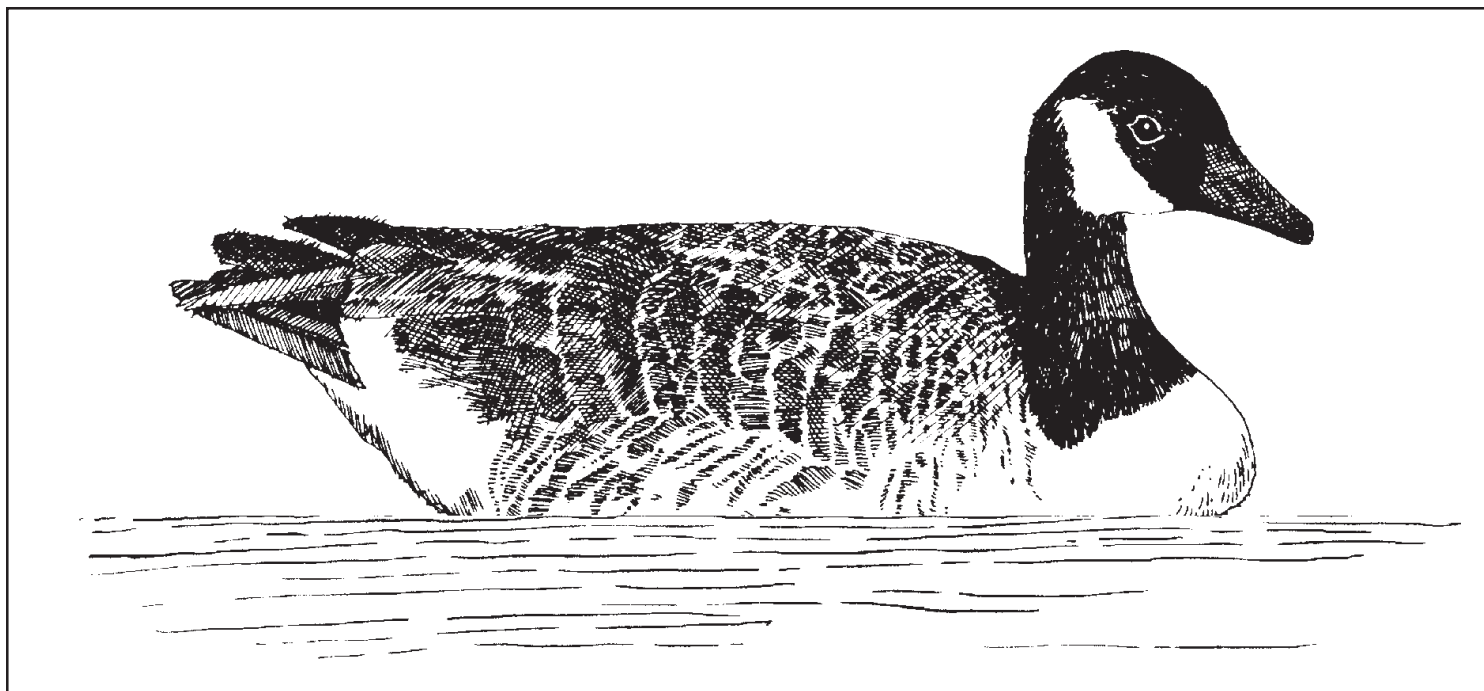


Canada Goose

(*Branta canadensis*)



With its beauty and fascinating behaviors, the Canada goose has captured the attention and interest of bird enthusiasts around the world for years. Intrigued by these characteristics, researchers at state and federal wildlife agencies have intensely studied goose behavior and habitat requirements. Furthermore, various non-profit organizations have been formed to help protect wetlands and other important goose habitats. As a result of this intense interest, the Canada goose is perhaps the best known species of goose in North America.

Description

Canada geese (*Branta canadensis*) are easily identified by their trademark white cheek and throat patches, dark grayish brown upper bodies and backs, and jet black beaks, heads, necks and legs. Unseen, they are easily recognized by their familiar resonant honking that gives them their nick-name of "honkers." They are relatively large birds, often weighing six to ten pounds and measuring between 29 and 38 inches in length. They range throughout North America but variations in size are common among populations that live in different areas. This size difference has resulted in Canada geese being classified into 11 different races which range in size from the small three pound cackling goose to the giant 12 pound Canada goose.

Although Canada geese as a species are easy to identify, distinguishing between the different races can be difficult. Biologists use bill length, wing length, tail length and weight to help them identify the different types of geese. Recently, scientists have begun to use DNA labeling to more accurately categorize and distinguish between the races.

Geese have plump bodies and long necks. Their legs are set further forward than are the legs of ducks and swans. This adaptation allows them to walk and graze more easily on dry land than other waterfowl. Their feet are webbed as well, which helps them while swimming. Geese also have large amounts of fluffy down feathers close to their bodies to insulate them against cold weather. In addition, like other waterfowl, they have a special oil gland located at the base of their tail. During preening, oil from this gland is distributed over the feathers, making them water repellent.

Geese have a unique method of regulating their body temperature. The veins and arteries in their legs and feet run very close together and aid in cooling and heating. In cold conditions, the warm blood traveling from the heart in the arteries heats the blood in the veins by convection, giving geese the ability to swim in frigid water and stand on ice for long periods of time. Conversely, in hot weather, the cooler blood returning from the feet helps reduce their temperature.

Migration

Canada geese are migratory by nature and show strong ties for using traditional migration routes. This allows geese to use familiar food sources and resting areas year after year. Migration flights take place during both day and night, and are dependant upon local weather conditions.

The familiar "V"-shaped flight formation of migrating geese is well known. This type of formation helps to reduce wind resistance for the flock, allowing the birds to conserve energy. It is believed that geese tend to periodically change the leader of the flock during flight to give a rest to the lead bird. Research also indicates that the lead bird is typically one of the larger, stronger birds.

As they head towards their wintering grounds, geese migrate as a family unit, allowing the parents to teach migration routes and staging or resting areas to their offspring. Quite often these family units join up with other related family units along the migration corridor, forming even larger migrating flocks.

Fall migration begins in late August or early September as family units reunite on traditional staging areas. This gathering seems to be tied to changes in the amount of daylight. As the days get shorter, the geese become restless in anticipation of winter weather, and begin feeding more heavily, storing up energy reserves in the form of body fat.

As water begins to freeze and food becomes buried under snow the geese start their migration. It is common, however, for them to show a strong bond for their breeding grounds, and they can be quite reluctant to leave. Eventually though, they are forced to leave as food becomes inaccessible. Even then, they tend to migrate only as far as need to find food and water to sustain them through the coming months of cold, wet weather.

Not all geese begin their fall migration at the same time and not all geese travel the same distance. This variability in the timing and distance of migration acts to safeguard geese populations against major declines due to localized poor conditions or a natural disaster. With flocks of geese spread out within the length of the migration corridor, the chance of a large number of geese being lost is minimized.

In contrast to fall migration, the spring migration is more closely tied to the strong urge to nest rather than to a lack of food. Geese begin their northward journey to their traditional nesting grounds in late January or early February as warmer temperatures begin to melt the snow and warm the ground.

As in the fall, spring migrating birds tend to leave at different times. Early migrators casually make their way northward in short 50 to 100 mile trips. Those migrating later make up the time by stopping less and spending a shorter time at each rest area.

Rest areas along the migration route where geese stop to feed and restore energy reserves are critical, especially for females which need to build up body fat reserves to sustain them through the nesting period. Mating takes place during the spring migration so that nesting and egg laying can occur as soon as the pair arrives on the breeding grounds.

Food Habits

Geese are typically upland grazers but feed on a variety of foods found in both upland and wetland habitats. They tend to use different food sources depending upon the season and availability. Plant material is the preferred choice of food, and includes widgeon grass, pondweed, American bulrush, cordgrass, algae, clover, grasses, sedges and various cultivated grains. Animal matter is a relatively unimportant food source, although geese will sometimes eat insects and crustaceans.

Recent growth of Canada goose populations is due to the amazing ability of geese to adjust to changes in their environment. Agriculture for example, has caused major changes in the goose's natural environment. As land has been cleared to plant crops, geese have discovered that residual grain left from harvesting is an excellent source of food. With an abundance of this new food source in more northern regions, some populations of Canada geese have shortened their migration distances allowing them to conserve precious energy. This energy savings has translated into increased survival and productivity for the geese.

Habitat

Habitat requirements for Canada geese can be quite diverse since geese utilize a variety of environments during their travels. Like other species of waterfowl though, geese depend on wetland and riparian areas throughout the year. Because of this, the significant loss of wetlands nationwide has been a topic of discussion and concern among managers. To address these concerns, many state and federal agencies, along with numerous conservation organizations, have become involved in purchasing and preserving wetlands. As changes in land use continue, these wetland areas have become increasingly important in sustaining goose populations.

As wild goose habitats have been altered or destroyed however, geese have adjusted. Many have quite

readily adopted urban recreation areas such as large parks and golf courses. Typically, these areas offer a supply of grass and wide open spaces which provide food, water and security. Along with this increased use of urban environments by geese has come an increase in nuisance complaints. Managers are currently working to alleviate the problems associated with urbanized geese while ensuring healthy populations of Canada geese for future generations.

Reproduction

Canada geese usually begin to mate during the second or third year of life. Paired geese form strong bonds and usually mate for life. A goose left alone by the death of its mate will however, pair again. Although geese migrate to the breeding grounds as a family unit, non-breeding individuals leave the group once they arrive. They join with other non-breeders and sometimes migrate to traditional “molting” areas to the north where they do not compete for food with breeding birds and have more daylight hours to feed. Meanwhile, breeding pairs of geese establish and aggressively defend their nesting territory.

Geese have a tendency to return to the same area from year to year and even use the same nest if the opportunity arises. The female usually selects the nest site. Geese prefer to nest on a firm structure with an unobstructed view, but will choose a wide variety of sites. They have been known to nest in abandoned osprey nests in tall pine trees, on islands, in dense marshes, on cliffs and atop muskrat dens. Manmade nesting structures have proven to be great substitutes for natural nesting platforms when nothing else is available. These artificial structures are made in a variety of ways but have one thing in common; they all provide a firm base above the water upon which geese can safely nest. They are usually placed out in the marsh, sometimes in open water, to reduce the chance of predation from racoons, foxes and skunks.

To build their nest, geese make a “scrape” or bowl-like depression on the ground which they line with sticks, cattails, reeds or grasses. The females also pluck down from their breasts to line the cup of the nest. Clutch size can vary from one to twelve eggs, but will average about five eggs. Freshly laid eggs are dull and creamy, but soon become glossy and stained by nest materials.

Unlike most waterfowl, both geese will take some part in nesting and rearing of young. Incubation which lasts approximately 28 days is performed solely by the female. Although the female incubates the eggs, the male stands nearby watching for predators. The female leaves the nest in early morning and late evening for short breaks.

When they hatch, young geese, called goslings, are covered with a fine brown fuzz. They are precocial, having eyes that are open and the ability to walk and swim shortly after hatching. Within a few hours, the female leads them to water. On these outings, both parents are present to watch over the young and protect them from predators.

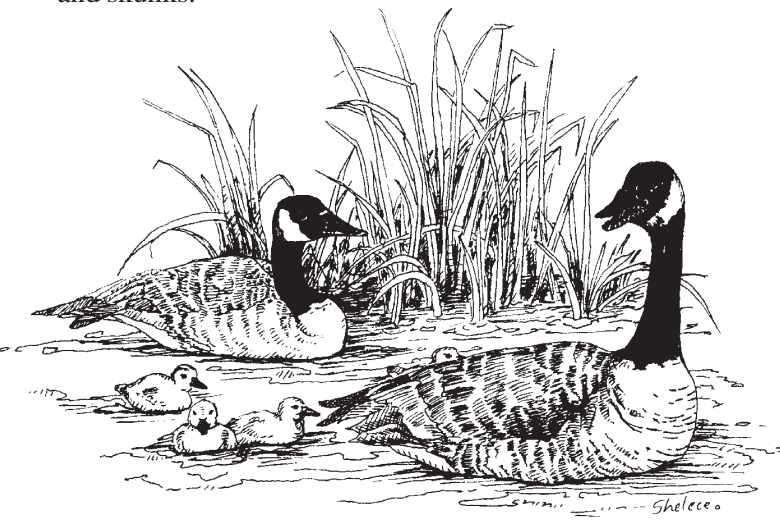
At about the time the goslings are half grown, the adult geese begin to molt their flight feathers. This annual shedding and regrowth of feathers renders the adult flightless for a short time. Because of the increased vulnerability of the geese during molting, several broods may band together in groups called “creches” for protection. By the time the adults are once again fully feathered and able to fly, the young are ready to fly as well.

Management

Like all waterfowl, Canada geese are protected under federal law and the Utah Wildlife Code. Responsibility for the management of Canada geese in Utah lies within the Wildlife Section of the Utah Division of Wildlife Resources.

During the late 1800s and into the early 1900s, Canada geese, like many migratory waterfowl, suffered severe population declines due to habitat destruction and overhunting. In 1900, the Lacey Act was passed by Congress outlawing the interstate trafficking of illegally harvested wildlife. This law was in part aimed at stopping the overharvest of waterfowl by market hunters who shot geese and ducks to sell to restaurants. In 1918, the Migratory Bird Treaty Act was passed making it unlawful to kill, capture, collect, possess, buy, sell, trade, ship, import or export any migratory bird, its parts, nests or eggs.

Habitat preservation and management has always played a critical role in sustaining goose populations. Preserving wetland and upland habitat along



migration corridors has been necessary to provide geese with food, water, shelter, resting areas and nesting sites.

In 1934, the Migratory Bird Hunting Stamp Act (Duck Stamp Act) was passed. The Duck Stamp Act required every hunter 16 years of age and older to purchase a stamp prior to hunting waterfowl. To date, over 500 million dollars has been raised by hunters, stamp collectors and conservationists through this program. Money collected from the sale of the stamps is used to purchase and maintain waterfowl habitat within the National Wildlife Refuge system.

In Utah, in addition to duck stamp dollars spent on wetland acquisition, money derived from the sale of hunting licenses, matched with federal money in the form of grants, has been used to purchase and maintain 17 waterfowl management areas. Privately held duck clubs, corporations, societies, and associations have also been instrumental in preserving thousands of acres of wetland habitat for waterfowl.

Additional Reading

Palmer, Ralph S., Ed. Handbook of North American Birds, Volume 2: Waterfowl (Part1). Yale University Press, New Haven, CT. 1976.

Bellrose, Frank D. Ducks, Geese and Swans of North America. Stackpole Books, Harrisburg, PA. 1976.



What You Can Do

If you are interested in helping populations of Canada geese consider:

- Purchasing a federal duck stamp and a Utah Wildlife Habitat Authorization. Revenues from the sale of these items are used to acquire and maintain habitats for geese and other wildlife.
- Joining Ducks Unlimited, an international organization dedicated to the conservation of waterfowl. Contact Ducks Unlimited at (800) 45DUCKS for membership information.
- Actively supporting local, state and national efforts to preserve and protect wetlands and riparian areas as habitat for geese and other wetland species.

Canada Geese are Watchable Wildlife

Canada geese rate as one of the most enjoyable of all wildlife species to watch. In Utah, Canada geese may be seen seasonally in many places, including the following sites:

- The Ogden Nature Center on 12th Street in Ogden.
- Ogden Bay Waterfowl Management Area near Hooper.
- Fish Springs National Wildlife Refuge near Callao.
- Pariette Wetlands south of Roosevelt.
- Desert Lake Waterfowl Management Area near Huntington.
- Cutler Reservoir in Cache County.

Please consult the *Utah Wildlife Viewing Guide*, available at the Division of Wildlife Resources and local bookstores for additional information.

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Produced by: Project WILD, Utah Division of Wildlife Resources (UDWR)

Written by: Jeff Strong, Information Technician, UDWR

Reviewed by: Tom Aldrich, Waterfowl Program Coordinator, UDWR

Edited by: Fred M. Hayes, Project WILD Coordinator, and Vicki Unander, UDWR

Artwork by: Cindie Brunner and Shelece Jorgensen (IMAGES MAY NOT BE REPRODUCED)



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