

Additional file 1. Literature searches.

Searches for literature in English					
	Date	No. of hits	Type of search	Search string	Comments
Full-text searches in 3 publication databases					
Academic Search Premier	19 Oct. 2012	2174	All text	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
JSTOR	19 Oct. 2012	2989	Full text	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
Scopus	20 Oct. 2012	2906	All fields	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
Title/abstract/keywords searches in the same 3 publication databases					
Academic Search Premier	19 Oct. 2012	139	Abstracts	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
JSTOR	19 Oct. 2012	127	Abstracts	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
Scopus	20 Oct. 2012	359	Article title, Abstracts, Keywords	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
Title/abstract/keywords searches in 11 other publication databases					
Agricola	27 Oct. 2012	74	Keyword anywhere	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz? OR brows? OR traml?)	
Biological Abstracts	19 Oct. 2012	133	All fields	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Articles from 1993 to 2002 available through Stockholm University.
BioOne	27 Oct. 2012	31	Abstract	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
COPAC	20 Oct. 2012	29	Keyword	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Search options limited (OR not allowed). Multiple searches were made, together equivalent to the search string at left.
Directory of Open-Access Journals (DOAJ)	3 Nov. 2012	99	All fields	(reindeer OR caribou OR Rangifer) AND (herbivory OR grazing OR grazed OR graze OR browsing OR browsed OR browse OR trampling OR trampled OR trample)	Search options very restricted (only two terms allowed, no wildcards). Multiple searches were made, together equivalent to the search string at left.
GEOBASE + GeoRef (Engineering Village)	19 Oct. 2012	276	All fields	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
IngentaConnect	27 Oct. 2012	195	Title, keywords or abstract	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
SpringerLink	3 Nov. 2012	32	Title & abstract	(reindeer OR caribou OR Rangifer) AND (herbivory OR grazing OR grazed OR graze OR browsing OR browsed OR browse OR trampling OR trampled OR trample)	Old version of database used (wildcards did not work, and there was a limit to the number of characters allowed). Two different searches made, together equivalent to the search string at left.
SwePub	3 Nov. 2012	37	Research publications	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
Web of Science	19 Oct. 2012	343	Topics	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
Wiley Online Library	27 Oct. 2012	74	Abstract	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	

Search engines	Date	No. of potentially relevant studies not already found in publication databases		Search string	Comments
Dogpile	16 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (herbivory OR grazing OR grazed OR browsing OR trampling OR trampled)	100 most relevant hits checked
Google	15 Nov. 2012	3		(reindeer OR caribou OR Rangifer) (herbivory OR graze OR grazed OR grazing OR browse OR browsing OR trample OR trampled OR trampling)	100 most relevant hits checked (total no. 13,100,000)
Google Scholar	15 Nov. 2012	5		(reindeer OR caribou OR Rangifer) (herbivory OR graze OR grazed OR grazing OR browse OR browsing OR trample OR trampled OR trampling)	100 most relevant hits checked (total no. 37,800)
Scirus	15 Nov. 2012	0		(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	100 most relevant hits checked (total no. 74,395)
Specialist websites (both general search functions and publication search facilities used, if available)	Date	No. of potentially relevant studies not already found using databases or search engines		Search string	Comments
Alaska Department of Natural Resources	26 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling OR herbivory)	100 most relevant hits checked
Alberta Conservation Association	16 Nov. 2012	0		reindeer, caribou, grazing, herbivory	Separate search for each search term
Alberta Reindeer Association	16 Nov. 2012				No search facilities
Arctic Centre (University of Lapland)	18 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling OR herbivory)	
Arctic Council	17 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term
Bureau of Land Management, US Dept. of the Interior	18 Nov. 2012	1		(reindeer OR caribou OR Rangifer) (graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling OR herbivory)	
Conservation of Arctic Flora and Fauna (CAFF)	17 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling OR herbivory)	
Environment Canada	16 Nov. 2012	0		(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
European Commission Joint Research Centre	16 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term
European Environment Agency	16 Nov. 2012	0		(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Publication search function did not work
Finland's environmental administration	16 Nov. 2012	0		(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Multiple searches equivalent to the search string at left
Finnish Environment Institute (SYKE)	16 Nov. 2012	0		(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Publications search
Finnish Game and Fisheries Research Institute	18 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term
Food and Agriculture Organization of the United Nations	16 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term
Greenland Institute of Natural Resources	18 Nov. 2012	1		reindeer, caribou, Rangifer	Separate search for each search term
GRID Arendal, Norway	18 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling OR herbivory)	
International Centre for Reindeer Husbandry	16 Nov. 2012	0		graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling	
International Union for Conservation of Nature	16 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (herbivory OR graze OR grazed OR grazing OR browse OR browsing OR trample OR trampled OR trampling)	
International Union for Conservation of Nature	16 Nov. 2012	0		reindeer, caribou, Rangifer	Publications catalogue searched
Ministry of Natural Resources of the Russian Federation	16 Nov. 2012				Search function unable to handle English search terms?
Natural Resources Canada	16 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term

Specialist websites (continued)	Date	No. of potentially relevant studies not already found using databases or search engines		Search string	Comments
Nordic Council for Reindeer Husbandry Research (<i>Rangifer</i> journal)	16 Nov. 2012	0		graz* OR brows* OR traml* OR herbivory	
Nordic Council of Ministers	17 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term
Northern Research Institute (NORUT), Norway	17 Nov. 2012	1		reindeer, caribou, Rangifer	Separate search for each search term
Norwegian Directorate for Nature Management	16 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term
Norwegian Institute for Nature Research (NINA)	16 Nov. 2012	2		reindeer, caribou, Rangifer	Separate search for each search term
Norwegian Polar Institute	18 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term
Norwegian Wild Reindeer Centre	17 Nov. 2012	0		grazing, browsing, trampling, herbivory	Separate search for each search term
Reindeer Herders' Association, Finland	17 Nov. 2012				No search facilities
Reindeer Research Program, University of Alaska	16 Nov. 2012	0		grazing, vegetation	Separate search for each search term
Reindrifftsforvaltningen, Norway	18 Nov. 2012				No information in English
Reinportalen, Norway	18 Nov. 2012	0		reindeer, Rangifer	Separate search for each search term
Russian Guild of Ecologists	17 Nov. 2012				No information in English
Russian Regional Environmental Centre	17 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term
Sámediggi (Finnish Sami Parliament)	16 Nov. 2012	0		reindeer, caribou, Rangifer	Separate search for each search term
Sámediggi (Norwegian Sami Parliament)	18 Nov. 2012				No information in English
Sámi Reindeer Herders' Association of Finland	17 Nov. 2012				No search facilities, little information
Sápmi (Sami Parliament in Sweden)	16 Nov. 2012	0		(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	
Swedish Environmental Protection Agency	17 Nov. 2012	1		(reindeer OR caribou OR Rangifer) (graz* OR brows* OR traml* OR herbivory)	
Swedish University of Agricultural Sciences (SLU)	17 Nov. 2012	1		(reindeer OR caribou OR Rangifer) (herbivory OR graz* OR browse* OR traml*)	
United Nations Environment Programme	17 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling OR herbivory)	
United States Environmental Protection Agency	17 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling OR herbivory)	100 most relevant hits checked
United States Fish and Wildlife Service	18 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling OR herbivory)	
University of Alaska Anchorage	18 Nov. 2012	0		(reindeer OR caribou OR Rangifer) (graze OR grazed OR grazing OR browse OR browsed OR browsing OR trample OR trampled OR trampling OR herbivory)	
Searches for literature in Norwegian					
Search engines	Date	No. of potentially relevant studies not already found in other sources		Search string	Comments
Dogpile	8 Dec. 2012	0		reinbeite OR renbeite	
Google	8 Dec. 2012	1		reinbeite OR renbeite OR ((beite OR gressing OR tramp) (rein OR ren OR reinsdyr OR rensdyr OR karibu OR caribou OR Rangifer))	100 most relevant hits checked (total no. 143,000)
Google Scholar	8 Dec. 2012	0		reinbeite OR renbeite OR ((beite OR gressing) (rein OR ren OR reinsdyr OR rensdyr OR karibu OR caribou OR Rangifer))	100 most relevant hits checked (total no. 7,820)

Scirus	8 Dec. 2012	0		reinbeit* OR renbeit* OR (beit* (reinsdyr OR rensdyr OR villrein OR tamrein))	100 most relevant hits checked (total no. 2,557)
Specialist websites	Date	No. of potentially relevant studies not already found in other sources		Search string	Comments
Bioforsk	8 Dec. 2012	0		reinbeite, reinsdyr, tamrein, villrein	Separate search for each search term
Nordic Council for Reindeer Husbandry Research (<i>Rangifer</i> journal)	8 Dec. 2012	0		reinbeite, renbeite, beite, gressing	Separate search for each search term
Northern Research Institute (NORUT)	8 Dec. 2012	0		reinbeit*, renbeit*, beit*, reinsdyr, rensdyr, villrein, tamrein	Separate search for each search term
Norwegian Directorate for Nature Management	8 Dec. 2012	1		reinbeit* OR renbeit* OR ((beit* OR gressing OR tramp*) AND (reinsdyr OR rensdyr OR villrein OR tamrein OR Rangifer))	
Norwegian Institute for Nature Research (NINA)	8 Dec. 2012	0		reinbeite, beite, reinsdyr, villrein, tamrein	Publication search; separate search for each search term
Norwegian Polar Institute	8 Dec. 2012	1		reinbeite, renbeite, beite, reinsdyr, svalbardrein, villrein, tamrein	Separate search for each search term
Norwegian Wild Reindeer Centre	8 Dec. 2012	0		reinbeite, beite	Separate search for each search term
Reindrifftsforvaltningen	8 Dec. 2012	0		reinbeite	
Reinportalen	8 Dec. 2012	0		reinbeite, renbeite	Separate search for each search term
Sámediggi	8 Dec. 2012	0		reinbeite, beite, reinsdyr, tamrein	Separate search for each search term
Six articles in Norwegian (mostly reviews) added as a result of contacts with stakeholders					

Searches for literature in Swedish

Publication databases	Date	No. of potentially relevant studies not already found in other sources	Type of search	Search string	Comments
Directory of Open-Access Journals (DOAJ)	26 Nov. 2012	0	All fields	renbete OR ((herbivori OR bete OR betad OR betat OR betade OR tramp) AND (renar OR caribou OR Rangifer))	Multiple searches equivalent to the search string at left
SwePub	26 Nov. 2012	0	Research publications	renbete, renar, Rangifer	Separate search for each search term
Search engines	Date	No. of potentially relevant studies not already found in other sources		Search string	Comments
Google	26 Nov. 2012	0		renbete OR (herbivori OR bete OR betad OR betat OR betade OR tramp) (renar OR caribou OR Rangifer)	
Google Scholar	26 Nov. 2012	0		renbete	

Specialist websites	Date	No. of potentially relevant studies not already found in other sources		Search string	Comments
Nordic Council for Reindeer Husbandry Research (<i>Rangifer</i> journal)	23 Nov. 2012	0		renbet* OR (herbivori OR bet* OR tramp*)	
Sapmi	23 Nov. 2012	0		renbet* OR (herbivori OR bet* OR tramp*)	
Swedish Environmental Protection Agency	23 Nov. 2012	0		renbet*	
Swedish University of Agricultural Sciences	23 Nov. 2012	0		renbete, Rangifer	Publication search; separate search for each search term

Searches for literature in Finnish

Publication databases	Date	No. of potentially relevant studies not already found in other sources		Search string	Comments
Arto	8 May 2013	0		(laidun* OR tallata OR talloa OR polkea) AND (poro OR Rangifer)	40 hits, all checked
Melinda	8 May 2013	0		(laidun* OR tallata OR talloa OR polkea) AND (poro OR Rangifer)	63 hits, all checked

Searches for literature in Russian

Publication databases	Date	No. of potentially relevant studies not already found in other sources		Search string	Comments
Arctic & Antarctic Regions	8 March 2013	0		олень пастбище, олень пастись, олень выпасать, олень выбирать, олень высматривать, олень вытаптывать, оленеводство	Separate search for each search term. 78 hits, all checked.
Melinda	8 March 2013	0		олень пастбище, олень пастись, олень выпасать, олень выбирать, олень высматривать, олень вытаптывать, оленеводство	Separate search for each search term. 8 hits, all checked.

Other searches

Review bibliographies	No. of potentially relevant studies not already found in other sources				Comments
Forbes & Kumpula (2009): <i>The ecological role and geography of reindeer</i> (Rangifer tarandus) in northern Eurasia	0				
Linkowski & Lennartsson (2006): <i>Renbete och biologisk mångfald</i>	3				
Moen & Danell (2003): <i>Reindeer in the Swedish mountains: An assessment of grazing impacts</i>	7				
Suominen & Olofsson (2000): <i>Impacts of semi-domesticated reindeer on structure of tundra and forest communities in Fennoscandia: A review</i>	5				

Search update					
Publication databases	Date	No. of potentially relevant studies not already found in other sources	Type of search	Search string	Comments
Academic Search Premier	2 Oct. 2013	0	Abstracts	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Searched for articles published in 2012 and 2013
GEOBASE + GeoRef (Engineering Village)	2 Oct. 2013	0	All fields	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Searched for articles published in 2012 and 2013
IngentaConnect	2 Oct. 2013	0	Title, keywords or abstract	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Articles sorted by Newest first
JSTOR	2 Oct. 2013	0	Abstracts	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Searched for articles published in 2012 and 2013
Scopus	2 Oct. 2013	3	Article title, Abstracts, Keywords	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Searched for articles published in 2012 and 2013
Web of Science	2 Oct. 2013	3	Topics	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Searched for articles published in 2012 and 2013
Wiley Online Library	2 Oct. 2013	0	Abstract	(reindeer OR caribou OR Rangifer) AND (herbivory OR graz* OR brows* OR traml*)	Searched for articles published in 2012 and 2013
Search engine	Date	No. of potentially relevant studies not already found in other sources		Search string	Comments
Google Scholar	2 Oct. 2013	0		(reindeer OR caribou OR Rangifer) (herbivory OR graze OR grazed OR grazing OR browse OR browsing OR trample OR trampled OR trampling)	Searched for articles published since 2012. 100 most relevant hits checked (total no. 4,910).