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## Spring Bird Notes

### *Cygnus olor* (Mute Swan)

**ORDER:** Anseriformes (3 Families)

**FAMILY:** Anatidae (174 Species)

It was so nice to get out for a walk today between the rain showers and the expected afternoon snow. The walk started off warm and sunny and quickly became cold, windy, and overcast with dark gray clouds. Choosing the appropriate clothes for walks in March can sure be tricky! I think some birds took this reprieve from the wet weather to more actively forage. I watched a Northern Flicker (*Colaptes auratus*) searching for berries, seeds, nuts, or insects under a tree near the McKinley marina, a Black-capped Chickadee (*Parus atricapillus*) hopping on the underside of a branch looking for seeds or insects, and a male Horned Grebe (*Podiceps auritus*) diving for crustaceans and fish. I also saw other birds taking advantage of this reprieve by resting lazily on the water, like Red-breasted Mergansers (*Mergus serrator*), Buffleheads (*Bucephala albeola*), and to my surprise a pair of Mute Swans (*Cygnus olor*)! The swans were gracefully swimming in front of the Milwaukee Art Museum. They were only there for a short while before they floated away out-of-sight.

Swans are the largest of *all* waterfowl. There are six swan species in the world and three in North America. We can periodically see the Trumpeter Swan (*Cygnus buccinator*), Tundra Swan (*Cygnus columbianus*), and Mute Swan (*Cygnus olor*) in our region during the spring and summer. In the Mute Swan, there is minimal sexual dimorphism, but the male, also called the cob, is slightly larger in size. The Mute Swan has two distinctive markings that help to differentiate it from the other species. The first distinctive marking is facial features. The bill is reddish-orange and has a black nail at the tip and a black knob at the culmen, which is the base of the bill. The black knob is generally larger in cobs, and in both mates the knob enlarges during the breeding season. Bare black skin reaches from the bill to the eyes. The second distinctive feature of the Mute Swan is the curvature of the neck which curves more towards the back making it look S-shaped and regal while swimming.

Birds are the only animal on Earth to have feathers. Feathers make up only 5-10% of body weight and are 2-3 times heavier than the skeletal structures. Feathers come in many shapes and sizes and serve many functions. Feathers are integral for flight, insulation, waterproofing, injury protection, ultraviolet light protection, acoustics, and as visual markings for display, defense, and camouflage. Here is a simplified chart of common characteristics of the six types of feathers.

Feather Type	Location on Body	Function
<b>Contour</b>	Outer body or visible feathers including wings and tail	Provide shape, protective barrier, and insulation; like shingles on a roof
<b>Semiplume</b>	Intermediate layer between outer contour and inner down feathers	Provide shape and insulation
<b>Down</b>	Whole body of hatchling and distributed throughout adult plumage	Insulation
<b>Filoplume</b>	Near base of some contour feathers	Senses changes to feather position
<b>Bristle</b>	Face	Amplify touch sensations and filter particles like wood on a woodpecker
<b>Pennaceous (Flight Feathers)</b>	Wing ( <i>remiges</i> ) and Tail ( <i>rectices</i> )	Flight and display

The reason I'm sharing this information with you is because feather types vary by species. For example, the Ruby-throated Hummingbird (*Archilochus colubris*) has 940 contour feathers which is the lowest amount of contour feathers found on any bird. However, in 1937, Ammann painstakingly counted the contour feathers on a Tundra Swan (*Cygnus columbianus*). This was the highest number of contour feathers counted and was . . . 25,216 of which 20,177 were on the head and neck! The swan had 80% of the contour feathers on the head and neck! Not on the huge body and wings!



How do white birds, like swans, stay so clean? Swans keep their feathers clean by aggressively flapping, rolling, and side-gliding on the water. Additionally, feather maintenance is accomplished by preening or sliding the beak from the base of the feather toward the tip. This smooths the feather structure back into alignment. Preening also involves removing **ectoparasites**, or external parasites like flies, lice, and ticks. Many bird species, including swans, obtain oil from the **uropygial** gland at the base of the tail feathers and transfer the oil on the beak to other feathers during preening. This provides waterproofing and, more importantly, acts like a conditioner to prevent feather breakage; making the feather last longer. This is very important for birds with white feathers since they lack pigment-added structural strength.

Mute Swans (*Cygnus olor*) mate for life and stay together even in non-breeding seasons. The courtship display involves mutual head turning with breasts close together and feathers fluffed. This magical display makes me think of my favorite ballet, *Swan Lake*. Hopefully, you can be inspired by this dance of the swans in nature.



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