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Authors: COON, N. C., and LOCKE, L. N.

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ASPERGILLOSIS IN A BALD EAGLE (*Haliaeetus leucocephalus*)

An adult bald eagle (*Haliaeetus leucocephalus*) was brought to the Swan Lake National Wildlife Refuge at Sumner, Missouri, on December 23, 1966. It had a broken left leg as a result of being caught in a steel trap. The bird was treated for exposure and held indoors for several days. During this time it was force-fed wild goose meat. The broken leg was splinted, but the injury failed to heal, and eventually the lower portion of the tarsus and the foot dropped off.

After the eagle became strong enough, it was placed in an outdoor pen. It did not eat for approximately a week after the transfer but then began to feed regularly on geese that were found dead and on road-killed rabbits.

The eagle seemed to be recovering well and plans were being made to band and release it, but it was dead on February 3, 1967. The carcass was sent to the Patuxent Wildlife Research Center, Laurel, Maryland, for analysis as part of the National Pesticide Monitoring Program.

When necropsied, the eagle, a female, weighed 6¾ pounds. There was marked atrophy of the pectoral muscles, and no subcutaneous or abdominal fat. The heart and heart blood together weighed 44 g. Both auricles and the left femoral artery contained chicken fat clots. There was also a slight valvular endocarditis. The left pectoral air sac contained three *Aspergillus* nodules, the largest of which measured 18 mm in diameter; the right pectoral air sac contained one nodule, and another nodule was present in the thoracic cavity between the lung and the ventriculus. Both lungs contained massive growths of *Aspergillus* mycelia. The liver weighed 81.5 g. and appeared grossly normal. The gall bladder was distended with bile and, in that condition,

measured 30 mm long by 20 mm wide. The spleen appeared normal and weighed 2.0 g. In one focus, the fungus appeared to have invaded the kidney. There was a thick mucus secretion in the oral cavity and upper digestive tract.

Two tubes of Sabourad's agar were inoculated with material from the right lung, and subsequently incubated at 37.5°C. *Aspergillus fumigatus* was isolated in each tube.

Although the carcass had been frozen for several months prior to necropsy, the lung tissue was in a fairly good state of preservation, and histologically showed a massive invasion of *Aspergillus*. The lumens of several tertiary bronchi were occluded by masses of hyphae. Strands extended from these centrally located fungus balls into the air capillary beds where the cellular detail was frequently obliterated by the proliferation of fungal elements and the granulomatous response of the host tissue.

Sections stained by the periodic acid-Schiff technique contained mats of fungal hyphae in the capillary beds. Conidiospores were scattered in the lumens of the bronchi, and, in some areas, fruiting conidiophores were present.

This is apparently the first recorded case of aspergillosis in a bald eagle. Neither Chute *et al.* (Maine Agric. Exp. Station Misc. Publ., 655: 1-120, 1962) nor Halloran (Amer. J. Vet. Res., vol. 16, no. 61, pt. 2: 1-465, 1955) listed any references to the occurrence of aspergillosis in bald eagles.

N. C. COON

L. N. LOCKE

Patuxent Wildlife Research Center

Laurel, Maryland 20810

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