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The Arthropod and Helminth Parasites of Red Deer
(*Cervus elaphus* L.) in New Zealand.*

By J. R. H. ANDREWS,

Zoology Department, Victoria University of Wellington

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Abstract

FIFTEEN parasites of forty red deer (*Cervus elaphus* L.) from New Zealand are recorded. The ectoparasites are: *Damalina longicornis* (Nitzsch), *Solenopotes burmeisteri* (Fahrenheit)—Phthiraptera, and *Haemaphysalis bispinosa* Neumann-Acarina. The endoparasites are: *Ostertagia leptospicularis* Assadov, *Ostertagia rubricervi* Andrews, *Rinadia quadrifurcata* Andrews, *Apteragia quadrispiculata* Jansen, *Spiculopteragia asymmetrica* (Ware), *S. böhmi* (Gebauer), *Capillaria bovis* (Schnyder), *Dictyocaulus viviparus* (Bloch), *Oesophagostomum venulosum* (Rudolphi), *Trichuris ovis* (Abildgaard), — Nematoda; *Fasciola hepatica* L. — Trematoda; *Taenia hydatigena* Pallas = (*Cysticercus tenuicollis* Rudolphi) — Cestoda. A key to the helminth parasites is given.

The red deer acts as a reservoir host for the parasites of domestic stock; *Fasciola hepatica*, *Cysticercus tenuicollis* and *Dictyocaulus viviparus*, causing death in stock and economic loss, and *Haemaphysalis bispinosa* causing severe irritation in cattle and other farm animals. There is some similarity between the parasitic fauna of red deer in other countries and that found in the present study. The overall effect of the parasitic fauna upon red deer in New Zealand is considered to be slight.

* This paper is part of a study on the parasites of red deer, presented for M.Sc. thesis at the Victoria University of Wellington.

INTRODUCTION

THE red deer (*Cervus elaphus* L.) has been present in New Zealand for a period of more than one hundred years. During this time it has achieved a wide distribution, its range often bordering on, or overlapping the farmland occupied by sheep, cattle, and other domestic animals. The red deer population has grown steadily over the years, gaining a noteworthy place in New Zealand's land economy as a causal agent of erosion in many important water catchment areas. Because of the ability of red deer to eat and rapidly destroy vegetation, flood danger in many lowland areas has increased, creating many conservational and economic problems. To counteract this population growth extensive control measures have been put into operation, taking the form of shooting and, more recently, poisoning.