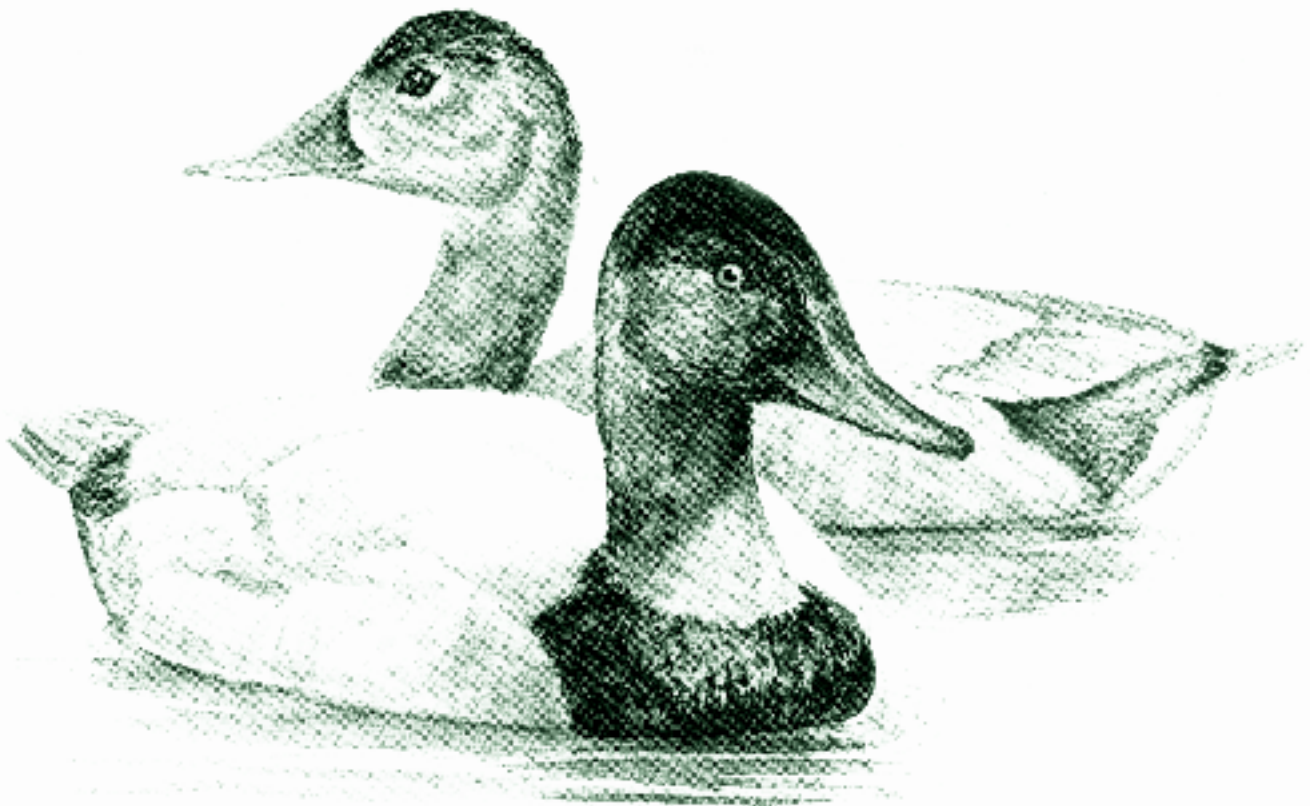


## Diving Ducks

“Bay ducks” and “sea ducks” are what the 12 species of Diving Ducks that most commonly inhabit the Eastern Shore are often called. Bay ducks include the bufflehead, canvasback, common goldeneye, greater scaup, lesser scaup, redhead, ring-necked duck, and ruddy duck. The sea ducks include the black scoter, common eider, old-squaw, surf scoter, and white-winged scoter. The common eider is seen rarely on the Eastern Shore. All of these species use the open

waters of the Chesapeake Bay, its tributaries, and the coastal waters of the Shore primarily during winter. None nest here. They all dive for their food and, in taking wing, do not spring directly upward but must patter for some distance across the surface to gain momentum to get under way.

This fact sheet describes bay ducks and sea ducks found on the Eastern Shore and details some management problems for these Diving Ducks.



## Bay Ducks

### Bufflehead (*Bucephala albeola*)

Other names:	Butterball, dipper
Size:	12 to 16 inches
Field Id.:	The male (drake) is small with a white body, black back, and dark purplish head with a large white patch extending to the back of his crest from the eyes. He has large, conspicuous white wing patches while in flight. The female (hen) is brown, with a white spot on each cheek and white wing patches in flight.
Habitat:	It prefers ponds, rivers, and lakes, as well as protected marine areas in winter.
Range:	The bufflehead is widespread from the Arctic southward. It breeds mainly in Canada and Alaska and winters mainly in the U.S. and the Pacific coast of Canada.
Clutch Size:	8 to 9 eggs
Incubation:	28 to 33 days
Food Habits:	On salt waters, animal foods (mainly crustaceans and mollusks) comprise the majority of its diet. On fresh and brackish waters, aquatic insects dominate its diet.

### Canvasback (*Aythya valisineria*)

Other names:	Can
Size:	19 to 24 inches
Field Id.:	The drake is light gray with a black chest, dull reddish head, and sloping forehead and bill. The adult's eyes are red, and the immature drake's eyes are yellow. The hen is light gray with a buffy neck, sloping forehead like the drake's, and brown eyes.
Habitat:	It prefers freshwater ponds, lakes, potholes, open-water marshes, saltwater marshes, and bays.
Range:	The canvasback is widespread throughout the U.S. and western Canada and breeds in the western Canadian provinces and in the northwestern U.S. It winters along—and, to some degree, inland from—the Atlantic, Gulf, and Pacific coasts.
Clutch Size:	7 to 12 eggs. Parasitism—ducks laying eggs in other ducks' nests—by red-heads is the greatest cause of canvasback nest desertion.
Incubation:	24 to 29 days
Food Habits:	At one time on its principal winter grounds in the Chesapeake Bay, the canvasback fed largely on wild celery, widgeon grass, eelgrass, and sago and clasping-leaf pondweeds; its main animal foods were clams, mollusks, and mud crabs. With the decline in submerged aquatic vegetation (SAV) in the Bay, two small clams now make up a great portion of its diet.

### Common Goldeneye (*Bucephala clangula*)

Other names:	Whistler (whistling of wings is heard before the duck is seen)
Size:	15 to 21 inches
Field Id.:	The drake is white with a black back, dull greenish head, bright white sides, bright yellow eyes, and a conspicuous round, white spot behind his black bill on each side of his face. The hen has a gray body, white neck and underbelly, and dull brownish head. Her bill and eyes are the same as the drake's. Both sexes have large, white wing patches.
Habitat:	It prefers ponds, lakes, and rivers, as well as brackish and saltwater areas in winter.

- Range: The whistler breeds in the Canadian and Alaskan Arctic and southward through eastern Canada to the U.S. It winters in the U.S. and on the Atlantic coast of Canada and the Pacific coast of Canada and southern Alaska.
- Clutch Size: Averages 9 eggs. It is a tree nester that nests in natural cavities or artificial nest boxes. This species experiences greater brood mortality than all other species because its nests are more vulnerable to predators.
- Incubation: 28 to 32 days
- Food Habits: On its Chesapeake Bay winter grounds, it feeds heavily on crustaceans (mud crabs, crayfish, amphipods), mollusks (ribbed and bent mussels, little surf clams, snails), small fish, and the seeds, leaves, and rootstocks of sago, other pondweeds, and wild celery.

### Greater Scaup (*Aythya marila*)

- Other names: Broadbill, bluebill
- Size: 15 to 21 inches
- Field Id.: The drake has a light-gray back, white belly, and a black chest and rear. His dark-colored, round head has a green gloss (in good light) with a blue, flat bill, and his wings have a white stripe when extended. The hen is brown with a prominent white band at the base of her blue bill and a white wing stripe.
- Habitat: It prefers freshwater ponds, lakes, rivers, coastal marine waters, and the Great Lakes.
- Range: It is found throughout most of North America, breeding in Alaska and northwestern Canada and wintering along the Atlantic, Gulf, and Pacific coasts and Great Lakes.
- Clutch Size: Averages 9 eggs
- Incubation: 23 to 27 days
- Food Habits: It feeds on both plant and animal life; however, in most areas, clams constitute the principal items of diet. In the salt-estuarine inlets of the Chesapeake Bay, it eats mollusks extensively.

### Lesser Scaup (*Aythya affinis*)

- Other names: Bluebill
- Size: 14 to 19 inches
- Field Id.: The drake is a smaller version of the greater scaup but has a dull purple head (in good light), which is oblong and peaked at the back. The white wing stripe is also restricted to the inner wings (secondaries). The hen is brown with a peaked head and conspicuous white area at the base of her bill. Both sexes have a blue bill.
- Habitat: It prefers inland ponds, lakes, rivers, marshes, and sheltered saltwater areas in winter.
- Range: The lesser scaup is widespread throughout North America and breeds from the West northward through western Canada and much of Alaska. It winters along and inland from the Atlantic, Gulf, and Pacific coasts.
- Clutch Size: Averages 9 eggs
- Incubation: 21 to 27 days
- Food Habits: The lesser scaup feeds on more plant materials than does the greater scaup. Foods include a variety of aquatic plants (60 percent of its diet) and snails, clams, and aquatic insects (40 percent).

## Redhead (*Aythya americana*)

Other name:	Pochard
Size:	18 to 22 inches
Field Id.:	The drake is gray and medium sized, with a red head, black chest, white belly, and bluish bill that has a black tip separated from the blue by a white ring. The hen is brown with a white breast and gray speculum.
Habitat:	It prefers ponds, lakes, bays, and open-water marshes.
Range:	The redhead is widespread throughout the U.S., wintering on the Atlantic and Pacific coasts, and widely distributed through southwestern Canada. On the Eastern Shore, it is found primarily in the Bay, its tributaries, and adjacent open-water marshes.
Clutch Size:	Approximately 11 eggs (difficult to determine because of its tendency toward parasitism—primarily with respect to other redheads and canvasbacks)
Incubation:	24 to 28 days
Food Habits:	It feeds more on aquatic plants—pondweed seeds, tubers, algae, wild celery, duckweeds, coontail, and water lily seeds—and less on animal life than do other divers.

## Ring-necked Duck (*Aythya collaris*)

Other names:	Ring-billed duck, ringbill, blackjack
Size:	14 to 18 1/2 inches
Field Id.:	The drake's back and chest are black while he has a white belly, gray speculum, and conspicuous white crescent on each side just behind his chest. His head is dull purple and peaked at the back, and his bill is gray with a black tip and two white rings, one behind the tip and one at the base. The hen is brown, with a white eye ring, gray speculum, white underbelly, and bill similar to the drake's.
Habitat:	It prefers ponds, lakes, bays, rivers, open-water marshes, and sheltered marine waters.
Range:	The ringbill is widespread from the Canadian Rockies, prairie provinces, and eastern Canada south along the Atlantic and Pacific coasts, the Gulf Coast, and the southeastern U.S. It breeds in Canada, parts of the West, and northern New England.
Clutch Size:	8 to 9 eggs
Incubation:	25 to 29 days
Food Habits:	It feeds in shallower water than other divers and, like the redhead, consumes great amounts of plant materials, including seeds of water shield, pondweeds, sedges, smartweeds, and leafy structures of coontail, pondweeds, and duckweeds. In Maryland, snails are eaten secondarily only to stems and leaves of the pondweeds.

## Ruddy Duck (*Oxyura jamaicensis rubida*)

Other names:	Butterball, bull-necked teal
Size:	14 to 16 inches
Field Id.:	Both sexes have drab, gray-brown plumage during the fall and winter. The drake has a distinctive, large, white cheek patch, topped by a black cap, and he exhibits a readily identifiable, erect, fan-shaped tail when on water. In February or March, his plumage turns a rich red-brown, and during the spring, his concave, gray-black bill turns bright sky-blue. The hen's cheek patch is grayish.
Habitat:	It prefers ponds, lakes, and rivers, as well as brackish and saltwater areas in winter.

Range:	The ruddy duck's breeding centers on the northern prairies, with important extensions into the intermountain basins and valleys of the West. In the East, it forms small breeding colonies in southeast Ontario, southwest Quebec, Montezuma Marsh and Long Island in New York, and Hackensack Meadows in New Jersey. In winter, it migrates to coastal areas. Its principal migration corridor to the Atlantic coast includes a route from North Dakota across Minnesota, Wisconsin, and southeast Michigan to the Chesapeake Bay.
Clutch Size:	Averages 8 eggs (ranges from 5 to 15). The ruddy duck drake accompanies the hen and her brood.
Incubation:	23 to 26 days
Food Habits:	It is primarily a vegetarian—preferring pondweed seeds and tubers, bulrush seeds, widgeon grass, and muskgrass—but eats some animal life, midge larvae and mollusks, for example.

## Sea Ducks

### Black Scoter (*Melanitta nigra*)

Other names:	American scoter, common scoter, coot, black coot, sea coot, black duck
Size:	17 to 21 inches
Field Id.:	The drake is the only American duck with entirely black plumage; his bill is orange. The hen is brown with large, light cheeks on each side of her head and neck. In flight, both sexes show a “two-toned” wing effect because of black linings and silvery primaries.
Habitat:	It prefers coastal saltwater areas, brackish water bays, and large freshwater lakes.
Range:	The black scoter breeds in Alaska and winters along the east coast from Maine to Florida.
Clutch Size:	Averages 8 eggs
Incubation:	27 to 28 days
Food Habits:	Its diet is 90 percent animal life and 10 percent plant life. Mussels and crustaceans are the principal animal foods while eelgrass and some muskgrass are the only plants eaten with any frequency.

### Common Eider (*Somateria mollissima*)

Other names:	Sea duck, drake
Size:	22 to 26 inches. It is the largest duck in the Northern Hemisphere.
Field Id.:	It is bulky and thick-necked. The drake is the only duck with a black belly and white back, breast, and forepart of the wing. His head is white with a black crown. The hen is brown with a long, flat profile and heavily barred body.
Habitat:	It inhabits coastal and other marine waters.
Range:	The common eider breeds from the Arctic south to the Maine coast, and it winters in Massachusetts and on Long Island. It is very rare on the Eastern Shore.
Clutch Size:	Averages 4 eggs
Incubation:	23 to 30 days
Food Habits:	Animals comprise 95 to 99 percent of its diet. Mollusks and crustaceans are particularly important.

## Old-squaw (*Clangula hyemalis*)

- Other names: Long-tailed duck, sea pintail, cockertail, coween kakawi  
Size: 17 to 21 inches  
Field Id.: In winter, the drake is white with a long, pointed, black tail, dark wings, and a black breast and back. He has a dark brown patch on each cheek and a short bill banded with black and pink. The hen, during winter, is brown but white below and on the sides of the head. She has a dark patch on each cheek, a dark crown and nape, and dark wings. Her bill and legs are gray. The old-squaw is the only sea duck combining white on its body with unpatterned dark wings.  
Habitat: It inhabits coastal and other large expanses of water in winter.  
Range: The old-squaw breeds in Arctic Canada and Alaska and winters along the Atlantic and Pacific coasts, sometimes far out to sea, and in the Great Lakes.  
Clutch Size: Averages 7 eggs  
Incubation: 24 to 29 days  
Food Habits: It is a phenomenal diver—down to depths of 150 feet and greater. Its diet consists mainly of animal life, crustaceans, amphipods, and crabs.

## Surf Scoter (*Melanitta perspicillata*)

- Other names: Skunkhead, coot, sea coot  
Size: 18 to 22 inches  
Field Id.: The drake is black with one or two white patches on top of his head like those of a skunk. He has white eyes and a reddish and yellow bill with a black circle on each side surrounded by white. The hen is dusky brown with light patches on the side of her face, a blackish bill, and brown eyes.  
Habitat: It inhabits saltwater bays and inlets, as well as large lakes.  
Range: The surf scoter breeds in northwest Canada and winters from Maine to Florida, chiefly off shore along the coast.  
Clutch Size: Ranges 5 to 7 eggs. Of all ducks in North America, less is known about the surf scoter than any other species. Clutch-size estimates therefore are not as accurate as for other species.  
Incubation: The same applies for incubation time as for the clutch size.  
Food Habits: Like other scoters, animal life—primarily clams and mussels—comprises more than 90 percent of its diet.

## White-Winged Scoter (*Melanitta deglandi*)

- Other names: Coot, sea coot, whitewing  
Size: 20 to 23 inches  
Field Id.: The drake is black with a white patch on his wings, a white eye ring, and an orange bill with black knob. The hen is dark brown, with two white patches on each side of her head, a white wing patch, and a bluish gray bill. The white-winged scoter is the most common scoter.  
Habitat: It prefers coastal waters and large lakes.  
Range: The white-winged scoter breeds in a strip from west-central Alaska southward to northern North Dakota. It summers from eastern Canada south to Massachusetts, and it winters from Alaska south to Baja California, on the Great Lakes, and along the Atlantic coast from the Gulf of St. Lawrence south to South Carolina.  
Clutch Size: Averages 10 eggs  
Incubation: 25 to 28 days  
Food Habits: It feeds almost entirely on marine animal life—crustaceans, barnacles, mussels, fish, and aquatic insects.

## Abundance and Distribution

Information about the population status of Diving Ducks in the Chesapeake Bay is incomplete. This is particularly true for sea duck species, which are extremely difficult to survey. However, a study completed by the Migratory Bird and Habitat Research Laboratory in the late 1970s indicated that total numbers of Diving Ducks wintering in the Bay declined dramatically between 1955 and 1979. During this period, the bufflehead was the only species that showed an increased population while the canvasback, redhead, goldeneye, and ruddy duck all declined significantly. Scaup and scoter populations did not show any changes during this 25-year evaluation period. The declines were attributed to reductions in SAV and invertebrate food resources and, to some extent, to poor breeding habitat conditions.

Results of Maryland's Midwinter Waterfowl Inventory in 1989 showed a total of 92,000 bay ducks and 5,200 sea ducks. In comparison, surveys in 1987 showed 113,700 and 15,800, respectively.

## Managing Diving Ducks

Because of their habitats and nesting areas, management for Diving Ducks on the Eastern Shore is generally limited to insuring contaminant- and pollution-free habitats for these species. Oil spills and other hazardous substance spills can and do greatly affect Diving Ducks and their food resources. Therefore, every effort should be made by private landowners to control pollution and storm-water runoff, and thereby improve water quality, SAV, and the aquatic invertebrate animal life in the Chesapeake Bay. Most people on the Shore are familiar with the significant loss of SAV on the Susquehanna Flats and the impacts to the canvasback and redhead ducks. The same applies to the other diving duck species and should be a conscientious reminder that without a healthy bay, we certainly will not have healthy populations of these species.

## Adapted from:

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## Diving Ducks

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