This elegant shot of a duck in most inelegant plumage graced our preceding back cover. Can you, in the absence of any obvious field marks, identify it to species?

Answer to Snap Judgment 9

KENN KAUFMAN



Ducks come in a variety of different packagings. Fortunately for us, most species are not so ambitious as the Oldsquaw *Clangula hyemalis*, in which both sexes go through three distinct plumages every year; but still, we have the challenge of identifying females, juveniles, and ducks in the cryptic "eclipse plumage" that many assume while molting the flight feathers. The best way to deal with this plethora of plumages is to focus on more consistent characteristics of shape and structure.

Our "Snap Judgment" duck provides a case in point. Clearly this bird is not at its best. Ratty and disheveled, completely without usable flight feathers, it has been captured on film at its most embarrassing time of year: full "eclipse." Virtually no pattern at all is discernable in the photograph . . . and yet, most readers will have identified this bird to the subfamily level at first glance. Its bushy-headed look (implying it would have a crest in more prosperous times), steep forehead, long body, and very long narrow bill mark it immediately as a merganser.

All right, so which merganser? Continue to look at the bill; it will provide all the clues you need.

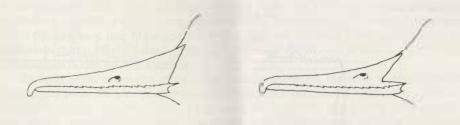
Half of the possible species can be ruled out immediately on bill length. The Hooded Merganser Lophodytes cucullatus and that vagrant merganser, the Smew Mergus albellus, have proportionately much shorter bills (in addition, the Smew would show strongly contrasted white cheeks in any plumage). So the choice comes down to the two large species, Red-breasted Merganser M. serrator and Common Merganser M. merganser. Birders who see both species regularly will probably sense that this one is a Red-breasted, because of the thin-looking bill. This is correct — but since thinness of the bill is only relative, it is worthwhile to analyze what creates this impression.

In both species the bill is thick at the base and tapers to a thin tip. In the Common the slope of the culmen (upper ridge of bill) from base to tip is fairly straight, but in the Red-breasted it is more *concave*, so that the entire distal half of the bill appears just as thin as the tip. The feathering at the bill base adds to the impression. On the Red-breasted, the feathering extends farther forward on the upper mandible than on the lower, while on the Common the upper mandible feathering ends much farther back

(see diagram); of course this degree of detail can be discerned only at close range, but even at some distance it causes the bill of the Common to appear more massive at the base.

Another point for close-range studies — an esoteric but reliable one — concerns the position of the nostril: on the Common it is closer to the mid-point of the bill than to the base, but on the Red-breasted (as you can see in the photograph) it is clearly closer to the base of the bill.

This summering **Red-breasted Merganser** was photographed by Alan Wormington.



Bills of Common Merganser Mergus merganser (left) and Red-breasted Merganser M. serrator (right), comparing shape, position of nostril, position of feathering at base.

TAMAULIPAN BIOTIC PROVINCE — Announcing an International Symposium on the Tamaulipan Biotic Province. The Symposium will include all ecological aspects of the biome: vegetation, invertebrates, ecological structure and function, biological resources (use and effects), and management. It will include aspects of applied science and conservation. The meeting will be held at La Quinta Royale Motor Inn, Corpus Christi, Texas, on October 28, 29, 30, 1982. Those interested in contributing papers should submit an abstract by I August 1982; abstracts for contributed papers must be received by I September 1982. For information on either, contact Gene W. Blacklock, Curator, Welder Wildlife Foundation, P.O. Drawer 1400, Sinton, Texas, 78387 or David Riskind, Head, Resource Management Section, Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas, 78744. For information on registration contact Jimmie R. Picquet, Director, John E. Conner Museum, Texas A&I University, P. O. Box 2172, Kingsville, Texas, 78363.