

SUNSET DANCERS

As forest succession in the East proceeds, woodcock numbers continue to decline.

DANIEL S. LIGHT

Its brain is upside down. It spends most of its time in deciduous woodlands. It feeds primarily on worms, its rotated brain allowing its eyes to look upward while its bill probes the ground. It goes by the name of bogsucker, timberdoodle, Labrador twister, night partridge, mud snipe, hookum-pake, and woodcock. (Even its scientific name has changed, with *Scolopax minor* presently being preferred over *Philohela minor*.) To Aldo Leopold this shorebird was the dancer in the April sky. But whatever it's called, it's a bird that's getting increasing attention from bird watchers, wildlife biologists, and hunters.

The American woodcock may be in trouble. Its population, especially in the eastern United States,

American woodcock with an earthworm.

Karl Maslowski

Male woodcocks need open areas for their elaborate courtship dances, which use a series of flights, "peents," and other lures.

has been declining at an average rate of 2 to 3 percent per year since the late 1960s, when the first comprehensive estimates of woodcock populations were made. The significance and reasons behind this decline concern biologists.

True, the woodcock is still a long way from being endangered. In fact, the birds in the central United States are more than holding their own. But it's the nature of the decline of the eastern population that raises questions, a long, steady, ominous drop that may signal worse years ahead.

Although the exact reasons for this decline are still somewhat mysterious, speculation centers on habitat—not so much on the loss of wild areas due to human development, but rather on inevitable ecological succession. In the woodcock's case, developers and asphalt aren't the problem, except in local instances. It is simple natural succession from young forest to old growth that may account for the decline. Although mature forest may be ideal for the black-backed woodpecker, it is not for the woodcock.

The woodcock is a specialist, feeding almost entirely on worms. That means it needs bare ground and a moist loamy soil that supports plenty of worms. This kind of soil is readily found throughout the

deciduous woodlands of the eastern and central United States and southern Canada. But the woodcock also needs cover and protection, especially from avian predators. That means it needs woods with a high density of small-diameter saplings and trees. A high stem density provides overhead cover from raptors. An alder thicket, or a 5-to-10-year-old clearcut with plenty of aspen and birch regeneration, provides this type of cover while at the same time promoting worm-producing soil. The high stem density also shades out plant growth that would impede woodcock movements and make soil-probing more difficult.

As if these habitat requirements weren't specialized enough, there is at least one more component in ideal woodcock habitat. Open fields are used by the males in the spring for their elaborate courtship flights. From these open areas the males entice females to them by using a series of flights, "peents," and other lures (Leopold's "sky dance"). The areas are also vigorously defended against other males. The openings can be as small as .25 acres. Since these grounds are hotly defended, we might suppose that the number of openings available determines the number of courting males, and to a certain extent this seems to be true.

Not only are forest openings used by courting males, they are also used by some woodcocks in sum-

mer as nighttime roosting areas. Whether these openings are an important requirement of woodcock habitat is open to debate; many of the birds prefer to spend their nights in the same wooded habitat as they spend the day.

Marginal farms in the northeastern United States and southeastern Canada were abandoned by the hundreds in the mid-1900s, their owners realizing that farming was a precarious occupation in these areas. The state of Maine, for example, presently has only about a fourth of the farm acreage it had in

the 1920s. As deserted farms reverted to woodlands they became woodcock paradises. One abandoned field after another gave way to natural succession and evolved into young-growth forest of aspen, alder, birch, and maple. Fields that were slow in being invaded by woody plants were used as singing grounds and roosting fields.

For 10 to 20 years in the mid-1900s the woodcock population in the eastern United States may have reached its highest point ever. But now, 20 or 30 years later, these old farmsteads have evolved into forests

LISTENING FOR SPRING

The month of March in North Texas can be unpredictable. Warm, sunny, clear days of 75 degrees, may be followed by a drop the next day into the 40s, and maybe even a light freeze. Even so, I try to keep the windows open all during the month of March. Why? So that I may listen for spring to arrive.

I know that we are all called bird watchers, with the emphasis on watching and the sense of sight. But we mustn't forget the sense of hearing in our quest to find and appreciate birds. That's why my windows are open in the month of March. Around February 15 we clean the purple martin house, evict early sparrow tenants, cut back tree branches from neighboring plants that may have grown too close and then wait for the martins to arrive.

But do we see the martins first? No. We hear them. The rich burbling *tchew, tchew, tchew* call comes almost piercing through the air, a certain clue that the martin scouts have returned. They came back just the other day. I had slept late, and was enjoying an extra cup of hot tea when I heard the call.

Racing for the back door, I yelled to no one in particular, "The martins are back!" I scanned the sky for several minutes. I could not see them, but I could hear them. Finally, two specks flying very high overhead veered in at an angle that made it obvious that these were the joyful singers.

The martins are my first heralds of spring. The sandhill cranes are the second. Every March they migrate north, sometimes hundreds of them flying directly and amazingly low over my house. The rolling repetitive call of *garroooooa, garroooooa* is an amazing sound, not to be confused with any other bird call.

I anxiously anticipate each spring one other bird sound. It's not a call or vocalization, but a by-product of an extremely specialized and exquisite flying adaptation. The sound is a buzzing, or humming sound. When I hear the *whizz-buzz* sound of a passing hummingbird, I know that spring has truly arrived.—Deborah Dennard, Fort Worth, Texas.

that are past the point of being prime woodcock habitat. The young aspen and other trees are being replaced by oaks and conifers. Although suitable for squirrels, woodpeckers, spruce grouse, and a host of other wildlife, these old forests are void of such species as woodcock and ruffed grouse.

Data from an annual woodcock census and from hunter harvest surveys document the fall in woodcock numbers. Woodcock census takers drive country roads during the spring months at dawn or shortly before dusk, recording the number of male woodcock heard "peenting" or "singing." Although the results may not reflect the total number of woodcock present, they nevertheless can be used to compare trends and differences between habitats and years. Since the late 1960s the number of singing woodcock males in the eastern United States has been declining at 2.6 percent annually. To put it another way, the number of singing males in the eastern United States is just 52 percent of what it was in 1968. In contrast, central flyway woodcock have shown an increase of 1.1 percent per year, or a 21 percent increase since 1968.

Hunter harvests have also dropped significantly. Adjusted indices of seasonal hunter success have shown a decline from almost 13 birds a year during the late 1960s to just over four birds a year during the mid-1980s. Seasonal hunter success has also been down in the central United States, but not to the same degree. Similar trends are also being recorded in the woodcock range of southern Canada.

The U.S. Fish and Wildlife Ser-

vice is in the midst of an intensive woodcock survival study at the Moosehorn National Wildlife Refuge in eastern Maine. The refuge is the only one in the country that was established primarily for woodcock. The area has undergone extensive habitat alteration aimed at improving conditions for woodcock. Strips (usually about 70 feet wide) of old-growth forest have been logged and cleared. The strips originally provide open areas for the courtship displays of singing males. Five years hence invading young trees should be high enough so that woodcock will be using the cut as a feeding area.

When possible, the strips are cut across wet areas. That way the birds have access to optimum soil moisture conditions throughout the spring, summer, and fall. The land is managed on a rotational system to maintain an assortment of habitat types in various chronological stages. The habitat alterations should benefit species such as the woodcock that rely on young growth, while at the same time retaining areas of old-growth forest for other species. The system should also be compatible with the forest products industry and with those who use the forest for recreational activities.

Future studies will be concentrated in the woodcock's wintering areas, primarily Louisiana. And woodcock populations in the central flyway will continue to be closely monitored. Ensuring the skydancer's well-being as a species is the goal. □

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