



## Sea Duck Information Series

# White-winged Scoter (*Melanitta fusca*)

French: *Macreuse brune*

### Description

The white-winged scoter is the largest of the three scoters. Adult males are 53–58 cm (21–23 in.) long and weigh 1,360–1,780 grams (3–4 lbs); adult females are slightly smaller. They are distinguished from other scoters by the all-white patch (speculum) on the secondary feathers of their wings, which is obvious in flight and sometimes visible at rest.

Adult males are entirely blackish with a small white, teardrop-shaped patch around its eye. Its orange bill has a black hump at the base and is somewhat wedge-shaped. Females and juveniles of both sexes are dark brownish with paler bellies; females and juveniles have a dark bill and variable amounts of white on their head that can appear as spots

### Range

White-winged scoters nest on freshwater and brackish lakes in the boreal forests of northwestern Canada and Alaska with scattered populations on the prairies and parklands in Manitoba, Saskatchewan, and Alberta.

They winter in large bays and estuaries along the Pacific and Atlantic coasts from the Aleutian Islands of Alaska to southern and Baja California and from Newfoundland to Texas. About 70 percent of the Atlantic white-winged scoter population appears to winter between Long Island Sound and Virginia, with greatest numbers in Chesapeake Bay. A few winter on the eastern Great Lakes as well.

### Habitat and Habits

In spring, scoters move from the saltwater habitats where they wintered (usually bays and inlets) to inland freshwater habitat, using estuaries and open coast habitats, then large lakes and rivers when moving inland to breeding areas. Actual migration routes are poorly understood for scoters on both the Atlantic and Pacific coasts.

Flocks usually fly low over the sea in long, wavering lines, but in migration, small flocks may fly much higher. They may congregate in large numbers on the water and are usually silent. When taking off from water, white-winged scoters must run across the water surface for a short distance



*White-winged Scoters*

to become airborne. Once airborne, their flight is swift and direct.

White-winged scoters are among the last ducks to migrate to breeding grounds and may not begin nesting until mid-June. Females return each year to nest near the area where they were hatched, occasionally using the nests of other birds.

Nest predators seem to play an important role in influencing nest site selection because the females consistently choose nest sites that are long distances from water (usually 25–100 m; 80–325 ft) and are often concealed under dense or thorny vegetation. In some areas, they nest predominantly on islands, although gulls, ravens, and crows often destroy 10–30% of nests there

Nests are shallow depressions. The female adds down to the nest when the clutch is complete, and incubates 5–12 eggs for 26–29 days.

Young from several broods may join to form large aggregations called creches, which are attended by one to three females. Young are able to fly at 63–77 days,

Only a few young scoters survive to adulthood - most deaths occur in the first few weeks of life. The chief predators are large gulls.

Shortly after egg laying begins, males leave females to migrate to molting grounds, where they shed

their wing feathers and are flightless for about 4 weeks. Hens begin molt after their young have fledged.

The diet of the white-winged scoter changes dramatically when it moves from saltwater wintering areas to freshwater breeding sites. Coastally, it typically feeds only during daytime in depths <5 m, but up to 20 m (60 ft), mostly on bottom-dwelling animals such as mollusks (clams, mussels, snails and periwinkles) and crustaceans (crabs, shrimp). Small items are swallowed under water, but large foods are brought to the surface and swallowed whole. On freshwater breeding sites, the bird feeds primarily on insect larvae and amphipods.

### Population Size and Status

Because scoter species are difficult to distinguish during aerial surveys, counts for the three species of scoters are combined, therefore no accurate population estimate specific for white-winged scoters is possible. The white-winged scoter is thought to be the most abundant of the three scoter species wintering on both coasts, but estimates of wintering population size are not available. It is believed that the North American population currently numbers between 500,000 and 800,000 birds.

Although data on population trends are poor, the only long term

breeding survey indicates a decline of >50% across their breeding range. By far, the greatest numerical drop in numbers has occurred in the northern boreal forest area of Northwest Territories. They have virtually disappeared from the more southern reaches of their breeding range in the prairie/parkland region of Canada and the U.S. Because females usually return to the areas where they were hatched, recolonization of these former breeding areas would be slow, even if suitable habitat remained. Reasons for the population declines are unknown.

### Management and Conservation

White-winged scoters are harvested throughout their range, mostly on wintering areas, but total harvest level is low. An estimated average of 30,000 is taken annually by sport hunters, with more than 80 % of that harvest occurring in the Atlantic Flyway. The level of subsistence harvest is unknown, but white-winged scoters are an important bird in the harvest by the First Nations of Canada's western boreal forest.

Because they congregate in high densities on coastal waters, often along oil transportation routes, white-winged scoters are highly susceptible to oil spills, and extensive oil spills could decimate local wintering populations. Also, the ducks feed on clams and mussels, which are known to concentrate toxic chemicals. Contamination of bays and estuaries where scoters winter could reduce their population.

Relatively little is known about their life history and ecology or the links among their breeding, wintering, and molting distributions. Satellite telemetry studies have recently been started that allow biologists to track the long distance movements of individual birds throughout the year. This information will help determine where birds from a particular wintering area breed, and



*Distribution of White-winged Scoter in North America*

vice versa, and identify the habitats and migration routes they use during migration.

Studies of nesting biology are currently underway in Alaska and in the northern boreal forest of Northwest Territories, Canada. These studies also provide opportunities to collect tissue samples for genetic and contaminant analyses that will further increase our understanding of the species.



### References and Resources

- Brown, P. W., and L. H. Fredrickson. 1997. White-winged Scoter (*Melanitta fusca*). In *The Birds of North America*, No. 274 (A.F. Poole and F.B. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.
- Brown, P.W. and M. A. Brown. 1981. Nesting biology of the White-winged Scoter. *Journal of Wildlife Management* 45:38-45.
- Seaduckjv.org* – the website for the Sea Duck Joint Venture.



*The Sea Duck Joint Venture is a conservation partnership under the North American Waterfowl Management Plan*

To learn more about sea ducks and the Sea Duck Joint Venture (SDJV), visit [seaduckjv.org](http://seaduckjv.org) or contact:

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