

A NOTE ON PLUMAGE TERMINOLOGY

by Richard S. Heil, Peabody

There has always been the need in Bird Observer records for a standard list of acceptable plumage terminology to be employed by both field observers and the records staff. Many observers, this writer included, have in the past erroneously attempted to age or sex a bird when it cannot safely be done other than in the hand. Any of the popular field guides can lead the unwary observer astray, especially in the fall when birds of the year complicate identification. For example, fall reports of adult male Black-throated Blue Warblers, adult male Cape May Warblers, female Hooded Warblers, female Lark Buntings, or adult Lark Sparrows might not be accurate. The fall immature males of Black-throated Blue and Cape May warblers are not generally separable from adults in the field. The immature and adult female Hooded Warblers are very similar, and fall immature and most winter-plumaged adult male Lark Buntings are inseparable as are immature and adult Lark Sparrows. The juvenile Lark Sparrow, on the other hand, is quite a different looking bird, very heavily streaked on the crown, nape, and breast. Normally, plain-breasted Chipping, Field, and White-crowned sparrows have similarly streaked juvenal plumages, but in each this plumage is usually (as in the Lark Sparrow) of short duration and is seldom observed during migration. However, in some individuals the normal molt may be retarded so that the previous season's plumage is retained much later than is typical; e.g., some Chipping Sparrows may still possess juvenal plumage in October.

Unfortunately, a number of different plumage terminologies have been and continue to be used in the literature for those birds in which both male and female adults have two plumages per cycle and are referred to in the records as summer (breeding) and winter plumages. In this category are the loons, grebes, Oldsquaws, most shorebirds, gulls, terns, alcids, starlings, many wood warblers (most notably Blackpoll and Bay-breasted warblers), Chipping Sparrows, and Snow Buntings. In Ruddy Ducks, Bobolinks, Scarlet Tanagers, Indigo Buntings, American Goldfinches, Dickcissels, Lark Buntings, and longspurs only the males have two markedly different plumages per cycle. Most small passerines attain adult plumage by the first summer although some do not until the second summer, e.g., American Redstart and Orchard Oriole. Many of the larger waterbirds may require three to five years to attain full adult plumage.

The aging nomenclature now in use and suggested for use in the future in the Bird Observer records is shown below in the proper sequence:

- 1) downy young; 2) juvenile; 3) first winter, etc. (1W, 2W, 3W);
- 4) first spring/summer, etc. (1S, 2S, 3S); 5) adult winter;
- 6) adult summer (breeding).

Thus, for reasons explained above and because not all observers may be able to age all groups of birds accurately, particularly gulls, this system will replace the "alternate" and "basic" plumage terminology often used in the past. The terms "sub-adult" or, simply, "immature" can be used to indicate any unidentified immature plumage.

The Greek letter phi (ϕ) can be used to designate all birds that cannot be sexed, that is, dimorphic species in which immatures and adult females are not readily separable in the field but are easily distinguished from adult males. This symbol cannot be used in the fall for species like Bobolink, Scarlet Tanager, and Lark Bunting in which adult males molt into a winter plumage essentially the same as that of adult females and immatures. For these species, the symbol $\phi\phi$ should be used. Waterfowl in eclipse plumage can also be denoted $\phi\phi$. Thus, ϕ is essentially for individuals not adult male, and $\phi\phi$ is for individuals entirely unsexed. The symbol $\phi\phi$ is not generally necessary for monomorphic species.

Color phases in jaegers can be reported as dark, intermediate, or light, and color phases in Northern Fulmar might best be reported as double light, light, dark, and double dark. (See Palmer: Handbook of North American Birds, Volume 1, plate on page 60.)

Observers are urged to make an effort to identify plumages and where possible to attempt to age or sex a bird using care in doing so. The percentages of migrant juvenile shorebirds noted in the fall may reflect nesting success on the high Arctic breeding grounds. Color phases, as in the Western Grebe, Northern Fulmar, and Common Murre, may be geographical or racial and give insight into species distribution or taxonomy. Indeed, the color phases of the Western Grebe are now being considered as possibly two distinct species. The race of fulmar breeding along the west coast of Greenland and Canada, Fulmarus glacialis minor, comprises mainly dark and double-dark individuals. A thorough knowledge of plumages greatly facilitates such studies of migration, distribution, molt, and, most fundamentally, identification.

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