

# Imperfect Albinism in a Green-winged Teal

by Robert W. Nero, Regina



—Govt. of Saskatchewan. Courtesy D. Wade.

The condition in which birds show a pale version of the normal appearance due to a general reduction of pigmentation over the entire plumage has been termed imperfect albinism or dilution. The accompanying photograph shows two immature female Green-winged Teal, both of which were taken while hunting on October 9, 1961, at Regina. The specimen on the left is in normal plumage, the one of the right shows the dilution effect. Pigment reduction is apparent in all parts of the plumage; instead of the normal blackish-brown color, the predominant color is pale grayish-brown. In a few areas of the plumage the reduction of pigment has resulted in an apparent change of color, e.g., from reddish-brown to tan on the tips of the secondary feather coverts, which form the margin of the speculum. Melanin, the chief pigment affected by albinism, produces various color effects from black to brown and reddish, depending upon the size and

concentration of granules. Note that the reduction of pigmentation has also involved the feet and the bill which are paler in color than in the normal. The eyes of the bird, however, were apparently not affected. A noticeable change not apparent from the photograph is the almost complete absence of iridescent color in the speculum. In the normal specimen the five innermost secondaries are bright greenish-blue, a color resulting mainly from mechanical diffraction of light; and these feathers are otherwise nearly black. In the aberrant specimen these feathers are brownish-black and a slight gloss with just a hint of green may be seen on a limited portion of each of the three innermost secondaries. This suggests, as might be expected, that the basic physical properties of the feathers have been unchanged except for the reduction of underlying pigment, and that the lack of iridescent green color is due to this reduction of black pigment.