

Infestations of Lice on White-tailed Deer, *Odocoileus virginianus*, in the Great Smoky Mountains National Park, Tennessee, USA

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Tricholipeurus parallelus (Osborn) and *T. lipeuroides* (Megnin) (Mallophaga: Trichodectidae) are the only species of chewing lice known from white-tailed deer, *Odocoileus virginianus* (Zimmermann) (Emerson and Price, 1981, Misc. Publ. Entomol. Soc. Am. No. 12, 72 pp.). Deer in the Cades Cove area of the Great Smoky Mountains National Park, Tennessee, USA were examined for lice from September 1983 to October 1983, and again from January 1984 to December 1984. Deer were anesthetized with 6 to 9 mg succinyl choline administered by darts. The inner surfaces of the front and back legs and groin were examined for lice. All lice were preserved in 70% ethanol and identified according to Scanlon (1960, Wildl. Dis. No. 5, 121 pp.). Immature lice were identified to genus. Voucher specimens have been deposited in the U.S. National Parasite Collection, Beltsville, Maryland 20705, USA (Accession Numbers 78933–78935).

One hundred twenty-seven deer were examined. Seventy-nine deer (62%) were infested; 51 (40%) and 36 (28%) had *T. parallelus* and *T. lipeuroides*, respectively. There was no difference between par-

TABLE 1. Prevalence of biting lice of the genus *Tricholipeurus* on white-tailed deer of the Great Smoky Mountains National Park, Tennessee, USA.

	No. deer examined	No. deer positive (%)		
		<i>T. parallelus</i>	<i>T. lipeuroides</i>	Immature lice
Bucks	51	19 (37%)	7 (14%)	3 (6%)
Does	76	32 (42%)	29 (38%)	27 (36%)

asitism of male and female deer by *T. parallelus* ($P < 0.1$, χ^2 test), but *T. lipeuroides* parasitized significantly more females than males ($P > 0.01$, χ^2 test) (Table 1).

Tricholipeurus lipeuroides was found concurrently with *T. parallelus* on eight deer, approximately 6% of those examined. Other authors have reported concurrent infestations of the two species (Watson and Anderson, 1975, Can. J. Zool. 53: 1047–1054; Samuel et al., 1980, J. Med. Entomol. 17: 15–17).

One doe which harbored both male and female adult *T. lipeuroides* as well as immature lice was also harboring two adult female *Solenopotes ferrisi* (Fahrenholz) (Anoplura: Linognathidae).

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