



# Wood Duck

by Chuck Fergus

The wood duck is our most brilliantly colored duck. Its scientific name, *Aix sponsa*, can be loosely translated as “a waterfowl in wedding dress.” This shy, retiring bird inhabits ponds and sluggish streams surrounded by woodlands. Nicknames include Carolina duck, squealer, summer duck and woodie. Most authorities place the species with the puddle or dabbling ducks, a group distinguished by its habit of feeding on and near the surface of shallow waters, rather than diving for food.

Wood ducks range from the Mississippi River east to the Atlantic coast, and from the Great Lakes Region south to the Gulf of Mexico. Most of them winter from the Carolinas south to the Gulf and west to eastern Texas. A small population of wood ducks also inhabits the Pacific Northwest. In Pennsylvania, woodies are common migrants in March and April; summer breeding residents; common migrants in September, October and early November; and occasional winter residents in the southeast and southwest corners of the state.

## Biology

An adult wood duck is 18 to 20 inches long, has a 24-inch wingspan, and weighs 1½ pounds. The male is called a drake, the female a hen. The drake’s coloration is nothing short of exotic. His head is iridescent green, shading into blue and purple, with a slicked-back crest of feathers and a white chin-bib. His eyes are bright red, his bill reddish-orange, his legs yellow. His chest, a rich chestnut, is separated from his golden-yellow sides by vertical bars of white and black. The hen’s plumage is drab, a combination of gray, white and brown. She has a small head crest and a circle of white surrounding each eye.

Wood ducks do not quack. The hen, more vocal and louder than her mate, squeals a shrill warning call, *hoo-eek hoo-eek*. The drake whistles an ascend-

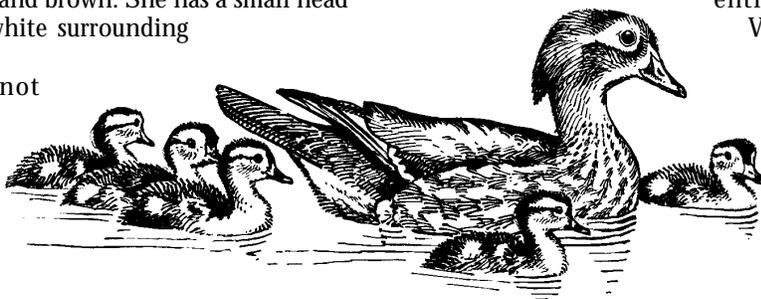
ing, finch-like *twee twee*. Woodies are excellent swimmers and fast, agile fliers. Above open terrain they can wing along at up to 50 mph; in woodlands they twist and turn between the trees, moving their heads almost constantly in flight.

The wood duck feeds along shores of woodland streams and ponds. A dabbler, it tips its head into shallow water and probes the bottom for vegetative parts and seeds of pondweeds, wild rice and water lilies. It also eats grapes, berries, and nuts — acorns, hickory nuts and beech-nuts — which are swallowed whole and crushed, inside the gizzard, into digestible bits. Insects and spiders comprise about 10 percent of the adult’s diet, while the duckling eats a larger percentage of these high-protein animal foods. In winter, wood ducks may turn to waste corn if natural foods are scarce.

Breeding occurs in late March and April, extending into May in the north. Most pairs form on the wintering range, following an intense courtship. The male preens behind his wings, spreading them to show off their iridescent sheen, he tucks in his chin, erects his crest, and fans his tail. He swims at the hen then circles her.

When the birds migrate north, the hen homes in on last year’s nest tree or, if she is a yearling, on the same general locale in which she was hatched. The male sets up no actual territorial boundaries, but will defend his mate from the attentions of other males. Several breeding pairs may share the same pond. Nesting concentrations are largely determined by the availability of nest sites. The mated hen seeks out a cavity in a tree; the male follows her on these search flights, but the hen apparently picks the exact spot.

Wood ducks prefer to nest in trees standing over water, but sometimes will settle for sites up to a mile away. They normally use natural cavities with entrances too small for raccoons to enter, often choosing excava-



tions made by pileated woodpeckers. They also nest readily in man-made boxes.

The hen lays 8 to 15 eggs (one per day) in the bottom of the cavity, on accumulated wood chips covered with down from her breast. The eggs are dull-white and unmarked. Incubation, by the female alone, starts with the last egg and takes about a month. Unlike most other male ducks, the drake woody stays with his mate well into her incubation. He has usually left the scene, though, by the time the eggs hatch.

All the eggs hatch on the same day. The hen usually keeps her brood in the nest overnight, and then in the morning she flies out and lands on the ground or water below, where she begins calling softly. The day-old ducklings leap out of the nest to join her. They tumble down perhaps 60 feet, sailing like cotton puffs and usually landing unharmed. The hen leads them to safety along a lake or a stream.

If a raccoon, snake or squirrel destroys her first clutch, the female may lay a second. A few hens raise two broods, but the vast majority raise only one.

Ducklings — and adults — are preyed upon by minks, otters, raccoons, hawks and owls. In Maryland, scientists found that half of the young were killed in their first month. The brood begins to break up after six weeks or so, and the young can fly when two months old.

After leaving his incubating mate, the drake woody joins other male wood ducks in the dense cover of a swamp or wooded pond. Here he molts into eclipse plumage: dull feathers resembling the drab plumage of a hen. During part of the annual summer molt, wood ducks — both drakes and, later, hens — lose their wing feathers and cannot fly. In late summer or early fall, a second molt begins, restoring the normal plumage.

Wood ducks migrate south for the winter. Some seek out common roosting and feeding sites, grouping in flocks of less than a hundred to several thousand. Pennsylvania band surveys show most of our home-grown woodies winter in the Carolinas, Georgia and Florida.

### Population

In the early 1900s, the wood duck was nearing extinction. Many woodland ponds, the species' favorite habitat, had been drained. Widespread logging had removed the mature trees needed for nesting. And for years the woody had been hunted hard for its good-tasting flesh.

In 1913, wood duck hunting was banned for five years by the U.S. Department of Agriculture to spur a population recovery. That effort was followed by the ratification of the Migratory Bird Treaty Act between the United States and Canada, which established the framework needed to manage waterfowl on a broader scale than with

inconsistent state plans. The wood duck was also aided by Pennsylvania's beaver reintroduction program, which began in 1917, and the construction and placement of thousands of wood duck nest boxes by conservation organizations.

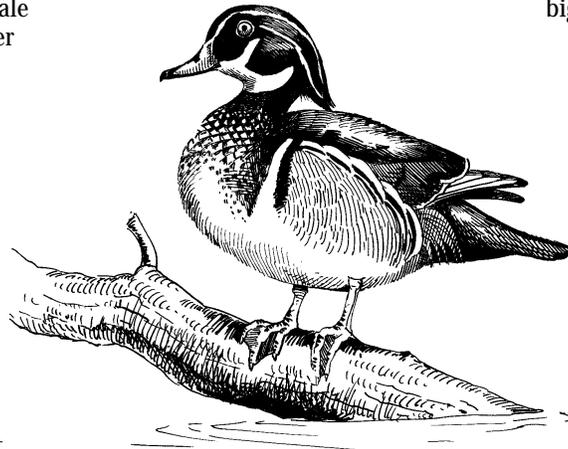
The wood duck population grew steadily. In 1941, hunting was again permitted. In 1976, waterfowl scientist Frank Bellrose reviewed many local studies and concluded that the adult population of wood ducks is about 1 million before each year's breeding. Others have estimated the annual post breeding population at 2½ to 3½ million.

Today the wood duck has reclaimed most of the Atlantic Flyway and a large part of the Mississippi drainage. The greatest concentration of woodies lies in Ontario.

### Habitat

Wood ducks inhabit slow-moving creeks, woodland ponds, lakes, swamps, marshes and beaver ponds. They rest in thick growths of water lilies, smartweeds and other emergent plants; hens hide their ducklings in vegetation, under overhanging banks and among fallen, partly submerged trees.

Woodies nest in cavities of mature sycamore, maple, oak, basswood, elm and gum trees. Where big trees are scarce, they will use man-made nest houses. Artificial nests should be made predator-proof, as they attract raccoons, squirrels and other predators looking for a meal. Place nest boxes on poles over water; attach metal shields partway up the poles, and make sure the boxes' entrances are small enough to exclude raccoons. Studies in Pennsylvania show that hens and broods having to travel more than a mile from their nest box to brood-rearing wetlands experience the highest mortality. That's why it's a good idea to place nest boxes near suitable wetlands. Wood duck boxes also provide nesting space for American kestrels, common screech owls, mergansers, squirrels and occasionally, wrens and tree swallows. Plans for the boxes can be obtained by writing: Pennsylvania Game Commission, Dept. MS, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797.



Wildlife Notes are available from the  
Pennsylvania Game Commission  
Bureau of Information and Education  
Dept. MS, 2001 Elmerton Avenue  
Harrisburg, PA 17110-9797  
[www.pgc.state.pa.us](http://www.pgc.state.pa.us)

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