ARCTIC BIRDS BREEDING CONDITIONS SURVEY

supported by the International Wader Study Group and Wetlands International's Goose and Swan Specialist Groups

PART TWO: please complete a separate form for each year and each site visited

This is the second part of a questionnaire that aims to collect information about the breeding conditions for birds through the Arctic as contribution to the database of International Wader Study Group and Wetlands International's Goose and Swan Specialist Groups, established in the Moscow State University, Russia. You should complete this second part after filling in part one which covers general information on environmental conditions at locations where field studies have been made. This second part is available in different versions for different parts of the Arctic, and enables more detailed information on the presence and breeding success of individual species to be recorded.

If you can fill in this part of the questionnaire it will help to build up an improved picture of Arctic bird diversity.

There are three versions of the part 2 questionnaire: one for Greenland, Iceland, Svalbard and northern Scandinavia; one for Alaska and Canada; and one for Russia. Please ensure that you have the correct form for your study site.

The database is being continually updated, and we are interested in completed forms not only from the current field season, but also from previous years including from expeditions that may already have published material elsewhere. Current information about the project, access to the database and survey bulletin issues can be obtained from http://www.arcticbirds.net. Contributors will receive annual bulletin summarising information on the breeding conditions for birds in the Arctic.

We would greatly appreciate feed-back and completed forms from all those active in Arctic fieldwork, as well as ideas and comments from any interested party.

see http://www.arcticbirds.net for more information

1. Summary details of respondent and survey site

Note: this section assumes that you have already filled in a Part One questionnaire for your site - the information here is needed to ensure that Parts One and Two for each site can be correctly linked.

YEAR:	
1.1 RESPONDENT:	1.3 PHONE: 1.4 FAX:
1.2 ADDRESS:	1.5 E-MAIL:
1.6 COUNTRY: 1.7 SITE NAME:	1.8 CO-ORDINATES (latitude and longitude)

2. Bird species present and/or breeding

Please tick relevant boxes

Notes: **Breeding:** evidence of courtship, copulation, nest-scraping, nest with eggs, freshly used nest or egg-shells found. **Hatching successful:** unfledged chicks seen; adults carrying food; adult alarm-calling near brood. **Fledging successful:** recently fledged young seen.

If you are sure that certain conspicuous birds (swans, snowy owl, skuas) were **NOT breeding/hatching/fledging**, put "**NO**" near appropriate box. If **breeding density surveys** were undertaken, please give average nest density and briefly describe survey area and methods in section 4 below.

2.1 Shorebirds/waders

Species		,	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ sq.km
Oystercatcher Haematopus ostralegus								
Greater Golden Plover Pluvialis apricaria								
Pacific Golden Plover Pluvialis fulva								
American Golden Plover Pluvialis dominica								
Grey (Black-bellied) Plover Pluvialis squatarola								
Ringed Plover Charadrius hiaticula								
Lesser Sand Plover Charadrius mongolus								
Dotterel Eudromius morinellus								
Black-tailed Godwit Limosa limosa								
Bar-tailed Godwit Limosa lapponica								
Little Curlew Numenius minutus								
Whimbrel Numenius phaeopus								
Spotted Redshank Tringa erythropus								
Redshank Tringa totanus								
Greenshank								
Tringa nebularia Wood Sandpiper								
Tringa glareola Terek Sandpiper								
Xenus cinereus Common Sandpiper								
Actitis hypoleucos Grey-rumped Tattler Heteroscelus brevipes								
Turnstone								
Arenaria interpres Red-necked Phalarope								
Phalaropus lobatus Grey (Red) Phalarope								
Phalaropus fulicarius Pintail Snipe								
Gallinago stenura Great Snipe Gallinago media								

Species		,	Abundance			eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ sq.km
Common Snipe Gallinago gallinago								
Jack Snipe Lymnocryptes minimus								
Long-billed Dowitcher Limnodromus scolopaceus								
Knot Calidris canutus								
Great Knot Calidris tenuirostris								
Sanderling Calidris alba								
Semipalmated Sandpiper Calidris pusilla								
Western Sandpiper Calidris mauri								
Red-necked Stint Calidris ruficollis								
Little Stint Calidris minuta								
Temminck's Stint Calidris temminckii								
Long-toed Stint Calidris subminuta								
Baird's Sandpiper Calidris bairdii								
Pectoral Sandpiper Calidris melanotos								
Sharp-tailed Sandpiper Calidris acuminata								
Purple Sandpiper Calidris maritima								
Rock Sandpiper Calidris ptilocnemis								
Dunlin <i>Calidris alpina</i>								
Curlew Sandpiper Calidris ferruginea								
Spoon-billed Sandpiper Eurynorhynchus pygmeus								
Broad-billed Sandpiper Limicola falcinellus								
Buff-breasted Sandpiper Tryngites subruficollis								
Ruff Philomachus pugnax								

2.2 Wildfowl

Species		Abundance			Bre	Average nest/pair		
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ sq.km
Whooper Swan Cygnus cygnus								
Whistling Swan (Tundra Swan)								
Cygnus columbianus Bewick's Swan Cygnus bewickii								
Bean Goose Anser fabalis								
White-fronted Goose Anser albifrons								
Lesser White-fronted Goose Anser erythropus								
Snow Goose Anser caerulescens								
Emperor Goose Anser canagicus								
Barnacle Goose Branta leucopsis								
Brent Goose (Black Brant) Branta bernicla								
Red-breasted Goose Branta ruficollis								
European Wigeon Anas penelope								
Baikal Teal Anas formosa								
Teal (Green-winged Teal) Anas crecca								
Mallard Anas platyrhynchos								
Pintail Anas acuta								
Northern Shoveler Anas clypeata								
Greater Scaup <i>Aythya marila</i>								
Eider Somateria mollissima								
King Eider Somateria spectabilis								
Spectacled Eider Somateria fischeri								
Steller's Eider Polysticta stelleri								
Long-tailed Duck (Oldsquaw) Clangula hyemalis								
Common (Black) Scoter Melanitta nigra								
Velvet (White-winged) Scoter Melanitta fusca								
Red-breasted Merganser Mergus serrator								
Common Merganser (Goosanser) Mergus merganser								

2.3 Other species

Species			Abundance			eding perform		Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ sq.km
Divers/Grebes/ Cormorants								
Red-throated Diver or Loon Gavia stellata								
Black-throated Diver Gavia arctica								
Pacific Loon								
Gavia pacifica White-billed Diver								
Gavia adamsii Red-necked Grebe								
Podiceps grisegena Northern Fulmar								
Fulmarus glacialis Great Cormorant								
Phalacrocorax carbo Shag								
Phalacrocorax aristotelis Pelagic Cormorant Phalacrocorax pelagicus						۵		
Birds of prey								
White-tailed Eagle Haliaeetus albicilla								
Hen (Northern) Harrier Circus cyaneus								
Northern Goshawk Accipiter gentilis								
Rough-legged Buzzard Buteo lagopus								
Merlin (Pigeon Hawk) Falco columbarius								
Gyrfalcon Falco rusticolus								
Peregrine <i>Falco peregrinus</i>								
Grouse								
Willow Ptarmigan <i>Lagopus lagopu</i> s								
Rock Ptarmigan Lagopus mutus								
Cranes Sandhill Crane								
Grus canadensis]				.			
Siberian White Crane Grus leucogeranus				.	.			
Skuas/Gulls/Terns Great Skua								
Stercorarius skua Pomarine Skua or Jaeger						_		
Stercorarius pomarinus Arctic Skua								
Stercorarius parasiticus Long-tailed Skua or Jaeger								
Stercorarius longicaudus]							
Ivory Gull Pagophila eburnea								
Common (Mew) Gull Larus canus		_		_	_	_	_	
Herring Gull Larus argentatus								

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Part 2. Russia Species			Abundance			eding perform	g condition ance	Average
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	nest/pair density, nests,pairs/ sq.km
Lesser Black-backed Gull Larus fuscus								54
Slaty-backed Gull								
Larus schistisagus Great Black-backed Gull								
Larus marinus Glaucous-winged Gull								
Larus glaucescens Glaucous Gull								
Larus hyperboreus Iceland Gull								
Larus glaucoides Ross's Gull								
Rhodostethia rosea Kittiwake (Black-legged Kittiwake)								
Rissa trydactyla Sabine's Gull								
Xema sabini Common Tern								
Sterna hirundo Arctic Tern								
Sterna paradisaea Aleutian Tern Sterna aleutica								
Auks								
Little Auk (Dovekie) Alle alle								
Razorbill <i>Alca torda</i>								
Bronnich's Guillemot (Thick-billed Murre) <i>Uria lomvia</i>								
Guillemot (Common Murre) Uria aalge								
Black Guillemot Cepphus grylle								
Pigeon Guillemot Cepphus columba								
Kittlitz's Murrelet Brachyramphus brevirostris								
Parakeet Auklet Cyclorrynchus psittacula								
Crested Auklet Aethia cristatella								
Least Auklet Aethia pusilla								
Common Puffin Fratercula arctica								
Horned Puffin Fratercula corniculata								
Tufted Puffin Lunda cirrhara								
Owls								
Snowy Owl Nyctea scandiaca								
Short-eared Owl Asio flammeus								

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Species		Á	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ sq.km
Passerines								
(Eurasian) Skylark Alauda arvensis								
Shore (Homed) Lark Eremophila alpestris								
Sand Martin (Bank Swallow) <i>Riparia riparia</i>								
Barn Swallow Hirundo rustica								
House Martin								
<i>Delicon urbica</i> Yellow Wagtail <i>Motacilla flava</i>								
Citrine (Yellow-headed) Wagtail Motacilla citreola								
White Wagtail Motacilla alba								
Meadow Pipit Anthus pratensis								
Red-throated Pipit Anthus cervinus								
Pechora Pipit Anthus gustavi								
American Pipit Anthus rubescens								
Water Pipit Anthus spinoletta								
Common Dipper Cinclus cinclus								
Siberian Accentor Prunella montanella								
Bluethroat Luscinia svecica								
Stonechat Saxicola torquata								
Wheatear Oenanthe oenanthe								
Gray-checked Thrush Catharus minimus								
Dusky Thrush Turdus eunomus								
Fieldfare Turdus pilaris								
Redwing Turdus iliacus								
Sedge Warbler Acrocephalus schoenobanus								
Willow Warbler Phylloscopus trochilus								
Chiffchaff Phylloscopus collybitus								
Dusky Warbler Phylloscopus fuscatus								
Arctic Warbler Phylloscopus borealis								
Siberian Tit Parus cinctus								
Little Bunting Emberiza pusilla								

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Part 2. Russia Arctic birds breeding conditions surv								
Species		<i>A</i>	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ sq.km
Pallas's Reed Bunting Emberiza pallasi								
Common Reed-Bunting Emberiza schoeniclus								
Lapland Bunting Calcarius lapponicus								
Snow Bunting Plectrophenax nivalis								
Common Redpoll Acanthis flammea								
Arctic (Hoary) Redpoll Acanthis hornemanni								
(Eurasian) Twite Acanthis flavirostris								
Rosy Finch Leucosticte arctoa								
Pine Grosbeak Pinicola enucleator								
House Sparrow Passer domesticus								
Tree Sparrow Passer montanus								
Siberian Jay Perisoreus infaustus								
(Black-billed) Magpie Pica pica								
Hooded/Carrion Crow Corvus cornix/corax								
(Common) Raven Corvus corax								
Other (give names):		000				000	000	

3. Seabird breeding colonies						
3.1 Were seabird colonies pres 3.2 If yes, please list species in		No □.	If yes, how many:			

	4	. Bird breeding	g densi	ty surveys				
4.1 Did you make any surveys of breeding shorebirds/waders □; wildfowl □; or other species □ 4.2 If yes, what method(s) did you use: Intensive nest search □; Transect plot □; Territory mapping □; Line transect □; Timed plot search □; Other (please name method)								
		ding density survey						
Total survey area	No. o	of survey plots	Size of su	urvey plot(s) (ha)	Brief description of methods			
	5. N	on-breeding a	ggrega	ations of bird	ls			
 5.1 Were any aggregations of moulting, roosting, or feeding birds present? Yes □; No □. 5.2 If yes, please list species and numbers: 								
Species		Moulting, roosting, of	r feeding?		Numbers			
ļ.								
		6. Lemm	ings/v	oles				
6.1 Were lemming 6.2 If so, please co		voles □; present in the table below:	your stud	dy area?				
Species present (list names)	(tick Rare	Abundance k one box per species) Common Abunda	chang	often did you meet lem ge during the summer? ou have capture data?	mings/voles? Did abundance ? I f so, how?			
				•				

PLEASE RETURN FORM TO THE FOLLOWING ADDRESS:

Pavel Tomkovich
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Bolshaya Nikitskaya Str., 6, Moscow, 125009, Russia
e-mail: pst@zmmu.msu.ru

Thank you for completing this form!