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Author(s)	MASUDA, Yasushi
Citation	Japanese Journal of Veterinary Research, 40(1), 43-43
Issue Date	1992-05-29
Doc URL	https://hdl.handle.net/2115/2376
Type	departmental bulletin paper
File Information	KJ00002377568.pdf



HISTOLOGICAL OBSERVATION OF TESTIS, EPIDIDYMIS,
SEMINAL VESICLES AND AMPULLA IN EZO SIKA DEER
(*Cervus nippon yesoensis*, HEUDE)

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This study examined the development and seasonal changes occurring in the reproductive organs of wild male Ezo sika deer captured in March, May, July, August, and October, 1991, in Ashoro, Hokkaido, Japan. Tissue samples of the testis, epididymis, seminal vesicles and ampulla were collected for histological studies. The spermatozoa from the cauda epididymis and fructose concentration of the seminal vesicles were also examined.

In the yearling (estimated age of 9 to 16 months), the interstitial cells of Leydig appeared in the testis. From May to October, the weight of the testis and seminal vesicles including the diameter of the seminiferous tubules and ductus deferens increased. Likewise, the number of primary spermatocytes and the height of the glandular epithelium also increased. In the October rutting season (estimated age 16 months), spermatogenesis in the testis was initiated and the concentration of seminal fructose increased.

From the estimated age of about 16 months, the weight of the testis and seminal vesicles, diameter of seminiferous tubules, and the concentration of seminal fructose declined to a low level in May. Spermatogenesis was arrested and non-motile sperm was collected from the cauda epididymis in May. Spermatogenesis increased again from July or August and reached peak development in the October rutting season. Spermatozoa from the cauda epididymis also showed high motility in this season.

From these findings, it is concluded that puberty in wild male Ezo sika deer occurs in October of the second rutting season after birth, at the estimated age of 16 months, following repeated seasonal changes in the reproductive organs and accessory reproductive organs.