Diving Ducks

by Chuck Fergus

Pennsylvania ducks may be grouped into two types: diving ducks and puddle ducks. Diving ducks 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. 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 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 ponds across the state are crowded with waterfowl. While this period varies from year to year, it often follows heavy nighttime rains in late March or 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. Three species of mergansers (which, though not actually diving ducks, are usually grouped with them) breed in Pennsylvania’s northern tier.

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, 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. Crows, raccoons and skunks eat the eggs.

In Pennsylvania, the fall migration of waterfowl begins in late August, peaks in October, and ends in December. 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. Pesticides, heavy metals and industrial pollution also harm them, either directly or by killing food plants or animals.

The Canadian prairie provinces — Manitoba, Saskatchewan and Alberta — form the single largest breeding habitat for many duck species. Alaskan and Canadian arctic wetlands are crucial to geese, swans and ducks. Our southern coastal states form an important wintering ground.

By the early 1900s, unregulated market killing had decimated duck populations along the Atlantic seaboard.

Today, waterfowl populations in the region are stable, thanks to law enforcement and modern habitat management and preservation. The U.S. Fish and Wildlife Service monitors 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.

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 — Length, 20 to 21 inches; weight, 2½ to 2¾ pounds. Also called a “can.” Plumage is black and white; male has a red head, female, brown. 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.

Canvasbacks eat seeds and other parts of pondweeds, wild celery, eelgrass, widgeongrass, 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 concentrating on the Chesapeake Bay comprise almost half of the entire North American population. 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 earlier market killing and consequently given periodic closed-season protection, has rebounded and is hunted.

1 - Canvasback, 2 - Redhead, 3 - Ring-Necked, 4 - Greater Scaup, 5 - Lesser Scaup, 6 - Oldsquaw, 7 - Bufflehead, 8 - Hooded Merganser, 9 - Common Merganser, 10 - Red-Breasted Merganser, 11 - Common Goldeneye, 12 - Black Scoter, 13 - Surf Scoter, 14 - White-Winged Scoter, 15 - Ruddy
**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** — Length 16 to 17 inches; weight, 1¼ to 2 pounds. Also called a “ring-bill.” 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.” 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 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.

**Oldsquaw** — Length, 16 to 20 inches; weight, 1¾ to 2 pounds. Also called a “long-tailed duck.” Plumage, a striking mix of black and white, shows much seasonal variation when found in the state. Food: crustaceans, mollusks, insects and fish. Oldsquaws may dive to 100 feet when foraging. They are uncommon spring and fall migrants. Occasionally they winter in the state, but more often along the coasts and on the Great Lakes. They breed in Canada, the Pacific Northwest and Alaska.

**Bufflehead** — Length, 13 to 15 inches; weight, about 1 pound. Also called a “butterball.” 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** — Length, 17 to 19 inches; weight, about 2 pounds. Also called a “whistler” for the sound of its wing-beats. 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 in Pennsylvania and across the continental United States.
**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 and fall migrants across Pennsylvania. They breed mainly in southwestern Canada, and winter along the United States coasts and in Mexico.

**Hooded, Red-Breasted and Common Mergansers** — Hooded and red-breasted mergansers average 16 to 18 inches in length, while the common merganser is 23 to 25 inches. Weight, about 1½ pounds for the hooded and red-breasted, 2½ to 4 for the common. Mergansers are known as “sawbills” and “fish ducks.” The species have distinctive, colorful plumage. They fly fast and low over the water. Food: fish and their eggs and other aquatic animals. All three merganser species breed in Pennsylvania, although their principal range is farther north. Breeding habitat is heavy timber around lakes, ponds, rivers and streams. Hooded and common mergansers usually nest in tree cavities, while the red-breasted nests on the ground, usually in thick cover. Eggs: 6 to 17. Incubation is by the female and takes about four weeks. Hooded and red-breasted mergansers 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 and November. Scoters breed in Canada and Alaska. They winter on the Great Lakes and along the Atlantic and Pacific coasts.