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Title: **Circumpolar status of arctic ptarmigan: Population dynamics and trends**

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Table S1. Characteristics of all the circumpolar ptarmigan study sites and monitoring series, both those included (no color) and those not included (grey color) in the analyses. The ID numbers (#) are located on the map in Figure 1. WPt = Willow ptarmigan, RPt = Rock ptarmigan, ERPt=Evermanns rock ptarmigan, - = information is not available. Sub = sub Arctic, low = low Arctic, high = high Arctic. Monitoring methods are recorded as 1 to 4 methods described in Materials and methods.

#	Site name	Country	Coordinates	Species	Arctic	Study area (km^2)	Duration of time series years	Field season	Person days/year in the field	Monitoring methods	Reference/source
1-24	Northern Sweden 24 sites	Sweden	65,52616N 16,07494E	WPt	sub	70 000	1994-	1-20 Aug	700	1	Höglund et al. 1967
25	Troms	Norway	69,86516N 21,69176E	WPt	sub	-	2007-	1-20 Aug	20-60	1	data and metadata available from Nilsen et al. 2018a
26	Finnmark Varanger Peninsula	Norway	70,2457N 30,5340E	WPt	low	-	2005-	1-4 Jul 1-4 Sept	9	4	Henden et al. 2011
27	East Finnmark	Norway	70,07348N 28,1856E	WPt	sub	-	2000-	1-20 Aug	-	1	data and metadata available from Nilsen et al. 2018b
28	Interior Finnmark	Norway	69,0124N 23,0410E	WPt	sub	-	2000-	1-20 Aug	-	1	data and metadata available from Nilsen et al. 2018b
29	West Finnmark	Norway	69,9689N 23,2716E	WPt	sub	-	2000-	1-20 Aug	-	1	data and metadata available from Nilsen et al. 2018b
30	Svalbard	Norway	78,91962N 11,85989E	RPt	high	-	1981-1982	-	-	2	Unander & Steen 1985
31	Svalbard	Norway	78,25N 17,33333E	RPt	high	1000	2000-	1 Apr- 5 May	130	1	Soininen et al. 2016
32-53	Iceland 22 sites	Iceland	65,25343N 18,8726W	RPt	sub	93.1	1963-	spring	3	1; 2	Nielsen et al. 2004
54	Zackenberg, NorthEast	Greenland	74,46666N 20,56666W	RPt	high	15.8	1996-	15 May- 1 Oct	330	2	Meltofte et al. 2007
55	Sirius, NorthEast	Greenland	71-78N 20W	RPt	high	-	1977-1990-	1 Oct- 31 May	1400	3	Hansen et al. 2008
56	Karupelv, NorthEast	Greenland	72,5N 24W	RPt	high	15	1988-	25 June- 5 Aug	240	2	Meltofte et al. 2007

57	Hochstetter, North East	Greenland	75.15N, 19.70W	RPt	high	18	2010-	30 June – 10 August	250	2	O. Gilg, pers. comm
58	Yukon North Slope	Canada	69,5N 139,25W	WPt	low	50	1974-not annually	20 June-10 July	15	2	D. Mossop, pers. comm
59	Yukon, Ogilvie mountains	Canada	64,25N 138,5833W	WPt	Sub	2	1970-	1-10 May	6	2	D. Mossop, pers. comm
60	Nadahini, Chilkat Pass, N. British Columbia	Canada	59,7N 136,6666W	WPt	low	2	1957-	3-10 May	5	2	D. Mossop, pers. comm
61	Tungsten, McKenzie mountains, Yukon	Canada	62N 128,5W	WPt	sub	2	1982-1985	1-10 May	6	2	D. Mossop, pers. comm
62	Manitoba	Canada	58,4N 94,4W	WPt	sub	10	1981-84, 85	Mid Apr-mid Aug	250	2	Sandercock et al. 2005
63	Ruby Mountains Kluane, SW Yukon	Canada	61,21666N 138,2666W	WPtRPt	sub	10	1988-1996 2004-2007	1 May-20 July	160	2	Martin et al. 2001; Wilson and Martin 2012
64	Chilkat Pass, NW British Columbia	Canada	59,83333N 136,5W	WPt	sub	2.5-4.5	1979-1981 1984-1992	Mid Apr-mid Aug	360	2	Sandercock et al. 2005
65	Anderson river, Northwest Territories	Canada	69,7N 129W	WPt	low	646	1958-1985	Jun	-	2	Hannon & Barry 1986
66	Windy Lake, Northwest Territory	Canada	68,08333N 106,6666W	RPt	low	-	1987-1989	Early Jun	-	2	Cotter et al. 1992
67	Fair Haven, Newfoundland	Canada	47,5N 53,85W	WPt	sub	20	1999-2012	May-Apr	10	1	C. Callahan, pers. comm
68	Gaff Topsails, Newfoundland	Canada	49,11666N 56,7W	WPt	sub	40	1999-2012	May-Apr	10	1	C. Callahan, pers. comm

69	Lapoile, Newfoundland	Canada	47,85N 58,7W	WPtRPt	sub	40	1999-2012	May-Apr	10	1	C. Callahan, pers. comm
70	Avalon Peninsula, Newfoundland	Canada	47.015871N 53.261641W	WPt	low	-	1955-1965	spring	-	2	Bergerud 1970
71	Alaska-Eagle Summit	USA	65,5175N 145,3068W	RPt	low	-	2014-	Apr-Aug	200	3	R. Merizon, pers. comm
72	Alaska-Alaska Range	USA	63,0365N 147,3075W	WPtRPt	low	-	1997-	Apr-Aug	200	3	R. Merizon, pers. comm
73	Alaska-Southcentral Metro	USA	61,1747N 149,6554W	WPtRPt	sub	-	2008-	Apr-May	50	3	R. Merizon, pers. comm
74	Alaska-Kenai Peninsula	USA	60,5868N 149,6485W	WPtRPt	sub	-	2012-	Apr-Aug	50	3	R. Merizon, pers. comm
75	Alaska-Taylor Highway	USA	63,5403N 142,352W	WPtRPt	low	-	2014-	Apr-May	10	3	R. Merizon, pers. comm
76	Alaska-Seward Peninsula	USA	64,6474N 165,3604W	WPtRPt	low	-	2018-	Apr-May	15	3	R. Merizon, pers. comm
77	Alaska, Denali	USA	63,58333N 149,6333W	WPt	sub	2522	1988-	1 Apr-30 Jun	30 to 60	3	C. McIntyre, pers. comm; McIntyre et al. 2012
78	Alaska	USA	69,26666N 144,9W	WPtRPt	low	21 230	2011-2012	12 Mar-6 May	12	3	Christie et al. 2014
79	Attu Island, Aleutian	USA	52,83333N 173,18333E	RPt ERPt	low	12.0-15.5	2003-2009	L May-E June	5-10	2	Braun et al. 2014
80	Adak Island	USA	51,75N 176,6166E	RPt	low	4 routes, 31.2 km	2015-2017	L May-E June	5-10	3	S. Ebbert, pers. comm
81	Central Verkhoyansky	Russia	67,31666N 123,31666E	WPt	low	-	1986-2012	Feb-May	10-20	3	Isael 2016, A.P. Isaev, pers. comm
82	Lower Lena River	Russia	67,63333N 135,56666E	WPt	sub	-	1986-2012	Apr-May	30	3	A.P. Isaev, pers. comm

83	Nenetsky	Russia	68,31666N 53,2E	WPt	low	150 (36 plots)	2007-2011	-	120 (2 counting sessions)	4	I. Prokovsky, pers. comm
84	Kanin	Russia	68,16666N 44,4E	WPt	low	400 (74 plots)	2011	-	150 (1 counting session)	4	I. Prokovsky, pers. comm
85	Kolguev	Russia	69,08333N 48,75E	WPt	low	400 (48 plots)	2013, 2015-2016	-	120 (1 counting session)	4	I. Prokovsky, pers. comm
86	Vaigach	Russia	69,73333N 60,16666E	WPt	low	85 (15 plots)	2015	-	60 (1 counting session)	4	I. Prokovsky, pers. comm
87	Erkuta, Yamal	Russia	68,25N 69,2E	WPt	low	-	2007-	15 Jun-12 Aug	6	4	Ehrich et al. 2017
88	Sabetta, Yamal	Russia	71,2N 71,6E	WPt	low	-	2014-	15 Jun-15 Jul	3	4	D. Ehrich & A.A. Sokolov, pers. comm.
89	Nenets autonomous district, Komi Republic	Russia	67,83333N 51E	WPt	low	- (26 plots)	1973-2014	spring	-	3	Mineev & Mineev 2017, Kishchinskiy 1973, Sdobnikov 1938, Uspenskiy 1960
90	Lower Kolyma	Russia	69,05N 161,5E	WPt	low	-	1977-1987	Summer, autumn	-	3	Andreev 1988

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