



Munching on grass seed, this Chipping Sparrow is in normal non-breeding (basic) plumage



This partially-albino (leucistic) Chippie was foraging in my backyard

Brunswick Wildlife Abnormal Plumage Color: Got Melanin?

You may have seen a true albino animal...a deer, a squirrel, or even a bird. Earlier this year, I saw an albino raccoon just off the road near Orton Pond. I am still whining over missing that photo.

I have never seen an albino bird; however, I have found several partially albino (leucistic) birds like the Chipping Sparrow in the photo.

The white patches around its neck were produced by a complete lack of melanin in those areas. Melanins are pigments which produce earth tones such as blacks, grays, browns, tans, reddish browns, and some yellows.

White feathers are the weakest of feathers. Many birds have evolved strong black wing tips with dense concentrations of melanin to lessen wear and give more strength...especially birds achieving high speed or needing more lift like Wood Storks.

Completely white birds with pink eyes are albino and have a complete absence of melanin caused by a genetic mutation that prevents its production in a bird's body.

There are two other categories of pigments that generate color in birds. Carotenoids, for example, are derived from a bird's diet and are responsible for bright red, yellow, and orange colors. Since albinism is caused by a complete absence of melanin, albino birds may still have colored parts based on other pigments.

Leucism is also a genetic mutation. It prevents melanin from being deposited normally in a bird's feathers. Leucistic birds have dark not pink eyes.

There are two types of leucistic coloration. First, an animal may have normal coloration but its plumage is pale due to an equal shortage of melanin in all feathers. Second, a bird may have white spots where other colors should exist...like the Chippie in the photo.

Leucistic birds are rare and albino birds very rare. Project FeederWatch received reports of less than a thousand leucistic birds annually of approximately five million birds reported each year from 2000 to 2006.

In theory the rarity of leucistic and albino birds may be explained by two situations. Birds with abnormal white feathers may be in more danger from predators because they are more visible so they may have a shortened life span. Also, given the important role plumage color has in selecting genetically strong mates, abnormal coloration may prevent birds from finding a mate and passing on the mutation to the next generation.

The leucistic Chipping Sparrow above was photographed in January. Last week, I believe it returned to my feeders. During its current visit I have only photographed its left side and the abnormal white patches appear to match. I hope to eventually match the right side's splotches and prove conclusively that this little guy made it through the year.

Watch your feeders for these rarities. It seems that each year, an albino or leucistic Ruby-throated Hummingbird is reported somewhere in the United States. Dare to hope!

John Ennis



This leucistic Chippie was photographed in late November and appears to be the same bird as my January sparrow



The left side view of the January bird