contorta is an academic problem (Madsen 1951), and the fact that only formalin-fixed specimens are available for study, the terminal diagnosis for this case was *Capillaria* sp.

"Frounce" caused by *Trichomonas gallinae* is considered to be a common infection of captive raptors including the Peregrine Falcon, Gyrfalcon, American Kestrel, Pigeon Hawk, Goshawk, Cooper's Hawk, Red-tailed Hawk, Red-shouldered Hawk, and Golden Eagle (Stabler 1968). Information on the occurrence of this disease in wild hawks, however, is limited. Since domestic pigeons and doves are often infected with *T. gallinae* (Stabler 1954) and are a common diet for captive raptors, the source and etiology of frounce in these cases are easily surmised.

In Iceland there are no wild pigeons or doves, although some towns and villages do have domesticated pigeons that occasionally will be taken by gyrs (Gudmundsson personal communication). The staple diet of the Iceland gyr is the Rock Ptarmigan (*Lagopus mutus*). Assuming that in domesticated raptors the common source of the trichomoniasis is the domesticated pigeons and doves, it is easy to see that the wild gyrs of Iceland would not have the same exposure and that a disease, although similar in gross appearance, would not necessarily have the same etiology. As reported, *Capillaria* occurs in a wide variety of game birds, and Rudolphi (1819) listed *C. longicollis* in *Lagopus*. The ptarmigans could well be the source of infection in Iceland.

This provides another example of the danger in extrapolation concerning the diagnosis of a disease when only gross observations and untrained personnel are involved. Although the caseous lesions in these Gyrfalcons were undoubtedly similar in gross appearance to those resulting from trichomoniasis, the combination of a laboratory examination, a study of the ecology of the bird, and the epizootiology of the disease incriminated *Capillaria*, not trichomoniasis, in the Iceland falcon losses. The importance of a thorough investigation of all mortality as an integrated part of the natural life history of wild populations is evident.

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BREEDING OF BOTTERI'S SPARROW (*AIMOPHILA BOTTERII*) IN ARIZONA

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Although the A.O.U. Check-list (1957:603) records southeastern Arizona as part of the Botteri Sparrow's breeding range, there were no known breeding records presented by Phillips *et al.* in The Birds of Arizona (1964:200).

On 22 July 1967, 4 miles N, 1.5 miles W Sonoita, elevation about 4750 ft, Ophir Gulch, Santa Rita Mts., Pima Co., Arizona, I located a nest (Univ. Ariz. Dept. Biol. Sci. no. 8297) that contained four fresh eggs. The nest was constructed of dried grass leaves and lined with animal hair. It was placed on the ground beneath the leaf canopy of a clump of blue grama (*Bouteloua gracilis*). The area was covered with dense bunches of alkali-sacaton (*Sporobolus cryptandrus*), which ranged in height from three to six feet. Scattered throughout the dense stand of alkali-sacaton were small clearings, and it was in one of the clearings that the nest was located. Annual grasses four to six inches in height covered the area between the nest and the sacaton, which extended 10 to 12 feet in all directions.

The female (Univ. Ariz. Dept. Biol. Sci. no. 8296) was flushed from the nest into a mist net. She had a well-developed brood patch and four postovulatory follicles on the ovary. Three and possibly four other pairs were observed on territories. This area, known more commonly as Gardner Wash or Canyon, has three *Aimophila* species that breed synchronously. They are the Rufous-crowned Sparrow (*A. ruficeps*), Botteri's Sparrow, and Cassin's Sparrow (*A. cassinii*).

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