

News, Notes, Comments

A National Database for Incidences of Avian Pox

The role of internal and external parasites on wild bird populations has received a great deal of attention in recent years (Garvin et al. 2004; Garvin et al. 2003; Blanco et al. 2001; O'Brien et al. 2001; Loye and Carroll 1998). One of the most widespread diseases affecting birds is avian pox, a viral disease spread among infected birds either via mosquitoes or direct contact between infected individuals. Infected birds show characteristic wartlike nodules on non-feathered parts—legs, feet, bill, eye margin (Friend and Franson 1999). These nodules can be fatal to individual birds if they interfere with feeding, breathing, or vision. However, birds with extensive infections may recover completely after which the nodules drop off, leaving scabs or scars on the previously infected area. Secondary infections (bacteria, fungi) may occur at these scars.

Avian pox is a major concern among breeders of domestic gallinaceous birds, parrots, and other captive birds and has been documented in wild raptors, waterfowl, doves, and finches. In fact, more than 20 avian families are known to be susceptible (Michigan Department of Natural Resources, http://www.michigan.gov/dnr/0,1607,7-153-10370_12150_12220-26362--,00.html, accessed 9 Aug 2004). However, its prevalence in wild bird populations is not well known.

In a recent issue of *NABB*, Dr. John Gregoire of Kestrel Haven Migration Observatory commented on the presence of lesions or tumors on captured birds and suggested that someone take the lead by establishing a central information/data source. Several researchers have begun to investigate various aspects of the ecology of pox infections. Collectively, banders have the potential to increase the knowledge base of the geographic, seasonal, and taxonomic distribution of this disease as much as any single researcher or team of researchers because of our widespread distribution and number of birds handled. In response to the comments and request in *NABB*, we are proposing the establishment of an "avian pox

database" similar to that created by Julie Craves of Rouge River Bird Observatory for bill deformities (http://www.umd.umich.edu/dept/rouge_river/bills.html, accessed 9 Aug 2004). We hope to maintain a website summarizing the occurrence of pox-infected birds so that any interested party (bander or other) can share information.

Correct identification of pox is essential. Growths that appear to be pox infections may be "tassel-foot," which is caused by *Knemidokoptes pilae* mites. Such growths are usually white but may be as dark as pox. Under a hand lens, tassel-foot growths show obvious tunnels created by the mites. A number of websites and books provide detailed descriptions of the appearance of pox-infected birds. The USGS National Wildlife Health Center (<http://www.nwhc.usgs.gov/>) has produced the *Field Guide to Wildlife Diseases*, available as a pdf download at http://www.nwhc.usgs.gov/pub_metadata/field_manual/field_manual.html. The *Field Manual of Wildlife Diseases in the Southeastern United States* (<http://www.uga.edu/scwds/manual.htm>) is available for a small fee from the University of Georgia's Southeastern Cooperative Wildlife Disease Study (<http://www.uga.edu/scwds/index2.htm>). Although not directly relating to wild birds, *The Parrot in Health and Illness* (Doane 1991) provides a great deal of information on avian pox and other diseases affecting parrots; many of these diseases affect wild birds as well.

When a pox-infected bird is captured, please include as much data as possible, such as the following: species, sex, and age; date captured/recovered; location and habitat; description of the tumor including location on bird, color, texture, measurements (include photos if possible); disposition of the bird (apparently healthy, moribund, found dead, etc.). Also include your affiliation or contact information and indicate if you wish to have your contact information posted on the Web.

Please note that humans cannot be infected with avian pox; however, pets (parrots, budgies, etc.) and domestic birds (chickens, turkeys, etc.) are very susceptible to the virus. Thus, to prevent infection of pets or domestic

birds, you should wash or sterilize your hands, clothing, etc. thoroughly before handling uninfected birds. Because the virus is potentially transmitted to other wild birds via your hands, avoid handling uninfected birds and do not re-use carry bags after handling an individual that you suspect has been infected.

For more information or to submit data, contact Dr. Steven W. Gabrey, Biology Department, Northwestern State University, Natchitoches, LA 71457; 318-357-5375; steveng@nsula.edu.

LITERATURE CITED

Blanco, G., R. Rodriguez-Estrella, S. Merino, and M. Bertellotti. 2001. Effects of spatial and host variables on hematozoa in White-crowned Sparrows in Baja California. *J. Wildl. Dis.* 37:786-790.

Doane, B. M. 1991. The parrot in health and illness: An owner's guide. Howell Bookhouse, New York.

Friend, M. and J. C. Franson (eds.). 1999. Field guide to wildlife diseases. General Field Procedures and Diseases of Birds. USGS Biological Resources Division Information and Technical Report 1999-2001. http://www.nwhc.usgs.gov/pub_metadata/field_manual/field_manual.html

Garvin, M. C., P. P. Marra, and S. K. Crain. 2004. Prevalence of hematozoa in overwintering American Redstarts (*Setophaga ruticilla*): no evidence for local transmission. *J. Wildl. Dis.* 40:115-118.

Garvin, M. C., J. P. Bas Baum, R. M. Ducore, and K. E. Bell. 2003. Patterns of *haemoproteus beckeri* parasitism in the Gray Catbird (*Dumatella carolinensis*) during the breeding season. *J. Wildl. Dis.* 39:582-587.

Gregoire, J. 2004. Atlantic flyway review: region II (north central) fall 2003. *N. Am. Bird Bander* 29:27-28.

Loye, J. E. and S. P. Carroll. 1998. Ectoparasite behavior and its effects on avian nest site selection. *Annals Entomol. Soc. America* 91:159-163.

O'Brien, E. L., B. L. Morrison, and L. S. Johnson. 2001. Assessing the effects of haemotophagus ectoparasites on the health of nestling birds: haemotacrit vs haemoglobin levels in House Wrens parasitized by blow fly larvae. *J. Avian Bio.* 32:73-76.

Steven W. Gabrey

Biology Dept., Northwestern State University
Natchitoches, LA 71457

John Gregoire

Kestrel Haven Avian Migration Observatory
5373 Fitzgerald Rd., Burdett, NY 14818-9626

Recent Literature

BANDING HISTORY, BIOGRAPHIES AND INDICES

SAFRING ringing totals over 50 years. H. D. Oschadleus and L. G. Underhill. 1999. *Safring News* 28:11-13. SAFRING, Avian Demogr. Unit, Dept. Stat. Sci., Univ. Cape Town, Rondebosch, 7701, South Africa (Brief summary of first 50 years of banding in southern Africa, where 1.8 million birds had been banded by July 1999. A table lists 1950-1974 and total totals of the top 20 most-banded birds, headed by 210,236 Barn Swallows. Total recoveries by July 1999 was 15,477 birds –

one bird in 115 banded. Trends over the 50 years are discussed briefly, such as an early focus on water birds and the effect on totals of the later introduction of mist nets and penguin flipper bands. A graph illustrates annual totals for three species of weavers.) MKM

20th century SAFRING –a personal perspective.

T. B. Oakley. 1999. *Safring News* 28:49-51. Box 124, Barrydale, 6750, South Africa (Brief banding autobiography and brief history of organized banding in southern Africa by retired 1981-1997 coordinator.) MKM