



Wildlife Note — 60
LDR0103



Finches and House Sparrow

Finches in Undulating Flight

by Chuck Fergus

Finches are small to medium-size songbirds with sturdy bills that let them crack open the tough hulls of seeds, their main food. Five species breed in Pennsylvania; one, the house finch, is a western species liberated in the Northeast that has become quite common. Finches are sociable birds, and outside of the breeding season they gather in flocks. They feed on the ground and in tall weeds, shrubs and trees. Even during summer, when insect populations burgeon, many finches continue to eat seeds and even nourish their young with a pulp composed of regurgitated seeds. In winter, many of the birds in this group frequent our bird feeders.

Male finches sing to attract females and to maintain pair bonds. In most species the female builds a cup-shaped nest hidden in the thick foliage of a tree or shrub. Female finches do most or all of the incubating, and males and females team up to feed the young.

Purple Finch (*Carpodacus purpureus*) — Don't look for a purple bird when trying to pick out this species: The male purple finch is maroon-red, while the female is brown with darker streaks. The species breeds across Canada and in the Northeast south to West Virginia. In Pennsylvania, purple finches nest mainly in the northern tier, and in winter, individuals from farther north overspread the state. Purple finches inhabit conifer plantations (including Christmas tree farms), spruce bogs, hillside pastures, woods edges and

mixed and open woods. In winter they eat weed, grass and tree seeds (elm, ash, sycamore and tulip tree); in early spring they consume buds and flowers of trees and shrubs; they take some insects in late spring; and they feed on fruits in summer.

The male has a melodious warbling song. The female builds a nest 15 to 20 feet above the ground, on a horizontal branch, usually in a conifer; she weaves a compact open cup out of twigs, weeds, rootlets and strips of bark, and lines it with fine grasses or animal hair. The three to five eggs are a pale greenish blue, dotted with black and brown. The female incubates them for around 13 days. Both parents feed the nestlings, mainly with seeds, and they fledge about two weeks after hatching. In the East, only one brood is raised per year. In winter, purple finches may join foraging flocks with American goldfinches, pine siskins and other species. At feeding stations, house finches and house sparrows dominate purple finches and often drive them away. Purple finches winter as far south as Florida.

House Finch (*Carpodacus mexicanus*) — House finches in the eastern United States are descendants of birds released in New York City in 1940. The species is native to the US Southwest; today *Carpodacus mexicanus* breeds from coast to coast. Females are sparrowlike, and males are similar to male purple finches, except that house finches show more streaking on the breast, are



Purple Finch

- DOUG PIFER



House Finch

- DOUG PIFER

not quite as robust, and are a more bright red. The red pigment in both species comes from beta-carotene found in many plants, particularly in red fruits; the red blush to the plumage intensifies as males age. House finches live in cities, suburbs and farms. They feed on seeds, flowers, buds, berries, small fruits and a few insects.

Pairs often form within flocks during winter. Males do not stake out territories but, instead, defend areas around their mates. House finches begin nesting as early as March and produce two or more broods per year, each with four or five young. Females nest in a variety of sites including conifers, ivy on building walls, abandoned nests of other birds, above porch lamps and in hanging flower baskets. The population of this western species "exploded" until around the mid-1990s, when an eye disease seemed to have curbed the growth in the East.

Pine Siskin (*Carduelis pinus*) — With their brown colors and streaked breasts, pine siskins look like sparrows; patches of yellow in the wings and tails are good field identifiers. Pine siskins nest in New England and Canada and in scattered sites southward in the Allegheny Mountains. In Pennsylvania they breed mainly in the northern tier, nesting in stands of hemlocks, pines, spruces and larches, and in ornamental conifers in backyards. These tame birds become much more visible when they flock to feeding stations in winter. As well as eating seeds put out by people, siskins consume the seeds of trees (alder, birch, spruce and others), weeds and grasses. They also eat buds, flower parts and some insects. They usually forage in flocks, even during the nesting season; in winter they're often seen in the company of goldfinches. In some years many siskins winter in the Keystone State, and in other years few show up.



Pine Siskin

American Goldfinch (*Carduelis tristis*) — The male goldfinch in summer is one of our most conspicuous birds: bright yellow, with black wings and a black forehead. The female is a dull olive-gray. In winter both sexes look like the summer female. Goldfinches are gregarious and are often seen flying in groups, in a characteristic bouncing or undulating flight pattern: bursts of wingbeats followed by short glides when the birds lose a few feet of height. While airborne, flock members sound a *perchickory* call. American goldfinches nest across North America and statewide in Pennsylvania. They forage in a variety of habitats including brushy areas, roadsides, open woods, woods edges and suburbs.

American goldfinches are with us year-round. Some winter in Pennsylvania; others move in from the south in April and May, returning to breed in areas where they

hatched, although they remain in flocks and do not set up territories until late June or early July. In the spring, goldfinches eat seeds, insects and insect eggs. In summer they turn



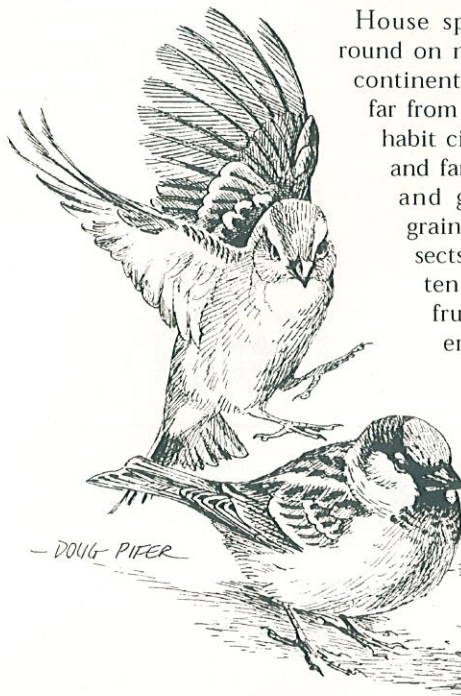
American Goldfinch

mainly to the seeds of thistles, dandelions, ragweeds, sunflowers and grasses. They eat elm seeds, birch and alder catkins, flower buds and berries. They clamber around in weeds and shrubs, picking out seeds. In winter, flocks may seem to roll across a field, as birds in the rear leapfrog over other flock members on the group's leading edge: this strategy gives each individual access to fresh foraging areas while requiring only short flights to get there.

Goldfinches start nesting later in the season than any other bird in the Northeast; perhaps breeding occurs late so that young hatch when seeds mature on favored food plants, particularly thistles. Flocks break up as males claim territories, in loose colonies, up to a quarter-acre in size. The male sings from a perch, voicing a clear canary-like song, and makes high, circling flights. The female builds a neat cup lined with thistle or cattail down, 4 to 14 feet up in a horizontal or upright fork of a small tree or shrub. Goldfinches often nest in thornapples, shrub willows and gray dogwood clumps. The nest is woven so tightly that it will hold water; flexible, it expands as the young increase in size. The female lays four to six pale bluish eggs. She incubates the clutch, with the male bringing her food. The young hatch after 12 to 14 days, are fed mainly on seeds by their parents, and leave the nest after another 11 to 17 days.

Some pairs raise a second brood, and fledglings have been found as late as September. Cowbirds sometimes parasitize goldfinches, but the young cowbirds often die because they don't get enough protein from the regurgitated seeds that goldfinch parents feed to nestlings.

House Sparrow (*Passer domesticus*) — Although named a "sparrow," this ubiquitous bird is actually a member of the weaver family, a large group of Old World birds. House sparrows have spread from Eurasia, and can now be found living with humankind around the globe. People introduced them in North America between 1850 and 1886 in an attempt to control insect pests, particularly the elm spanworm caterpillar. At first the bird was called the "English sparrow," because most imports were brought from England. Male house sparrows have black chin and breast patches (the amount of black varies among individuals), white cheeks and a chestnut nape. Females are a dingy brown.



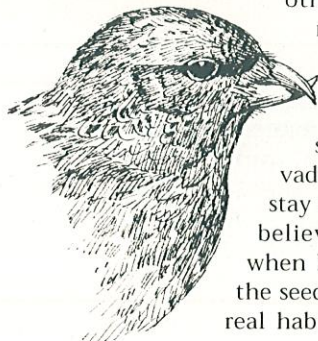
House Sparrows

House sparrows live year-round on most of the species' continent-wide range. Never far from humanity, they inhabit cities, suburbs, towns and farms. They eat weed and grass seeds, waste grains, chicken feed, insects and spiders (about ten percent of the diet), fruit tree buds, flowers, crumbs and garbage. They nest in protected places, including holes in trees and buildings, porch and

barn rafters, behind shutters and awnings, in bluebird houses, and in thick growth of ivy on the sides of buildings. Often they destroy the eggs and young of native cavity nesters. House sparrows use their nests for shelter during most of the year. Both sexes work at lining the cavity with grass, weeds, feathers and trash. Pairs are monogamous; prolific breeders, they produce two or three broods of three to seven young annually. Recently-fledged juveniles form flocks in summer and are joined by adults after the breeding season ends in August and September. In late fall, pairs return to their nest cavities.

When house sparrows overran the United States in the early 20th century — ousting native breeders, fouling buildings with their droppings, and offending people with their aggressive, noisy habits — those who had championed the species' introduction were roundly castigated. The population peaked in the early 20th century. Since then, it has fallen. Several factors may be involved. Tractors and automobiles have replaced horses, and farming operations have been sanitized, so that grain is no longer widely available in winter.

Red Crossbill



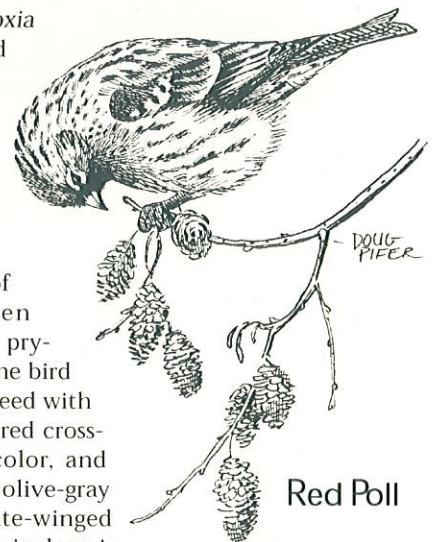
Winter Finches — In addition to our five breeding species, four other finches breed in the far north and visit the Northeast in winter, when they may descend on feeding stations in peoples' yards. In some years many finches invade our area; in other years they stay in the north. Ornithologists believe that finches come south when key food sources, particularly the seeds of conifers, fail in their boreal habitat.

Red crossbills (*Loxia curvirostra*) and white-winged crossbills (*Loxia leucoptera*) have oddly shaped bills, the tips of whose mandibles cross. A bird will stick its bill between the scales of a spruce cone, then open the mandibles, prying apart the scales; the bird lifts out the exposed seed with its tongue. The male red crossbill is brick red in color, and the female is a mix of olive-gray and yellow. The white-winged crossbill has white wingbars in both sexes; the male is a rosy pink,

and the female is colored much like the red crossbill female. Both types of crossbills eat the seeds of various conifers, and they also feed on buds and weed seeds. In the years when they winter in Pennsylvania, they may arrive with cold fronts in late October and November.

The common redpoll (*Carduelis flammea*) has a red forehead and a black chin. It is the size of a goldfinch. Redpolls feed actively in brushy and weedy fields and along woods edges, picking up seeds of trees, weeds and grasses. Often they forage in mixed flocks with pine siskins and goldfinches.

The evening grosbeak (*Coccothraustes vespertinus*) is a big, husky bird. The male is dull yellow with prominent white wing patches, and the female is yellowish gray; the massive bill is white in both sexes. Wintering flocks wander widely in search of food, although a feeding station frequently restocked with sunflower seeds will hold them in one area. Evening grosbeaks forage in mixed woodlands, coniferous forests, towns and suburbs. At bird feeders, they often displace one another, as well as the local birds, giving strident chirping calls and putting on aggressive displays while competing for food.



Red Poll



Evening Grosbeaks