

Turkey Music

BY MARK ELLINGWOOD

You can hear it drifting down from tall pines and ridge-top oaks, as sunlight from below the horizon gently paints May's predawn sky. It begins with the restless shuffling of feet on tree limbs, the stretching of wings, and the shy but probing clucks of anonymous treetop neighbors. As dark silhouettes become visible, the music crescendos with inquiring yelps from hens and thundering gobbles from anxious toms. The day awakens, and turkeys launch from their nighttime roosts with audible wing strokes and a discernable whistling of air as they plummet to the forest floor. The calling persists throughout the morning and in so doing, ensures that the cycle of life will continue and that "turkey music" will echo through our woodlands for another year.



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BACK FROM THE BRINK

Turkeys were common during the early settlement of southern New Hampshire, but large-scale forest clearing, subsistence hunting, and commercial markets in wildlife led to their demise by 1850. With the passage of the federal Pittman Robertson Act in 1937, state wildlife agencies began the challenge of filling the wild turkey void created during the preceding 200 years. Early restoration efforts focused on the propagation and release of game farm turkeys. These efforts failed because these birds lacked the wariness and adaptability necessary to survive in the wild.

With the advent of cannon nets, biologists were able to efficiently capture wild birds for release into unoccupied range. In 1969-1970, 26 West Virginia wild turkeys were released in southeast New Hampshire, but failed to take hold because of severe winters and lack of ideal habitat. In 1975, 25 birds from New York were successfully released in the farm-rich Connecticut River Valley towns of Walpole and Westmoreland. These birds thrived and ultimately served as the source of birds for 15 additional transplants that took place within New Hampshire over the next 20 years. Today, New Hampshire is home to an estimated 30,000 wild turkeys!

VULNERABLE CHICKS

Turkeys are polygamous; males breed with multiple females but do not participate in nesting or rearing of young. Breeding peaks in mid- to late April in New Hampshire and it takes a hen about two weeks to lay an average clutch of 10 to 12 eggs. She then begins incubating the eggs, a stage that lasts for 26 days. Incubating hens use their beaks to turn their eggs hourly, and in so doing ensure proper chick development.

Turkeys nest on the ground, preferably in thick cover where they are concealed from predators. Turkey chicks feed themselves, are covered with down, and are mobile within 24 hours. Nearly 40% of turkey nests fail and approximately 60% of chicks die during the first 14 days of life. Coyotes, foxes, raccoons, skunks, fishers, bobcats and owls prey on New Hampshire's wild turkeys. Research suggests that wet weather may enhance the ability of predators to scent incubating hens. Most hens will re-nest if their first nest is destroyed. Second nests produce late season broods, accounting for the disparity in size among birds when broods flock together in mid-



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Many factors affect the survival of young turkeys, from predators to weather – during a cold, wet spring, chicks can't maintain their body heat.

CREATE SOME TURKEY HABITAT!

Give our turkeys a helping hand by preserving their habitat. Good turkey habitat includes mature mast-producing hardwoods (mostly oaks), smaller hardwoods and a mixture of understory plants such as grapes and berries. Manage hardwood forests for maximum acorn production; other mast producers like beech, birch and ash are also important seed producers, especially in years of low acorn yield. Turkeys need mature timber for roosting year-round. The edges of woods, brushy areas, farmlands, cutovers and old fields offer important nesting cover and feeding areas and escape cover for broods.

Good turkey habitat includes small openings that produce insects, seeds and berries, as well as larger open areas like agricultural fields, pastures and roadsides. Maintain existing openings and create more — these can be planted with supplemental foods for turkeys (consult with UNH Cooperative Extension, www.extension.unh.edu, for details). Reduce impacts on nesting turkeys and broods, and other ground-nesting birds, by delaying field mowing until July 1 or later.

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A turkey nest (above) is typically a small depression lined with dead leaves. The state's now abundant population of wild turkeys grew from an initial release of 25 turkeys in western New Hampshire in 1975, under the oversight of Fish and Game turkey project leader Ted Walski (below c. 1975).

summer. Turkey chicks begin flying when they are 8 to 14 days old. They begin roosting off the ground shortly thereafter, making them much less vulnerable to predators.

AMAZING ADAPTORS

Turkey populations are prone to fluctuations driven by predation, variable chick survival and periodic starvation. Despite our harsh climate, New

Hampshire turkey populations partially buffer themselves against winter food shortages by taking advantage of human-related foods such as backyard bird feeders (sunflower seeds) and dairy farm silage. In the absence of these foods, we'd likely have fewer turkeys and less stable turkey populations. Fish and Game sponsored research has documented the importance of dairy farms to Connecticut River Valley turkey populations. Not only do these farms provide important winter foods, they also appear to serve as the focal point of turkey dispersal for the region. Farms have served as critical stepping-stones that turkeys have exploited in their expansion northward. In 1984 there were 435 dairy farms in New Hampshire; today only 135 remain. What will happen if these farms are sold for house lots?

New Hampshire turkeys live on the northern fringe of their range. While turkeys are capable of coping with ex-

treme low temperatures, deep snows that cover food, or soft snows that inhibit mobility, threaten turkey survival. New Hampshire research has revealed some remarkable adaptations to these threats. Unlike most birds, turkeys can store appreciable body fat (up to 15-20% of body weight). This fat has the capacity to sustain adult hens for up to 3 weeks (juveniles have less body fat storing capacity – upwards of 2 weeks). Fat storage allows turkeys to cope with periodic food shortages. Turkeys also modify their behavior when access to food is limited. When mobility is good, turkeys wander far and wide in search of food. When deep powder limits their mobility (broad-breasted turkeys can't plow through deep powder – but they can walk on hard or crusted snow), turkeys roost close to food sources, thus minimizing movement and energy expenditures.

Turkeys are an amazing package of adaptations that have been refined and tested over the eons. The next time you see a local flock of turkeys, consider the remarkable attributes that allow them to survive in our harsh winter climate. And when you see a hen with poults or you hear a distant gobble, savor the moment and celebrate the "music"! WJ

Mark Ellingwood is the Wildlife Programs Administrator for the N.H. Fish and Game Department and author of the turkey segment of Fish and Game's Big Game Management Plan.

Turkey management – A tricky business

It's tough to manage wild turkey populations precisely. Large mammals like deer, moose and bear have relatively modest reproductive rates and relatively high survival rates compared to turkeys. Unlike large mammals, wild turkeys are prone to dramatic fluctuations in reproduction and survival, giving wildlife managers less control over their abundance. As a result, wildlife managers can facilitate turkey population change, but don't precisely control it over the short-term.

Because things can change so quickly with turkey populations, Fish and Game generally maintains a conservative hunting framework. Only when turkey populations reach minimum densities can we safely liberalize turkey hunting seasons to take advantage of additional recreational opportunities without compromising the population objectives in our Wild Turkey Management Plan.

Some regional New Hampshire wild turkey populations are now high enough to accommodate additional recreational opportunity. That's why, at the time of publication, a proposal is being considered to establish a 5-day fall shotgun season for turkeys in WMUs D1, D2, H1, H2, I1, I2 and K. Also, because turkeys have succeeded in pushing their range northward, a short spring turkey season has been proposed for WMU A in the northernmost part of the state. Check the Fish and Game website at www.wildlife.state.nh.us for updates.



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