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Appendix A. Witham, J.H., and J.M. Jones. 1990. White-tailed deer abundance on metropolitan forest preserves during winter in northeastern Illinois. Wildl. Soc. Bull. 18:13-16.

$$[6] \text{ Water loss} = 24.357(X) - 1.035(X^2) + 586.79$$

$$[7] \text{ Fat loss} = -34.106(X) + 1.431(X^2) + 205.28$$

$$[8] \text{ Protein loss} = 7.966(X) - 0.345(X^2) + 201.36$$

$$[9] \text{ Ash loss} = 1.783(X) - 0.0507(X^2) + 6.57$$

BIFB fat (% DMB) was related to BIFB weight (kg) as follows:

$$[10] \ln \text{ Fat} = 0.136(X) - 1.009, r = 0.98, \text{ SEE} = 0.25.$$

As BIFB weight decreased, the rate of fat catabolism decreased and the rates of water loss and protein catabolism increased (Fig. 2). Between 36.1 and 25 kg of BIFB weight, the rate of protein loss increased rapidly from 0.04-0.19 kg/kg. Between 25 and 12.9 kg, protein loss gradually increased from 0.19-0.25 kg/kg. The rate of ash loss remained fairly constant for BIFB weights between 12.9 and 25 kg (i.e., 19-22 g/kg of weight loss), but between 25 and 36.1 kg, decreased to 5 g/kg of weight loss. Based on the rates of fat and CP losses, the amount of ME catabolized (Mcal) per kg of BIFB weight loss was calculated to range from 7.7 to 1.1 for the fawns in the study:

$$[11] \text{ Catabolized ME (Mcal)} = -0.272(X) + 0.0114(X^2) + 2.7335.$$

Catabolized ME derived from fat (Mcal) ranged from 7.5 to 0.03 (Mcal) per kg of BIFB weight loss and comprised 97.8% of the total

Table 3. Blood composition (dry matter basis) of white-tailed deer fawns during early and late winter.

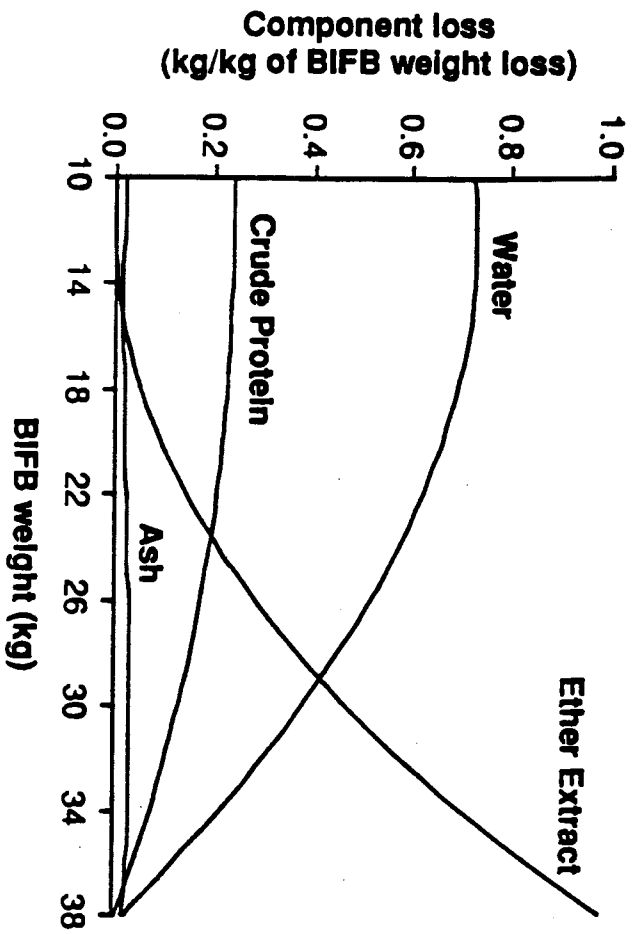
Component (%)	Early ^a		Late ^b		P ^c
	\bar{x}	SE	\bar{x}	SE	
Dry Matter	19.3	0.3	16.9	0.6	**(*)
Gross Energy (kcal/g)	5.62	0.03	5.39	0.06	**(*)
Ether extract	0.83	0.09	1.21	0.18	NS(NS)
Crude Protein	94.8	0.5	93.2	0.8	NS(NS)
Ash	3.6	0.1	3.9	0.4	NS(NS)

^a November-January. $N = 7$.

^b March-April. $N = 5$.

^c * - $P < 0.05$, ** - $P < 0.01$, NS - nonsignificant. Parentheses indicate males.

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Appendix D. Watkins, B.E., D.E. Ullrey, J.H. Witham, and J.M. Jones 1990.
Field evaluation of deuterium oxide for estimating body composition of white-
tailed deer (Odocoileus virginianus) fawns. J. Zoo and Wildl. Medicine.
21:453-456.

263	247	S
264	321	S
265	843	S
266	085	Sp
267	820	S
268	119	Sp
269	158	Sp
270	251	S

x

T, 86 x37₄, 1 found

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Appendix F. Witham, J.H., E.A. Cook, and J.M. Jones. No date. White-tailed deer habitat change in metropolitan northeastern Illinois. Unpub. manuscript. 14pp.

