

## FELINE PRACTICE – PARASITOLOGY

An epizootic of a rare fur mite in a remote island chain in the southern United States is described. Signs and symptoms included dull, dry, rust-colored haircoat and secondary gingivitis, in addition to gastrointestinal disturbances, vomiting, constipation, and rectal irritation or prolapse. Treatment with pyrethrins resolved most of the primary dermatologic signs, but treatment of secondary signs was more problematic.

### A PRACTITIONER REPORT

## An Epizootic of a Rare Fur Mite in an Island's Cat Population

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### Introduction

The rare, fur-clasping fur mite is within the sub-order *Astigmata* of the parasitic arachnid mites in the superfamily *Listrophoroidea* (*Lynxacarus radovskyi*).<sup>1</sup> The fur mite completes its four-stage life-cycle on the surface of the cat's skin. The large eggs, which measure over 200  $\mu\text{m}$  in length, are attached to the cat's hair (Fig. 1). The six-legged larva and eight-legged nymph and adult stages are equipped with modified sternal plates that encircle the hair allowing the first two sets of legs to "monorail" the mite along the hair (Figs. 2A & B). The adult mites are very large, measuring 430 to 515  $\mu\text{m}$  in length.

Previous reported cases of *Lynxacarus radovskyi* have involved island outbreaks although one mainland episode has been reported.<sup>2-6</sup> This article describes an epizootic situation in a remote island chain in the United States.

The Florida Keys are a remote bridge-connected chain of islands south of Miami. In 1982, the first cat harboring fur mites was discovered by the auth-

or. In 1988, over 300 cases were seen and treated at our clinic. Entire neighborhoods of feral cats and households of pet cats became infested.

The light tan-colored mites have a predilection for the tail head, tail tip, and perineal area (Fig. 3). Heavily parasitized animals will have whole body involvement and the haircoat will appear "peppered" and feel granular. The mites are best seen with magnification (head loupe) or by removing some hair for microscopic examination. The fur mites cling tenaciously to the epilated hair using their sternal plates and first two legs. Their distinct, elongated shape makes them easily recognizable and unforgettable.

### Signs and Symptoms

In small numbers, the mites are incidental findings, however, they can number into the thousands on heavily parasitized animals. They are not innocuous and instigate medical problems where the underlying cause could be overlooked (Table 1).

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FIG. 1 — Fur mite egg attached to hair shaft, length approximately  $210\mu$  ( $120\times$ ).



FIG. 2 — A. Female *Lynxacarus radovskyi* with sternal plate that fixes to the hair, and characteristic eight legs, length approximately  $515\mu$  ( $60\times$ ). B. Male *Lynxacarus radovskyi* length approximately  $430\mu$  ( $60\times$ ).

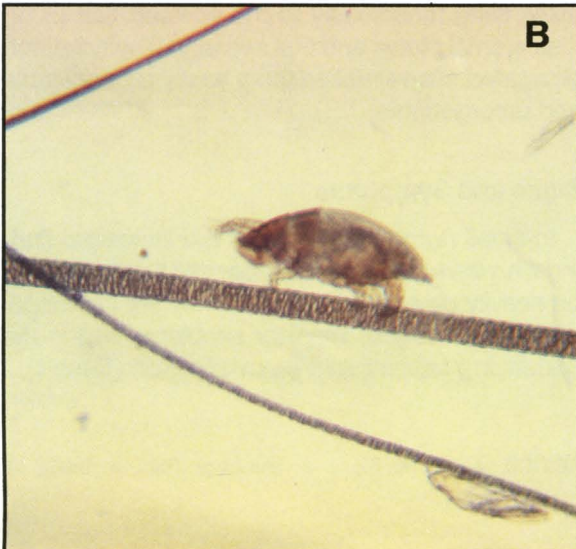


FIG. 3 — Close-up view of "peppered" appearance of cat perineum.

TABLE 1  
Common Signs Associated With Fur Mite Infestation<sup>a</sup>

Sign	No. of Cats	%
Dry, dull, rust-colored haircoat	200	66
Gastrointestinal disturbances	150	50
Tail-head, inguinal alopecia	100	33
Gingivitis, pyorrhea	100	33
Self-abuse dermatitis	60	20
Hairballs	60	20
Anorexia	60	20
Secondary vulvitis/proctitis	30	10
Restlessness	30	10
Fever	30	10
Weight loss	25	8
Negative temperament change	15	5

<sup>a</sup>300 cats with fur mites, number, and percentage affected.

Cats will present with multiple nonspecific signs such as a dull, dry, rust-colored haircoat and secondary gingivitis. Gastrointestinal disturbances, vomiting, constipation, rectal irritation or prolapse, and hairballs because of excess grooming also are common. Regional inguinal and tailhead alopecia, hair mowing, hair pulling, and self-abuse dermatitis are frequent signs. Restlessness, fever, anorexia,

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