

# 'WHITE' AMERICAN COOT

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I'm a member of the Saskatoon Nature Society and have been for the past summer taking advantage of birding with the senior group called the Golden Eagles, that go out on Thursdays. During our August 27th outing at 10:55 am, just through Radisson on our way to Redberry Lake, one of our members spotted a white coot keeping company with 4 others. I happen to be the only one to capture a picture of it through my passenger side window.



*Editor's note: after some deliberation, our consultants concluded that it is impossible to tell if this coot is albino or leucistic.*

*If the bill is all pink without a dark tip AND the eye is red then it should be an albino. If the eye is merely dark but not red then it is leucistic and not an albino. Age is hard to know. The Birds of North America mentions 2 specimens with partial leucism, but not any considered albino.*

[excerpt from Leucism; Wikipedia]

Leucism (occasionally spelled *leukism*) is a general term for the phenotype resulting from defects in pigment cell differentiation and/or migration from the neural crest to skin, hair, or feathers during development. This results in either the entire surface (if all pigment cells fail to develop) or patches of body surface (if only a subset are defective) having a lack of cells capable of making pigment. Since all pigment cell-types differentiate from the same multipotent precursor cell-type, leucism can cause the reduction in all types of pigment. More common than a complete absence of pigment cells is localized or incomplete hypopigmentation, resulting in irregular patches of white on an animal that otherwise has normal colouring and patterning. This partial leucism is known as a "pied" or "piebald" effect; and the ratio of white to normal-coloured skin can vary considerably not only between generations, but between different offspring from the same parents, and even between members of the same litter.

Albinism results in the reduction of melanin production only, though the melanocyte (or melanophore) is still present. Thus in species that have other pigment cell-types, for example xanthophores, albinos are not entirely white, but instead display a pale yellow colour.

A further difference between albinism and leucism is in eye colour. Due to the lack of melanin production in both the retinal pigmented epithelium (RPE) and iris, albinos typically have red eyes due to the underlying blood vessels showing through. In contrast, most leucistic animals have normally coloured eyes.

