary advantage to this behavior in the birds, which in the 1960s were so endangered that only 26 individuals were left, says Richardson. Now there are 350 of the warblers on the island, partially because of the cooperation. This behavior is usually seen in close-knit societies, and the research may help scientists better understand why certain species evolved to help take care of their kids, calves, or chicks.—*Susan Cosler*

#### BATMOBILES

Motorists in Port St. Lucie, Florida, are being driven literally batty by recent delays in roadwork on Interstate 95. More than 20,000 Mexican free-tailed bats and evening bats have taken up residence under a bridge, complicating plans to widen the road. Construction crews are working around the colony to allow the bats to raise their young without disturbance. Mating has already taken place, and maternity season for the free-tailed bats, which make up the majority of the large colony, lasts from early May to mid-August, says bat researcher John Greenwood of Friends of Bats, a Florida group advising the construction project on bat conservation and protection measures. "The babies, when they're initially born, can't fly, so that's why we need to be particularly careful," Greenwood says. Bats comprise up to half of all the mammals in Florida and each one eats its body



If big retailers do their part, cypress trees such as this one in the Atchafalaya Basin won't end up as mulch.

Since 2002 much of the garden mulch sold from big-box retailers has come from coastal Louisiana's shrinking cypress forests, home to a rich diversity of wildlife, including the "rediscovered" ivory-billed woodpecker. Because of skyrocketing demand, timber companies found "that mulch was valuable enough to feed whole trees into shredders," says Paul Kemp, vice-president of Audubon's Gulf Coast Initiative. But the booming mulch industry made a practice of logging stands of young bald cypress, so the swampland forest—already reeling from other pressures—couldn't regenerate.

Now, in a major victory for Audubon, the Sierra Club, and other environmental groups that belong to a coalition called Save Our Cypress ([www.saveourcypress.org](http://www.saveourcypress.org)), the imperiled trees will likely be saved. Logging decreased significantly in the past year, after the coalition's campaign of letter writing and educational talks convinced Wal-Mart and Lowe's not to buy mulch made from coastal Louisiana's forests. "We slowed it to a trickle," exults Dean Wilson, basin keeper of the Atchafalaya, the largest swamp in the United States, who has helped track the damage over the years. Wilson routinely flies over forests with Southwings, a band of volunteers who pilot their aircraft to help environmental causes. "The timber companies logged 80,000 acres in six years, but in 2007, after the retailers made their decision, they only logged a few hundred acres," he says.

The drop came at a critical time. In a recent Tulane University study, satellite images show that bottomland hardwood forests dominated by oaks and other trees suffered up to 85 percent mortality after Hurricane Katrina. Nearby cypress-tupelo forest, on the other hand, had minimal damage. "The lateral root system [of the cypress] weaves the forest together in a tapestry, so not only do they hold themselves up, but they hold all of the mid-story and canopy trees up," explains Gary Shaffer, an ecologist at Southeastern Louisiana University. That means any hope of wetland ecosystem regeneration and future hurricane protection depends on the health of the cypress.

A lot of avian life depends on it, too, especially "the bigger birds that need larger trees, like osprey and herons," says Melanie Driscoll, who heads up Audubon Louisiana's Important Bird Areas program. Many warblers and cavity nesters like woodpeckers—ivory-bills and otherwise—are tied to the cypress swamps as well.

For now the big retailer moratorium on cypress mulch is largely holding firm. (A notable holdout is Home Depot.) Environmental groups suggest that better mulch alternatives include renewable pine bark, pecan shells, or even items from your own garden. (For other alternatives, read "The Dirt on Mulch" by going to [audubonmagazine.org](http://audubonmagazine.org), clicking on the March-April 2007 issue cover, and going to Audubon Living.)—*Kristin Elise Phillips*





weight in bugs—about 2,000 to 3,000 insects—every night. “Imagine what the mosquito population would be without them,” says Greenwood, who says the bats likely chose the area under the bridge because the narrow passageway is too small for natural predators to enter.—*Shawn Query*

#### YOSEMITE SAM'S VACATION

If you're vacationing in a national park this summer, that crack you hear may not announce the start of an afternoon thunderstorm. Senator Tom Coburn (R-OK), with the support of the National Rifle Association, is pushing legislation (cosponsored by 23 Republican senators) that would open the national park system and all national wildlife refuges to visitors bearing arms. True, current laws allow gun owners with permits to pack heat in the parks, but their weapons have to be unloaded and locked up in vehicle trunks. That's not good enough for Coburn, who says the parks are becoming too dangerous for the unarmed public. The senator cites recent studies showing that some parks (in borderland areas) are drug-running havens and that ranger forces are stretched thin. “He's always trying to protect law-abiding citizens, trying to protect their Second Amendment rights. And not being allowed to carry [guns] in national parks, [it] seems like their rights were being violated,” explains Coburn's press secretary, Don Tatro. But both the U.S. Park Police and The Association of National Park Rangers oppose the bill. Says retired ranger Doug Morris, “Loaded guns have been prohibited in the national parks since the 1930s. These rules work and have long contributed to the indisputable fact that our national parks are among the safest places in America.”—*Kurt Repanshek*

#### ENDANGERED SPECIES

## Who Knew, Emu?

In northern Australia the king of the jungle is a flightless, five-foot-tall bird with a blue neck, a brilliant red wattle, and a prehistoric casque atop its head. The southern cassowary tromps through the forest gulping down ripe fruits from the woodland floor and dispersing their seeds miles away in fresh mounds of dung. And with a pair of five-inch daggers for claws on its inner toes, this emu relative can stop just about anything or anyone that gets in the way.

What it can't stop, however, is climate change, which is accelerating the natural process of desertification that has been under way in Australia for the past 20 million years and is now threatening to shrink the thin band of coastal wet forest where the cassowary lives. “Climate change predictions here are quite dramatic,” says David Westcott, an ecologist at the Commonwealth Scientific and Research Organization in Atherton. “Habitat moves up mountains, and the mountains don't go up high enough.” With more than 80 percent of the cassowary's historic habitat in the wet tropics already destroyed, scientists put the bird's remaining population at only 1,200 to 2,500 individuals. To help ensure the species' survival, the Queensland Parks and Wildlife Service is working with the Australian Rainforest Foundation to secure a 150-mile habitat corridor along the coast.

Although many of Australia's endemic species are facing similar threats, it's been a particularly rough couple of years for the endangered cassowary. In 2006 the town of Mission Beach, a prime location in cassowary territory, was ravaged by Cyclone Larry, which all but eliminated the fruit crop the birds depend on. The cassowaries were popping out of forests more frequently, crossing roads and heading into backyards in search of sustenance. Many were attacked by dogs or hit by cars. Then came 2007, a long, hot, dry year for Australia that was even more intense for a large-bodied, forest-dwelling species left with little shade and little water in its coastal hangouts. Ornithologists reported birds ducking under vegetation and panting just to keep cool. The Mission Beach locals, who know the birds so well that they give them names, claim that not a single chick survived that season. Climate scientists say such extreme weather is apt to be all the more commonplace in Australia's future.

Still the big bird's resilience may help it adapt—at least for the short term. In the past couple of months Mission Beach residents have spotted a few striped chicks trailing behind their fathers. And Westcott has ramped up his efforts to understand how climate change has affected cassowary populations in the past. His team has been sampling DNA from cassowary dung in order to develop better estimates of the population size and to understand the history of the bird's movements in and out of patches of remnant forest, all of which will give the Queensland Parks and Wildlife Department better data to figure out where to focus their conservation efforts.

“By looking at the past,” Westcott says, “we've got some idea as to what we have to deal with in the future.”—*Brendan Borrell*



Habitat loss has led Australia's endangered cassowaries to forage in dangerous places, including roads.