

SOME RARE CASES OF ALBINISM IN ANIMALS.

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In a paper which I contributed to THE OTTAWA NATURALIST, Nov., 1906, I summarized my views upon the large subject of Animal Coloration, and I dealt with the evolution of the colors of living creatures, attempting to classify exhaustively a large variety of examples known to me. In referring to "Physiological Coloration" I made mention of a closely allied phenomenon, which I regarded as "Pathological," and due to abnormal or diseased conditions, grouping thereunder albinos, such as white crows, hawks, peacocks, moles, etc. I mentioned, as a likely cause, a diseased or defective peripheral nerve supply; a white hedgehog (*Erinaceus*) being found to have an abnormal condition of the peripheral nerve twigs ending in the skin, and resulting in a lack of the usual color or pigment in the integument, or rather in the spines and hairs developed from the skin. I stated that, according to Darwin, white cats have blue eyes, are, as a rule, deaf, and, if Dr. Lawson's statement be correct, are always tom-cats. The eyes of most animals are dark or colored, owing to pigment massed in the retina, and in the iris; but in albinos, color being absent, the retina is without it and the rich blood-supply renders the eyes red or pink, as well as the nose and tips of the ears, as in albino rabbits and white rats and mice.

All white animals are not albinos, because the absence of color in the fur or plumage may be due to seasonal and other normal causes. Thus the grey harbour seal is snow white when very young, but its nose and eyes are jet black. The Polar bear, Arctic fox, the stoat or ermine, the varying hare, the ptarmigan, and other animals, are permanently or seasonally white, and thus resemble their wintry surroundings. Dr. Starr Jordan observes that the white color of Arctic animals may be useful not alone in rendering them inconspicuous, but may also serve a direct physiological function in preventing loss of heat from the body by radiation. He adds, "the dark colors of animals may be of value in absorbing heat rays and thus helping to keep them warm. But by far the most widespread use of color is to assist an animal in escaping from its enemies or in capturing its prey." Now, while cold and dryness tend to produce whiteness, damp and warm conditions result in darkening the fur or plumage and the external color of animals generally.