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# EYE DISEASE IN RAPTORS

by

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Virtually any eye disease that occurs in humans and other animals can be found in raptors. Cataract, glaucoma, retinal degeneration, conjunctivitis, keratitis and uveitis are seen occasionally as primary diseases. However, they are usually seen secondary to other diseases of the eye such as trauma or generalized infection. Many of these eyes are permanently blind.

Trauma seems to be the most common cause of eye disease in raptors. Most of the animals I have seen for eye problems have had a history of being shot or hit by a moving vehicle, or having flown into an inanimate object. Some birds have had cataract and keratitis. Most have had retinal tears and retinal degeneration. These findings were often associated with severe damage to the eye in which the lens and iris were displaced posteriorly, and the back of the eye was ruptured. Although the raptor eye contains cartilage and bone making it fairly strong, it is very prone to rupture, particularly through the posterior part which is relatively thin. This is probably because, unlike most domestic animals, these eyes fit their orbits snugly with very little room for fat or other tissue that might cushion them. Thus, when the eye is traumatized, it cannot move and the shock waves that are set up move posteriorly causing damage.

Although many of the eyes I have seen were clearly traumatized, some had changes that were relatively old and could have been caused by other means. In these situations, especially where the birds have vision loss, it is impossible to be sure if the trauma they were brought in for was a cause or whether the vision loss led to the trauma.

Treatment is usually of no benefit in the types of eye disease we see in raptors, largely because of the severity of damage to the eyes. I have had some success in birds with early, moderate damage. The inflammation seen in these cases has been controlled by

corticosteroids and infection has been prevented by antibiotics. In some cases, the birds even regained vision. *A-59*

All raptors brought in because of a history of trauma should have their eyes thoroughly examined. Many of the lesions I have mentioned are inapparent to the casual observer and require the services of an ophthalmologist. Only by continued examination and experience will we be able to reach a point where we may be able to help a greater number of these birds than we are able to now.

## References

- 1) Keymer, I.F.: Diseases of birds of prey. Vet. Rec. 90: 579-594, 1972.
- 2) Lord, R.D.: An anomalous condition of the eye of some hawks. Auk 73: 457, 1956.
- 3) Murphy, C.J., Kern, T.J. and MacCoy, D.M.: Bilateral keratopathy in a barred owl. J. Am. Vet. Med. Assoc. 179: 1271-1273, 1981.
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## Announcements

Dr. Barbara Sawyer, DVM was tragically killed in an auto accident last summer. Dr. Sawyer had been actively involved in the veterinary care of injured raptors for several years and was instrumental in forming the San Joaquin Raptor Rescue Center. Besides spending long hours of her free time helping raptors, she was an active member of the Raptor Rehabilitation Coordinating Committee. To ensure that her dedicated and untiring work in helping wildlife will long be remembered, a memorial scholarship fund has been established. The \$1,000 scholarship will be awarded annually to a veterinary student or veterinary graduate who best exemplifies the interests and motivation to continue with work in raptor care and rehabilitation. Those interested in contributing may do so by sending your donation to: Barbara Sawyer Memorial Fund, c/o Dr. Ken Harding, P.O. Box 778, Merced, CA 95340.