Greater and Lesser Scaup: Beyond Crown Shape

Tony Leukering

Despite the fact that separation of Greater and Lesser Scaup has bedeviled generations of birders, the problem has not been particularly well treated in the primary birding literature. The recent treatment of the subject in Barry et al. (2006) does a better job than most, but nearly lacks illustrations. As part of a larger effort by me and others to provide a more thorough treatment of the problem, this essay summarizes some of the key aspects of head shape that make scaup identification in the field much more efficient and accurate than relying solely on the shape of the crown in profile.

The primary problem with using crown shape to identify scaup is that crown shape is malleable, varying according to the whim and activity of the individual bird in question. Birds at rest are much more likely to exhibit the stereotypical crown shape than are active birds. In fact, if birders only looked at actively-foraging scaup (that is, individual birds that spend less time at the water's surface than beneath it) and only used crown shape to determine identification, we would believe that Lesser Scaup is quite rare. That is because actively-foraging scaup tend to hold their head feathers more depressed, presenting

Back Cover Photo Key

Upper left photo: Female (left) and first-year male (right) Greater Scaup, Palo Alto, Santa Clara Co., CA; 2 March 2009; photograph by Tony Leukering

Upper right photo: Adult male Lesser Scaup, Sands Lake, Chaffee Co., CO; 2 January 2007; photograph by Tony Leukering

Center left photo: Adult male Greater Scaup, Palo Alto, Santa Clara Co., CA; 2 March 2009; photograph by Tony Leukering

Center right photo: Adult male Lesser Scaup, Palo Alto, Santa Clara Co., CA; 2 March 2009; photograph by Tony Leukering

Bottom left photo: Adult male Greater Scaup, Palo Alto, Santa Clara Co., CA; 2 March 2009; photograph by Tony Leukering

Bottom right photo: Adult male Lesser Scaup, Belmar Park, Jefferson Co., CO; December 2009; photograph by Bill Schmoker

a more rounded profile to the crown. I cannot count the number of times that I thought I was observing an actively-foraging Greater Scaup, only to realize once it ceased foraging that it was a Lesser Scaup. This phenomenon can be seen in the top right picture on the back cover. Note that the white in the bird's wing stripe is limited to the secondaries (it does not extend into the primaries, which are gray), which proves that it is a Lesser Scaup. Then, note how round the crown profile is, and how different from that of the Lesser Scaup in the picture below.

One-character identifications are fraught with uncertainty and inaccuracy; it is considerably better to base an identification on multiple points. Fortunately, there is a suite of characters that inform scaup identification. The characters discussed below are intended to be considered with the photos on the back cover. They combine to form an overall appearance that differs between the two species, often greatly, such that experienced observers can quickly and accurately identify most swimming scaup seen reasonably well. Be aware, though, that there are still individuals outside the norm for either species, with first-year birds often presenting the biggest problem. In my experience, the toughest scaup to identify are one-year-old females in the summer, when their head feathers are very worn, changing their head shape.

Ageing Scaup

Learning to age scaup can greatly assist with identification. If one is looking at an adult, one can confidently ascribe meaning to the field marks described in the next section, whereas these features may appear intermediate or "odd" on first-year birds. Adult female scaup exhibit darker body coloration than do first-year birds, so searching individual birds for paler juvenal feathers is a good means of determining the bird's age. Eye color, which changes from brown to yellow or amber in a bird's first year, can also play a part in age determination, but since the rate of eye-color change is variable, this can be a tricky feature to use. Some youngsters acquire yellow eyes much sooner in that first year than do others, making eye color less useful later in winter. Additionally, a small percentage of adult females retain brownish eyes.

Young males differ from adults of both sexes in that they may have a brown head like a female, but lack a female's white in front of the eyes and exhibit a male bill pattern.

Profile View

Crown profile: This aspect has typically been treated cursorily in

field guides, with only reasonably decent treatment in recent texts, often mentioning only that the head is rounded in Greater and peaked in Lesser. Greater Scaup does have a rounded crown profile, but it is not actually circular; its highest point is generally at or in front of the eye. The peak of Lesser's crown is typically more pronounced and positioned well behind the eye (see middle row of photos on back cover; head peaks indicated by arrows). As noted above, beware of individuals that are actively foraging; their crown profiles may very well be unreliable in identification.

Overall head shape: Greater Scaup has a large head that is roughly the same dimensions from top to bottom as from front to back. The head of Lesser Scaup is noticeably taller (top to bottom) than it is deep (front to back). Note: In all references herein to head height (distance from top to bottom), I consider the lower edge of the head to be defined by the lower edge of the bill.

Eye placement: Though subtle, with experience, eye placement can provide a strong clue as to an individual scaup's identity. This feature is indicated by the lines on the middle row of pictures. In Lesser Scaup, the eye is lower than the mid-point of the head from top to bottom, while the eye of Greater Scaup is above the mid-point. Thus, Lesser Scaup shows proportionately more head above the eyes than does Greater Scaup. However, beware of actively-foraging Lesser Scaup (see text above and upper right picture on back cover).

Head-on View

Head thickness and jowls: In my opinion, this is one of the most useful characters, as it is mostly dependent upon bone structure rather than how the plumage is held. It is also relatively easily discerned with reasonable views. By "jowl," I mean that portion of the head that, in a head-on view, extends outward below the eyes to form a bulge. Greater Scaup has a wide head (side to side) while Lesser Scaup sports a narrow head. This difference is accentuated by the strong jowls exhibited by Greater Scaup, with Lesser's jowls being much less noticeable.

Even taking into account Lesser Scaup's narrower bill, that species' bill at its widest is usually wider than is *either* jowl (the extension of the cheek outward from the side of the bill). Greater's jowls are *each* about equal in width to the bill at its widest. Put another way, even though the bill of Lesser Scaup is narrower, the bill is still usually half or more the width of the head at its widest point, while the bill of Greater Scaup (even though it is wider) is less than half the width of the head at its widest point.

As these comparisons can be a bit tricky on an active bird, it is

often easier to simply assess the angle of the jowls (indicated by the white lines on the left side of each picture). The jowls do not protrude as much on Lesser; thus, the angle created by the top edge of the jowls is greater (and the dimple shallower) than that created by Greater's jowls. Note that in the bottom set of pictures on the back cover, the Lesser Scaup's head is turned slightly to our left, accentuating the bird's left jowl (the one on our right).

Bill Shape and Coloration

From above or below: The bill of Lesser Scaup is usually parallel-sided (the same width at base and tip) or just slightly wider at the tip than at the base. Greater Scaup bills are usually obviously wider at the tip than at the base.

Head on: While I lack good photos to illustrate this point, the shape of the underside of the bill is different in the two species, with Lesser typically exhibiting a very shallow concavity—a very shallow upside-down "U"—while Greater shows a deeper concavity. This difference in shape might suggest the difference between an upside-down saucer and an upside-down bowl.

Bill-tip black (on males): Though some authors have championed this character as an identification criterion, it is only useful in some cases. The black on the bill tip of Lesser Scaup is restricted to the nail, which is entirely black with parallel sides. Thus there is a rectangle of black at the bill tip, with the long side of that rectangle parallel to the sides of the bill. On some Greater Scaup, the black extends off the nail onto the main part of the bill. In these cases, the black forms a triangle with its base at the bill's tip (bottom row of pictures). However, many male Greater Scaup have the black restricted to the nail, with the black forming a rectangle (upper left picture) as in Lesser Scaup. Thus, birds with an extensive triangle of black on the bill can be identified as Greaters, but birds with a smaller rectangle of black probably cannot be safely identified by this character.

Note that female scaup have a very different bill pattern from that of males, and their bills are identical (or virtually so) in the two species.

ACKNOWLEDGMENTS

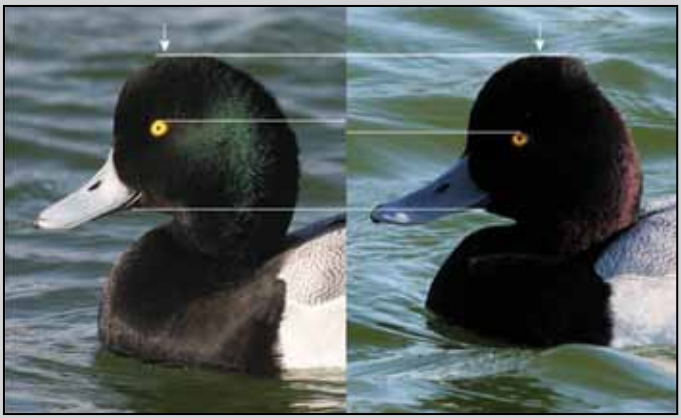
I would like to thank Jessie Barry for reviewing a previous draft of this manuscript.

LITERATURE CITED

Barry, J. H., C. D. Cox, and A. Jaramillo. 2006. Ducks, geese, and swans. *In* National Geographic Complete Birds of North America, J. Alderfer, Ed. National Geographic Society, Washington, DC.

Tony Leukering, 102 Delaware Avenue, Villas, NJ 08251, greatgrayowl@aol.com

Greater Scaup (left, all rows) and Lesser Scaup (right, all rows). ***Photos by Tony Leukering, except bottom right photo by Bill Schmoker.*** **Photo dates and locations on p. 75.**



In the Scope: Greater and Lesser Scaup . . . 75