

## THE SEASONAL OCCURRENCE OF CATTLE GRUBS IN THE GULLETS OF CATTLE<sup>1</sup> (Preliminary Report)

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The life history of the common cattle grub, *Hypoderma lineatum* (De Vill.) is reasonably well known, and certain aspects have been frequently described. Despite frequent reference, however, detailed studies on the seasonal occurrence of these larvae in various portions of the body of the cow are relatively few. Bishopp, Laake, Brundrett, and Wells (1) provided data on the occurrence of first instar grubs in the gullets of Texas and New York cattle. Mote (2) provided similar data for Ohio, and Haberman, Morgan, and Dicke (3) reported on comparable work in Wisconsin. The present study is associated with a series of observations on the control of cattle grubs, undertaken by the South Dakota Agricultural Experiment Station. The observations reported here are of a preliminary nature, as further data will be accumulated during the coming year.

Frequent trips to the packing plant of John Morrell and Company in Sioux Falls to obtain grubs for an insecticide screening project has permitted the simultaneous collection of data on seasonal occurrence with a minimum of effort. Since larvae of *H. lineatum* congregate in the submucosa of the oesophagi of cattle it is possible to examine the degree of grubbiness of large numbers of animals by searching for larvae in the "casings" after the muscularis coat of each oesophagus is removed. Observations are now available for December, 1953; January, and February, 1954.

Table I summarizes the data collected during this three month period. Since the cattle being slaughtered on any one day, or in any two or three hour period, do not represent a random sample of cattle coming to the plant in a one or two week period, the data obtained have been pooled to reduce variability.

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**TABLE I**  
**PERCENTAGE OF GULLETS INFESTED AND AVERAGE INFESTATION PER INFESTED GULLET, DECEMBER, 1953, JANUARY AND FEBRUARY, 1954**

Dates of Observation	Gullets Examined	Gullets infested		Larvae observed	
		(no.)	(%)	(no.)	(ave./infest. gull.)
12/14					
12/22	110	70	63.6	666	9.5
12/28					
1/4	110	73	66.3	781	10.7
1/11					
1/18	106	8	7.5	60	7.5
1/25					
2/1	581	18	3.1	70	3.9
2/3					
2/8	1000	35	3.5	201	5.7
2/10					
2/15	1100	22	2.0	48	2.2

#### BIBLIOGRAPHY

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