



## Diving Ducks

Pennsylvania ducks may be grouped into two types: diving ducks and dabbling or puddle ducks. Diving ducks often spend much more of their time farther out from shore than puddle ducks. Both groups can be found on streams, rivers, lakes and marshes. This note covers 15 species commonly called diving ducks.

Diving ducks eat seeds and other parts of aquatic plants, fish, insects, mollusks, crustaceans and other invertebrates. They dive underwater to obtain much of their food. They have large broad feet, fully webbed and with strongly lobed hind toes, that act as paddles. Their legs are spaced widely apart and located well back on the body, improving diving efficiency but limiting agility on land. Their bodies are compact, and their wings have relatively small surface areas; noticeably more narrow than puddle ducks. While this arrangement helps their diving and swimming, it hinders their ability to become airborne. Instead of springing straight out of the water into flight, as puddle ducks are able to do, diving ducks must run across the water to build up speed before taking off.

Diving ducks, puddle ducks, geese and swans begin migrating north through Pennsylvania in late February. Each year there is a peak in migration, when wetlands across the state are crowded with waterfowl. While this period varies from year to year, it often follows heavy nighttime rains in March to early April.

Diving ducks nest in New England, Canada, midwestern and prairie states, the Pacific Northwest and Alaska. Several species inhabit both the Eastern and Western hemispheres. Two species of mergansers, common and hooded (which, though taxonomically distinct from other diving ducks, are usually grouped with them due to similar ecology) breed in Pennsylvania.

Although variable among species, diving ducks are generally less likely than dabbling ducks to breed at one year of age; divers typically breed for the first time when 2 to 3 years old. Beginning in winter and before heading north, and into spring, males in their brightly-colored breeding plumage vie for females. Courtship may include ritualized drinking and preening movements, posturing and calling. Copulation takes place in the water. Males and females form monogamous pairs that last until the female begins incubating eggs; then,



### redhead

the male leaves the area and usually joins a band of other males.

Nesting habits and habitats vary from species to species. Generally, female diving ducks lay 5 to 15 eggs in vegetation, tree cavities, or rock crevices over or near the water. Because females do not start incubating a clutch until they lay their last egg, young develop simultaneously and all hatch at about the same time.

Ducklings are covered with down, patterned with shades of yellow or brown to break up their body outlines. Their eyes are open, and they can swim and feed themselves soon after hatching. The group, called a brood, remains together until the ducklings can fly, usually 8 to 10 weeks after hatching.

Adults undergo a post-breeding molt, growing a new set of feathers. Males molt first; in all species, the male's bright nuptial plumage is replaced by drabber, less-conspicuous feathering. While their flight feathers are growing, ducks cannot fly; they keep quiet and stay hidden during this period of vulnerability.

Ducks are preyed upon by raccoons, foxes, mink, hawks and owls; young are also taken by snapping turtles and predatory fish. Crows, raccoons and skunks eat the eggs.

In Pennsylvania, the fall migration of waterfowl begins in late August, peaks in October through November, and ends in late December to early January. Some ducks winter in our state, but most go farther south. Diving ducks winter along the Atlantic and Pacific coasts, across the southern states and in Mexico and Central America.

Habitat is of prime importance to ducks. Wetlands originally covered some 127 million acres in the U.S., but today more

than half of those acres have been drained and converted to farmland, or developed for housing and industry. Drought periodically dries up parts of remaining wetlands, affecting duck reproduction. Ducks are vulnerable to oil spills on coastlines where they winter or breed. Pollution such as siltation, herbicides, pesticides, heavy metals and other industrial contaminants also harm them, either through direct toxicity, accumulation through the food chain, or by killing important food plants or animals.

The Prairie pothole region or “duck factory” in North and South Dakota and the Canadian prairie provinces—Manitoba, Saskatchewan and Alberta—forms the single largest breeding habitat for many duck species. Alaskan and Canadian arctic wetlands are also crucial to geese, swans and ducks. Pennsylvania’s southern coastal states form important wintering grounds.

By the early 1900s, unregulated market killing had decimated duck populations along the Atlantic seaboard. Today, most waterfowl populations in the region are stable, thanks to modern law enforcement, scientific management of harvest, and habitat management and preservation. The U.S. Fish and Wildlife Service monitors continental waterfowl numbers. The Service divides the United States into four administrative units called flyways (they correspond to four major migration corridors for waterfowl) and gives states within the flyways guidelines for setting hunting seasons and bag limits. Pennsylvania is part of the Atlantic Flyway.

Duck hunting is a challenging, rewarding sport. To pursue waterfowl, today’s hunter is required to buy a federal duck stamp and a Pennsylvania migratory game bird license. Revenues are used to monitor waterfowl populations through surveys and to acquire wetland habitat. Many people other than hunters also enjoy waterfowl, observing and photographing these colorful, diverse birds.

**Canvasback** - Also called a “can.” Length 20 to 21 inches; weight, 2½ to 2¾ pounds. Plumage is black and white; male has a red head, female, brown. Both sexes exhibit a distinctive long, sloping profile from the tip of the bill to the top of the head. Flight is swift (up to 70 mph in calm skies, faster with a tail wind), with little dipping and weaving; flocks number 5 to 30.

canvasback



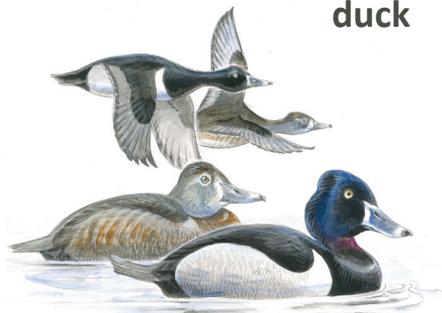
Canvasbacks eat seeds and other parts of pondweeds, wild celery, eelgrass, widgeon grass, other aquatic plants, mollusks and crustaceans. In Pennsylvania, the canvasback is an uncommon spring and fall migrant. It breeds in the prairie states, Rocky Mountains, Canada and Alaska. In the Atlantic Flyway, wintering canvasbacks are concentrated on the Chesapeake Bay. Hazards on the breeding range include drought (the canvasback does not adapt as readily to drought-related habitat changes as do other ducks); and loss of nesting habitat. The canvasback population, once greatly reduced by market killing and consequently given periodic closed-season protection, has rebounded and is annually hunted.

**Redhead** - Length, 19 to 20 inches; weight, 2 to 2½ pounds. Plumage is black and gray; male has a red head, female, brown. Flies in singles, pairs and in flocks of 5 to 15. Redheads feed in shallower water than do other diving ducks, eating the seeds, tubers and leaves of plants, along with insect larvae and snails. In Pennsylvania, redheads are uncommon migrants in spring and fall. They breed mainly in the northern United States and southwestern Canada, and winter across the southern United States and in Mexico. Females often lay eggs in the nests of other ducks, and leave them to be incubated by the nest owners. They also desert their nests more readily than do hens of other species.

**Ring-necked Duck** - Also called a “ring-bill.” Length 16 to 17 inches; weight, 1¼ to 2 pounds. Plumage is black and white for the male, brown and white for the female. The male has a faint brown ring around the neck (not easily seen in the field), and both sexes have a pale ring near the tip of the bill. They fly swiftly in flocks of up to 20. They feed in shallow waters on seeds and vegetative parts of pondweeds and other water plants, and on insects, mollusks and other aquatic animals. Common migrants through Pennsylvania during spring and fall, ring-necked ducks breed across southern Canada and the northern United States. Some occasionally winter in Pennsylvania, but most go to the coasts, the southern states and Mexico.

**Greater and Lesser Scaup** - These two nearly identical species are 16½ to 18 inches in length, and weigh 1½ to 2½ pounds. They are also called “broadbills” and “bluebills.”

ring-necked duck



greater and lesser scaup



## long-tailed duck



Males are black and white, females, brownish and white. The bill is blue for both species. Greater scaup inhabit large bays, sounds and inlets of both coasts, and the Great Lakes. The lesser scaup is the one normally seen in Pennsylvania. It frequents Presque Isle Bay and the larger bodies of inland waters. Scaup eat mollusks, insects, crustaceans and aquatic plants. Common spring and fall migrants through Pennsylvania, they breed across Canada into Alaska. They winter along the coasts.

**Long-tailed Duck** - Also called “oldsquaw.” Length, 16 to 20 inches; weight, 1¾ to 2 pounds. Plumage, a striking mix of black and white, shows much seasonal variation when found in the state. Males have a long, pointed tail. Food: crustaceans, mollusks, insects and fish. Long-tailed ducks are likely the deepest divers of any duck – they may dive to 100 feet or more when foraging. They are uncommon spring and fall migrants through Pennsylvania. Occasionally they winter in the state, but more often along the coasts and on the Great Lakes. They breed in Canada and Alaska and are the most common breeding duck in the high Arctic region.

**Bufflehead** - Also called a “butterball.” Length, 13 to 15 inches; weight, about 1 pound. Plumage is mostly black and white on the male, and brown and white on the female. The male has a large white patch on its head. Buffleheads are fast fliers with rapid wing-beats. They eat aquatic insects, snails, fish and other animal foods. Buffleheads are common spring and fall migrants, breeding in northern Canada and Alaska, and wintering along the coasts and in the southern states.

**Common Goldeneye** - Also called a “whistler” for the sound of its wing-beats. Length, 17 to 19 inches; weight, about 2 pounds. Plumage is black and white on the male, brown and white on the female. Goldeneyes dive for crustaceans, insects, mollusks and fish. Common spring and fall migrants, they breed across Canada and in Alaska, and winter on larger rivers in Pennsylvania and coastal bays and across the continental United States.

## bufflehead

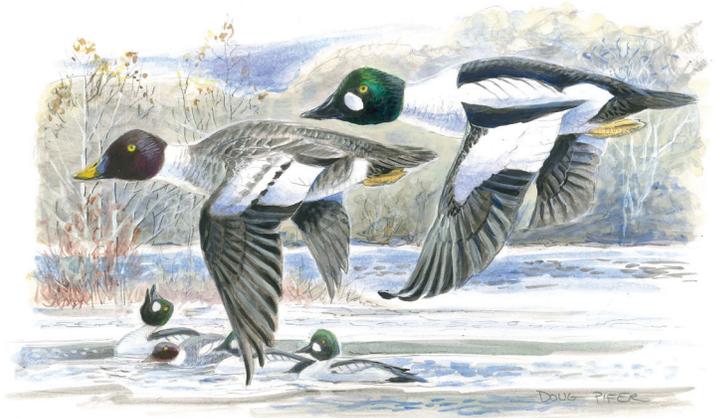


## ruddy duck



**Ruddy Duck** - Length, about 15 inches; weight, about 1 pound. Small and stubby, the ruddy duck has a short, thick neck, an upturned tail, and white cheek patches under a dark cap. It prefers to dive—rather than fly away—from danger. In flight, ruddy ducks skim low over the water in compact flocks. Food is primarily vegetation (widgeon grass, pondweeds, bulrush seeds), midge larvae and mollusks. Juveniles eat a larger proportion of energy-rich animal food than do adults. Ruddy ducks are common spring-fall migrants across Pennsylvania. They breed mainly in Canadian prairies, and winter along the United States coasts and in Mexico.

**Hooded, Red-breasted, and Common Mergansers** - Mergansers are known as “sawbills” and “fish ducks.” Hooded mergansers average 16 to 18 inches in length, while the red-breasted and common merganser are 20 to 25 inches. Weight, about 1½ pounds for the hooded, and 2½ to 4 pounds for the red-breasted, and common. The species have distinctive, colorful plumage. They fly fast and low over the water. Food: fish and their eggs and other aquatic animals. Hooded and common mergansers commonly breed in Pennsylvania, with an expanding range. Breeding habitats are lakes, beaver ponds and streams for hoodeds and rivers and streams for



## common goldeneye

commons. Hooded and common mergansers usually nest in tree cavities. Eggs: 6 to 17. Incubation is by the female and takes about four weeks. Red-breasted have a more northerly breeding range, across Canada, and they nest on the ground rather than in cavities. Hooded and red-breasted mergansers primarily winter along the coasts and in the southern United States: the common merganser winters in Pennsylvania, on the Great Lakes, and across the continent where the water remains open.

**Black, Surf and White-winged Scoters** - Length, 18½ to 22 inches; weight, 2 to 3½ pounds. All three scoter species are basically black, with varying amounts of white in the plumage. These sea ducks fly in long, undulating lines, in irregular groups, or in V-shaped flocks. They eat mollusks, crustaceans, aquatic insects and plants. They are rare to uncommon migrants over Pennsylvania, passing through the state in March and April, and again in October through December. Scoters breed in Canada and Alaska. They winter on the Great Lakes and along the Atlantic and Pacific coasts.

## black, surf, and white-winged scoters



hooded merganser

common merganser

