

## **Elaeophoriosis in Elk (*Cervus canadensis*) 1**

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## Elaeophoriosis in Elk (*Cervus canadensis*)<sup>1</sup>

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Blindness of undetermined etiology has been observed in elk for over two decades by personnel of the Arizona Game and Fish Department (Wilkins and Weller, 1944, Spec. Rpt. F. A. Proj. W-9-R, Ariz. Game and Fish Dept.; Erling, 1957, Spec. Rpt. Proj. W-78-R-1, Ariz. Game and Fish Dept.). From July to December, 1956, eleven cases were reported involving calves and yearlings in an area centered upon the Chevelon Ranger District of Sitgreaves National Forest (White, 1957, Completion Rpt. Proj. W-78-R-1, Ariz. Game and Fish Dept.). Since 1958, three to four blind elk calves and yearlings, of both sexes, have been observed annually.

During the period from 1958 to 1961 four live blind elk and tissues from an additional case were referred to the College of Veterinary Medicine at Colorado State University (Gallizioli, 1961, Completion Rpt. W-78-R-5, Ariz. Game and Fish Dept.). Since that time, three live blind elk and tissues from

seven others have been received. Gross and microscopic examinations of the eyes and central nervous systems are being conducted and will be reported in detail elsewhere (Adcock, unpublished data). The findings to date indicate that the blindness is a result of lesions within the eyes, optic nerves, brains, or combination thereof. An intra-arterial nematode identified as *Elaeophora schneideri* Wehr and Dikmans, 1935, has been found associated with the lesions and appears to be responsible for their production.

Recently, members of the New Mexico Game and Fish Department found two blind elk calves in the Gila National Forest near Silver City, New Mexico. One of these died and at necropsy 123 *E. schneideri* were recovered from arteries throughout the body.

*E. schneideri* is a common parasite of deer and domestic sheep in the Rocky Mountain Region of the western and southwestern United States, but has not been previously reported from elk.

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