



Finches and House Sparrow

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 have been known to nest in Pennsylvania. One, the house finch, (*Haemorrhous mexicanus*) is a western species liberated in the Northeast that has become quite common. Another, the red crossbill (*Loxia curvirostra*) is a rare nester here, mostly in conifer forests. Finches are sociable birds, and outside of the breeding season they gather in flocks. They feed mainly in trees but will forage on the ground, in tall weeds and in shrubs. 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. They will also eat insects, buds, and fruit. In winter, many of the birds in this group frequent bird feeders but also can be found in conifers and on deciduous trees with catkins such as birches, ashes, maples, and aspens.

Male finches sing to attract females and to maintain pair bonds. Finches tend to be sexually dimorphic with the male's plumage more colorful than the females. 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 (*Haemorrhous purpureus*)

Do not look for a purple bird when trying to pick out this species. The male purple finch is maroon-red, sometimes described as raspberry-colored, while the female is brown with darker streaks. The species breeds across the southern half of Canada and south into the Pacific Northwest, the Great Lakes states and the Appalachian Mountains in the Northeast where it is found as far south as West Virginia and Virginia. In Pennsylvania, purple finches nest mainly in the northern tier and at higher elevations in southern regions of the state. 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. They are associated with larger forest tracts, but are often found at edges and in openings. In winter, they eat weed, grass and conifer seeds and other 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.

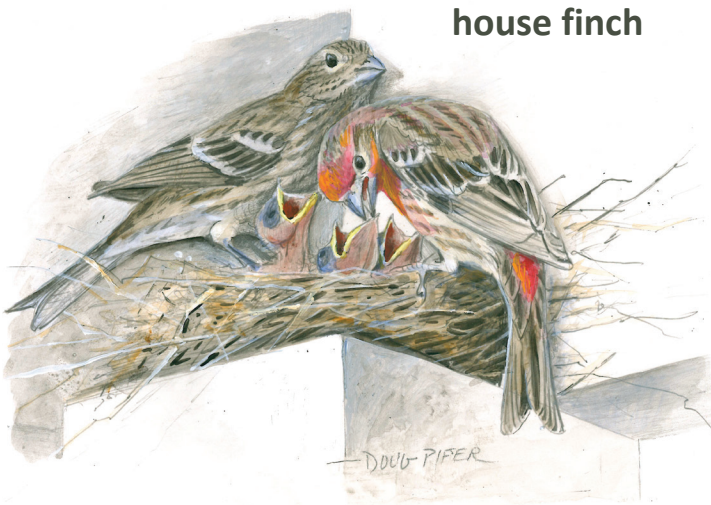
The male has a melodious warbling song usually given from high in a tree but sometimes given mid-air, called "sky-larking." The female builds a nest at any height from 3 to 60 feet above the ground, on a horizontal branch, usually in a conifer; she weaves a compact open cup out of twigs, weeds, rootlets and strips of bark, and lines it with fine grasses or animal hair. The two to seven 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. One to two broods may be 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. Despite

that, purple finches are more numerous than those species. Purple finches winter as far south as the Gulf states.

House Finch (*Haemorhous mexicanus*)

House finches in the eastern United States are descendents of birds released in New York City in 1940. The species is native to the U. S. Southwest; today *Haemorhous mexicanus* breeds from southern Canada, across most of the United States and south through most of Mexico. Females are sparrowlike, and males are similar to male purple finches, except that house finches show more streaking on the breast and flanks, are not quite as robust, and are a more bright or “strawberry” 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 varies with the pigments in the food that is consumed during molt. House finches inhabit urban, rural and suburban environments and have adapted to a wide range of human-associated habitats. In the east, they are often found near human dwellings where they readily visit feeding stations. They feed on seeds, flowers, buds, berries, small fruits and 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 along 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 a highly contagious eye disease, Mycoplasma conjunctivitis, caused a dramatic population decline in the East. The disease causes respiratory problems and swollen eyes in house finches. Infected finches often die as a result of starvation, predation or exposure. Some birds do not die and may transmit the disease to flocks in other areas. It is important to regularly clean feeding stations with soapy water to prevent the spread of this disease. Although numbers have declined from peak populations in the mid-1990s, the *Second Atlas of Breeding Birds in Pennsylvania* shows the house finch to be numerous in Pennsylvania.



house finch



pine siskin

Pine Siskin (*Spinus 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 Alaska, across Canada, in northern parts of the United States including the upper Great Lakes and New England. They nest in western mountains south into Central America. In Pennsylvania, the pine siskin is a rare breeding bird in most years. It nests mainly in the northern tier 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, 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 are often seen in the company of goldfinches. During some years, many siskins winter in the Keystone State in response to cone crop failures in northern forests, and in other years few show up.

American Goldfinch (*Spinus tristis*)

The male goldfinch in summer is one of Pennsylvania’s 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. They have 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 goldfinch



American goldfinches nest across much of North America from southern Canada south into the southern states in the east and across the west except for the southwest. In Pennsylvania, goldfinches are found statewide, absent only in small areas within major cities and portions within large contiguous blocks of forest. They forage in a variety of habitats including brushy areas, roadsides, open woods, woods edges and suburbs.

American goldfinches inhabit Pennsylvania 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. Goldfinches primarily eat seeds. In the spring, they forage for seeds, insects and insect eggs. In summer, they turn 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 two to seven 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 the nests of 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 not related to North American sparrows but is related to Old World sparrows. The house sparrow is native to Europe and Asia, and can now be found living with humankind around the globe. This invasive species was introduced into 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 live year-round throughout North America with the exception of northern Canada. Never far from humanity, they inhabit cities, suburbs, towns and farms. They eat primarily grains and seeds including weed and grass seeds, crop and waste grains and livestock feed. They also consume bird seed, food litter and garbage. In summer, they will eat insects and spiders (about 10 percent of the diet), fruit tree buds and flowers. 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. House Sparrows aggressively defend potential nest sites and often destroy the eggs and young of native cavity nesters. They regularly displace nesting bluebirds and tree swallows. House sparrows use their nests for shelter during most of the year, an advantage in spring when competition for nest sites begins. Both sexes work at lining the cavity with grass, weeds, feathers and trash. Pairs are monogamous; prolific breeders, they produce one to



house sparrow

four broods of three to seven young each. 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. Yet, dairy barns can host many house sparrows and still have large populations of this invasive species.

Winter Finches

In addition to Pennsylvania's breeding species, four other finches—white-winged crossbill (*Loxia leucoptera*), common redpoll (*Acanthis flammea*), evening grosbeak (*Coccothraustes vespertinus*), and pine grosbeak (*Pinicola enucleator*)—breed in the far north and visit the Northeast in winter, when they may descend on feeding stations in yards. In some years, “winter 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



red crossbill

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.

The pine grosbeak (*Pinicola enucleator*) is the largest of Pennsylvania's winter finches. It is a grayish bird with a plump chest and round head. The males are reddish-pink on their head, chest and back, while females and immature birds vary from orange to yellow. Their diet is almost exclusively plant-based (buds, seeds and fruits) generally from spruce, pine, juniper, birch, maple, poplars, and more. During winter, pine grosbeaks can be seen eating grit and salt along roadsides and visiting feeders with black oil sunflower seeds or suet.



evening grosbeak