Section 8

Miscellaneous

Electrocution

Miscellaneous Diseases

Vertebral column deformity (scoliosis) in a bald eagle

Photo by James Runningen

Introduction to Miscellaneous Diseases

"Nature is far from benign; at least it has no special sentiment for the welfare of the human versus other species." (Lederberg)

The fact that "Nature is far from benign" is clearly evident from the preceding chapters of this Manual. The diseases and other conditions described are the proverbial "tip of the iceberg" relative to the number of specific causes of ill health and death for free-ranging wild birds, but the wild bird health problems described account for most major wild bird disease conditions seen within the United States. However, the full toll from disease involves many other causes of illness and death that individually may cause substantial die-offs. Two examples of these other causes of die-offs are the deaths of Canada geese that ingest dry soybeans, which then expand and cause lethal impactions within the moist environment of digestive tract, and the poisoning of ducks from rictin, a naturally occurring toxic component of castor beans. Some of these lesser-known causes of disease and mortality may become increasingly important in the future because landscape and other changes could result in environmental conditions that may enhance the interface between specific disease agents and susceptible bird species.

This final Section of the Manual includes some of the lesser-known causes of avian mortality. The first chapter provides an overview of electrocution in birds, with a special emphasis on eagles. The second chapter is a miscellaneous chapter that highlights a significant disease of domestic ducklings not yet known to exist in wild birds, disease caused by stress due to improper handling of birds, and several other conditions that might be encountered by biologists who work with birds. These other conditions include tumors, traumatic injuries, weather, nutritional factors, and drowning as causes of avian illness and death. These two chapters expand the scope of disease presented in the previous chapters and provide additional perspectives of the diverse causes of avian mortality. It is our hope that the collective information provided in this Manual will stimulate those interested in the conservation and well-being of avian species to give greater consideration to disease in the management strategies employed for the conservation of these species.

Quote from:

Lederberg, J., 1993, Viruses and humankind: intracellular symbiosis and evolutionary competition, *in* Morse, S.S., ed., Emerging viruses: Oxford, England, Oxford University Press, p. 3.