Waterfowl are among the most readily observed families of birds, admired by birders and non-birders alike. They are often easily identified, although similar species certainly present identification challenges. Most species of waterfowl can be identified by shape, size, and overall color pattern alone. Structural characteristics hardly ever fail, and you can avoid deciphering the complicated molts and plumages of ducks, including the dreaded identification of ducks in eclipse plumage. There are times when an understanding of molt or knowledge of a unique plumage detail will allow you to determine the age and sex of a challenging duck at hand, but such details often are not necessary to name an individual to species. For practice, we’ll go a step beyond species identification in this quiz with brief discussions on aging, sexing, and subspecies.

The title already gave away that we are dealing with ducks and geese here. These birds are known for swimming, for visually striking diurnal migrations, and for their quacks and honks. You probably already have a working knowledge of what characterizes ducks and geese, so let’s get started.

**Quiz Photo A**

We often use plumage as a crutch for identification, but this silhouette limits us to structural features to make the call. We will focus on the individual in the front left of Quiz Photo A. It has a relatively short neck, which readily eliminates geese and swans.

Our little duck...—wait, hang on a second...is it little? Do we have anything to compare it to, so as to judge relative size? There are several birds in the background, and they are of similar shape. From what’s visible in the photo, they all look roughly the same, so comparing our quiz bird with others is not particularly helpful this time, but it is often a great place to start.

Ducks come in an array of shapes and sizes, as different species are specially adapted to utilize various aqueous habitats, where they feed on a broad spectrum of food—ranging from vegetative matter to mollusks, crustaceans, and fish. The duck in Quiz Photo A has a bill that is typical of a dabbling duck, so we can toss out all the ducks that have a short and thicker bill, often used to pry mollusks off rocks. The excluded species include both goldeneyes, all the scoters and eiders, and Harlequin and Long-tailed Ducks. Mergansers all have thinner bills than our quiz bird. The distinctive stifftails and Wood Duck are also excluded. So we are left with the genera *Aythya* and *Anas*, which have some similarities in their bill shape. So let’s switch over to body shape.

The body is fairly long and even throughout,
coming to a bluntly pointed end. This is a different look from that of many diving ducks which have sloping backs, and which often hold their tails in the water. This duck's tail is short and not trailing in the water, but rather is well above the surface. This posture is typical for dabbling ducks in the genus *Anas*, but not of diving ducks in the genus *Aythya*. The short tail eliminates Northern Pintail and American Wigeon. Switching back to a closer look at bill shape, we see that the bill is fairly straight and thick, with parallel edges. Thus, from the list of remaining *Anas* dabblers, we can cross off Northern Shoveler and Cinnamon and Blue-winged Teals because those species have more-spatulate bill tips. Green-winged Teal is smaller-billed. Gadwall's bill is a touch thinner throughout, but if you are not comfortable with that distinction, then also take a look at head shape.

The head is smoothly rounded, but still slightly square. Gadwall has a steeper forehead and a slightly larger, puffy, square head. We are left to consider American Black Duck, Mottled Duck, and Mallard. We can clinch the identification with one unique structural plumage characteristic, which you may have already noticed. The duck in Quiz Photo A has curled uppertail coverts, a characteristic only seen in male Mallards. (And some hybrids have partially curled feathers, but we won't go there—yet). This drake Mallard was photographed by the author on 2 January 2008 in Rochester, Monroe County, New York. The birds in the background of the same size and shape are also Mallards.

**Quiz Photo B**

We have two birds in Quiz Photo B, so right off the bat we can compare them. On the lower right, a striking black-and-white male; on the left, a duller, gray-and-brown female-type individual. Both are of roughly the same size and shape. Therefore, because duck species are generally distinct structurally, we can probably assume that these two are of similar, if not the same, species.

First, let's take a look at the male. The color pattern is a stunning black and white, which immediately narrows our choices down to diving ducks and sea ducks. With its dark head, black upperparts, and white breast and sides, the bird has to be in the genus *Bucephala*, which includes Bufflehead and Barrow's and Common Goldeneyes. We can readily eliminate Bufflehead because this bird lacks the large white patch on the head, and the female-type bird of matching size and shape has a thicker bill and more oval-shaped head than the square-headed, petite-billed Bufflehead. So, we are down to goldeneyes. Given the infamous identification problems of female goldeneyes in particular, we are forced to take a closer look.

When it comes to this species pair, I believe it is wise to age and sex an individual bird before pinning down a species. Our clean black-and-white bird is an adult male, as first-year male goldeneyes are similar to females, acquiring some but not all adult male plumage characters throughout the winter. Also, we can say that our female-type bird is indeed a female, as young males by this late in the winter would have evidence of a white patch behind the bill, at least some white on the breast, and at least a few black-and-white scapulars coming in. Additionally, males never have bright coloration on the bill. The female can be aged by the even gray coloration on the breast and body, the clean white neck collar, and the dark brown head. First-year females tend to have a browner overall body color (often with two generations of feathers visible on the sides), a head that is a bit lighter brown and not as puffy, a darker bill, and darker eyes. Therefore, the female in this photo is an adult.

To identify her to species, we'll switch back to a structural mark: head shape. The female goldeneye in this photo has an oval-shaped head, with a “mane” of long feathers extending off the back of the head, coming to a point at the base of the neck. These structural features, in combination with the dark feathers extending down the throat farther than on Common, are enough to call this bird an adult female Barrow's Goldeneye.
Bill color is a widely used feature in female golden-eye identification, but it can get you into trouble. In summary, bright-orange bills are typical for adult female Barrow’s, but adult female Commons occasionally have all-orange bills. A female with extensive orange above the nostril, like our Quiz Photo B female, is probably a Barrow’s. Immature female Barrow’s can show bright bills like the bird in Quiz Photo B in their first winter, but don’t forget that female Barrow’s lose their bright orange bills for the nesting season. Note that this adult female is already losing her bright bill color by late February.

As for the adult male goldeneye, unfortunately the head is turned in this photo. We are stuck without an obvious feature we usually turn to identify male goldeneyes—the shape of the white patch behind the bill. So we need to look at a less-well-known but nonetheless significant point of distinction between the two species of goldeneyes. Taking a close look at the scapulars on this bird, you’ll notice that something isn’t quite right. Barrow’s Goldeneyes have well-defined white squares on their black scapulars, but the scapulars on the male in Quiz Photo B are white with thick black borders. Commons, however, have white scapulars with very thin black edges. This scapular pattern is not right for a Barrow’s or a Common, but it is typical for an adult male Barrow’s × Common Goldeneye hybrid. This hybrid was photographed by the author on 17 February 2007 at the Mukilteo ferry dock, Snohomish County, Washington.

I chose this photo with the head turned so that we would be forced to think about the scapular pattern. The white eye patch on hybrids is generally of an intermediate shape—an oblong oval, coming up along the bill farther than on Commons. Even very skilled observers have mistaken a hybrid for a Barrow’s because they didn’t take a close look at the back pattern. And another mark, the black “spur” or “thumb” that extends down the side of Barrow’s Goldeneye, is reduced in hybrids. As for hybrid female goldeneyes, they must be out there—I’d love to be able to identify one!

Quiz Photo C

A lone “white-cheeked” goose can be a dangerous and intimidating identification. Until recently, we thought of Canada Goose as a totally straightforward identification. With the 2004 split, however, we frequently find ourselves asking, “Canada or Cackling?” The goose in Quiz Photo C has a petite bill, a big eye, and a rounded head, all features creating a “cute” appearance—perfectly typical of Cackling Goose. Many Cackling Geese are the source of heated battles on the birding e-mail lists, but many others—such as this one photographed by the author on 20 February 2007 at the Montlake Fill in Seattle, Washington—really are fairly easy to identify.

When we consider that there are four subspecies of Cacklers—which vary greatly in size, shape, and overall color—we start to realize that there are some individuals which fall into a gray area of being impossible to correctly identify in the field. Our quiz bird is readily identifiable as Branta hutchinsii minimina, with a proposed standard Eng-
lish name of Ridgway’s Cackling Goose after its describer. Adult geese molt all of their body plumage at once before migration, while first-year geese molt throughout the winter. You may be able to discern two generations of feathers on the side and belly, including some retained juvenal plumage, indicating that this bird is in its first year.

When it comes to “white-cheeked” goose ID, it is tremendously helpful to compare individuals in a flock and see them in the field. While here we don’t have the luxury of a view from the field, Supplemental Photo C allows us to frame our discussion with at least some comparison.

The center bird in Supplemental Photo C is the Cackling Goose from Quiz Photo C. The middle goose is smaller than the other two, which are similar to each other. These geese are also small-billed and big-eyed, with short, thick necks that lack the graceful curve of a Canada Goose. We can safely call these two birds Cackling Geese; they are not really in that gray area of impossible identifications. Given that this photo was taken in western Washington state in winter, out of the typical wintering range of Aleutian and Richardson’s Cackling Geese, we can be reasonably certain that these are Taverner’s Cackling Geese (B. h. taverneri). Plus, there are some morphological characters that rule out other Cacklers: The birds are too dark for typical Richardson’s Goose, yet too pale and small-billed for typical Aleutians. There is still much to be learned about subspecific identification of Cackling Geese. They certainly can present a challenge, as they are quite variable, but fortunately the majority are “typical” for their subspecies and tend to flock together.