

# Ecography

E4826

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Appendix 1. Data on wolves *Canis lupus* live-captured and radio-tracked in Białowieża Primeval Forest in 1994–1999.

Wolf	Age at capture, sex	Period of radio-tracking	Body mass upon capture (kg)	Fate
Pack BNP (Białowieża National Park)				
Szara	Subad F	26 Mar 1994–11 Feb 1995	–	Collar failure; found shot on 26 Jan 1999
Ruda	Ad F	26 Mar 1995–22 Oct 1997	42	Poached in a snare
Chytra	Subad F	18 Dec 1996–4 Oct 1997	28	Poached in a snare
Chyża	Ad F	17 Jan 1998–21 Aug 1999	30	Died, cause unknown
Pack Leśna				
Bura	Ad F	27 Jan–22 Sep 1995 6 Feb 1996–14 Jul 1998	34	Collar failure Died
Bystra	Subad F	12 Dec 1996–4 Apr 1997	36	Probable dispersal
Siwa <sup>a</sup>	Subad F	4 Nov 1997–20 Dec 1998	30	Collar failure
Harda	Subad F	30 Dec 1997	32	Dispersed to Belarussian part of BPF; shot there on 2 Feb 1998
Syta	Juv F	20 Oct 1998–5 Jan 1999	24	Probable dispersal
Pack Ladzka				
Zbój	Juv M	22 Oct 1997–29 Jan 1998	34 (45 <sup>b</sup> )	Poached in a snare
Drab	Ad M	23 Jan–7 Apr 1998 3 Feb–10 Sep 1999	44	Collar failure Collar failure
Sroga	Ad F	23 Jan 1998–6 Jun 1999	33	Poached (shot)

<sup>a</sup>Since winter 1997/1998 a breeding female of a new pack Leśna II.

<sup>b</sup>Body mass when found dead.

Appendix 2. Territory and pack size of wolves and prey biomass in North America and Europe. Size of pack territories (non-migratory and non-dispersing wolves, only) estimated by radio-telemetry (most often as Minimum convex polygons with 95% of localizations). Data marked by asterisks are mean values for several packs, years, or pack-years. Other data are minimum and maximum recorded territories of single packs in one year or one autumn-winter season. All data points from the cited sources are shown in Fig. 3. Prey biomass calculated based on winter densities of ungulate prey and mean body masses of ungulates (after Banfield 1981; for North American species, and Jędrzejewska and Jędrzejewski 1998; for European species). Minutes in latitude and longitude are given in decimal system.

Locality	Latitude (°N)	Longitude (°E/W)	Territory size (km <sup>2</sup> )	Pack size (n wolves)	Prey biomass (kg km <sup>-2</sup> )	Source
Italy, Abruzzo	42.00	13.50 E	92	5	–	Ciucci et al. (1997)
Romania, Brasov region	45.50	25.50 E	100–172	2–6	419	Promberger et al. (1998), Promberger-Furpass et al. (2000)
Canada, southern Quebec	47.00	75.00 W	199*	–	430	Porvin (1987)
Canada, southwestern Quebec	47.00	77.00 W	130–625	2–8	75–111	Messier (1985)
USA, north-central Minnesota	47.75	93.25 W	80*–128*	2*–6.5*	–	Fuller and Snow (1988)
USA, northeastern Minnesota	47.75	91.00 W	110*–243*	7–8	126–306	Mech (1973), Van Ballenberghe et al. (1975)
USA, north-central Minnesota	47.75	93.25 W	78*–153*	4.7*–9.3*	376	Fuller (1989)
USA, north-central Minnesota	48.00	93.00 W	192	6	360	Berg and Kuehn (1980)
USA, northwestern Minnesota	48.50	95.00 W	195–555	3–7.5	390	Fritts and Mech (1981)
Canada, east-central Ontario	50.00	82.00 W	175*–224	7–8	186–348	Pimlott et al. (1969), Kolenosky (1972)
Canada, southwestern Manitoba	51.00	100.00 W	189–431	7–16	–	Carbyn (1981)
Poland, Białowieża Forest	52.50	24.00 E	116–310	3–7	634 (836) <sup>a</sup>	This study
Canada, northwestern Alberta	54.92	177.83 W	297–878	–	491	Bjorge and Gunson (1983)
USA, south-central Alaska	63.00	152.00 W	280–3077	2.5–15	117–203	Ballard et al. (1987)
USA, northwestern Alaska	66.00	160.00 W	460–4312	2–19	63	Ballard et al. (1997)

<sup>a</sup>In parentheses: European bison (very rare prey of wolves) included into estimates of total prey biomass; for statistical analysis the lower estimate (bison excluded) was used.

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