

Appendix 1. List of radio-collared pine martens *Martes martes* in Białowieża National Park (Poland) in 1991–1998, number of locations done at intervals of 15 min and > 2.5 h (independent locations). M – males, F – females, ^a subadult males.

Marten	Body mass (kg)	Radio-tracking period	Number of locations		Fate
			Total (at 15-min intervals)	Selected independent	
Males					
M 1 ^a	1.30	21 Apr.–2 Aug. 1993	75	62	Died, cause unknown
M 3	1.51	12 Oct.1993–15 Mar. 1995	2283	802	Died, canine distemper virus
M 4	1.30	12 May 1991–19 Mar. 1992	3855	380	Transmitter failure
M 5	1.38	31 Jan. 1992–14 Mar. 1996	5703	829	Killed by a fox
M 7 ^a	1.20	6 Dec. 1994–28 Aug. 1995	1749	283	Contact lost
M 10	1.30	24 Oct. 1994– 25 Feb. 1995	710	105	Transmitter failure
M 14 ^a	1.29	15 Mar.–16 May 1996	96	50	Contact lost
M 16 ^a	1.60	25 Aug. 1992	1	1	Dispersal
M 17	1.48	11 Oct. 1998–20 Feb. 1999	65	58	Contact lost
Total			14537	2570	
Females					
F 1	0.91	8 May 1992–13 Apr. 1994	845	113	Died, canine distemper virus
F 2	0.90	13–15 Apr. 1991	42	5	Killed by a raptor
F 6	1.01	19 Nov. 1991–16 Dec.1993	2827	375	Lost transmitter or died
F 8	1.00	27 Mar.1992–16 May 1994	1455	183	Died, canine distemper virus
F 9	0.88	16 Jan. 1995–19 July 1995	668	118	Transmitter failure
F 11	1.03	17 Nov. 1995–21 Feb. 1996	316	58	Contact lost
F 12	1.08	27 Feb. 1995–16 Feb. 1996	1286	280	Died, starvation
F 20	0.95	3–5 Apr. 1996	2	2	Died, starvation
F 33	1.00	9 May 1992–2 June 1992	240	40	Killed by a predator
Total			7681	1171	

Appendix 2. Number of track measurements and track length (cm) used to identify unmarked pine martens. Details in Zalewski (1999). Symbols of martens as in Fig. 1.

Marten	Sex	Number of measurements	Range of average length of 5 shortest leaps (cm)
Winter 1993/1994			
A	F	13	48.0–53.4
B	M	4	58.0–64.2
C	F	7	42.3–46.8
D	F	5	39.4–44.4
E	F	6	47.6–54.6
F	F	4	40.3–47.3
G	M	10	70.8–86.6
Winter 1994/1995			
H	F	5	38.0–43.0
Winter 1995/1996			
I	F	5	44.2–48.8
K	F	4	44.2–51.6
L	F	10	39.8–44.8
M	F	5	45.2–52.8
N	F	8	49.5–52.4
O	M	6	59.8–75.4
P	M	7	64.1–78.8

Appendix 3. Mean and maximum numbers of tracks 10 km⁻¹ of transect and estimated density for populations of pine marten in Europe. Densities were calculated using Prikloński's (1965) formula. In three locations (41°–49°N), densities were estimated by the authors of cited papers (Ryabov 1959, Baumgart 1977, Pelikan and Vackar 1978).

Country	Latitude (N)	Longitude (E)	N tracks-10 km ⁻¹ of transect		Estimated marten density (N ind-10 km ⁻²)		Sources
			Mean	Maximum	Mean	Maximum	
Russia	41°	42°	–	–	6.20	10.30	Ryabov 1959
France	48°	7°	–	–	7.70	–	Baumgart 1977
Slovakia	49°12'	16°22'	–	–	6.30	–	Pelikan and Vackar 1978
Russia	51°13'	41°44'	9.50	–	3.26	–	Volkov 1996
Poland	52°03'	23°54'	26.20	29.7	8.45	9.58	Zalewski et al. 1995
Russia	53°07'	56°59'	2.55	–	0.81	–	Volkov 1996
Russia	53°24'	57°57'	0.59	–	0.19	–	"
Lithuania	54°10'	24°25'	8.00	–	2.44	–	Ulevicius and Juskaitis 2003
Russia	54°53'	37°37'	4.20	22.6	1.25	6.73	Volkov 1996
Russia	54°50'	43°20'	3.00	–	0.89	–	"
Belarus	55°50'	30°00'	26.00	50.0	7.48	14.38	Sidorovich et al. 2000
Belarus	55°50'	32°00'	30.00	59.0	8.65	17.97	Sidorovich et al. 2000
Russia	56°35'	49°02'	4.10	–	0.61	1.54	Volkov 1996
Russia	56°31'	32°52'	2.18	5.5	1.15	–	"
Russia	57°26'	59°37'	1.45	–	0.40	–	"
Russia	58°37'	37°54'	3.80	–	1.00	–	"
Russia	58°52'	58°26'	10.60	20.2	2.76	5.26	"
Sweden	59°40'	15°25'	2.66	6.3	0.68	1.60	Lindström et al. 1995
Finland	61°	26°	1.43	5.8	0.35	1.41	Kurki et al. 1998
Finland	61°10'	25°20'	3.14	8.3	0.76	2.02	Kauhala et al. 1999
Russia	62°17'	33°55'	2.21	–	0.52	–	Volkov 1996
Russia	62°27'	58°47'	1.06	1.4	0.25	0.33	Yazan 1962
Russia	62°27'	58°47'	1.01	1.4	0.24	0.33	Yurgenson 1954
Russia	62°27'	58°47'	0.97	–	0.23	–	Teplov 1960
Finland	63°20'	30°10'	3.40	5.0	0.78	1.14	Kauhala et al. 1999
Finland	64°	27°	0.34	3.0	0.08	0.67	Kurki et al. 1998
Russia	64°26'	30°20'	0.90	–	0.20	–	Volkov 1996
Russia	64°35'	43°03'	1.60	3.0	0.35	0.66	"
Russia	65°	32°	1.21	2.2	0.26	0.48	Danilov and Tumanov 1976
Russia	65°	54°	1.76	3.0	0.38	0.65	Grakov 1962
Finland	66°47'	24°10'	1.51	2.1	0.31	0.44	Kauhala et al. 1999
Russia	67°56'	31°59'	2.10	–	0.43	–	Volkov 1996

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