## 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.

I.1 RESPONDENT:	1.3 PHONE:
1.2 ADDRESS:	1.4 FAX:
1.2 ABBILLOG.	1.5 E-MAIL:
1.6 COUNTRY:	1.8 CO-ORDINATES
1.7 SITE NAME:	(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

2.1 Shorebirds/wader	5	,	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ 1 sq.km
Pacific Golden-Plover Pluvialis fulva								
American Golden-Plover Pluvialis dominica								
Black-bellied (Grey) Plover Pluvialis squatarola								
Ringed (Common) Plover Charadrius hiaticula								
Semipalmated Plover Charadrius semipalmatus								
Eurasian Dotterel  Eudromius morinellus								
Hudsonian Godwit Limosa haemastica								
Bar-tailed Godwit Limosa lapponica								
Eskimo Curlew Numenius borealis								
Whimbrel Numenius phaeopus								
Bristle-thighed Curlew Numenius tahitiensis								
Lesser Yellowlegs Tringa flavipes								
Greater Yellowlegs Tringa melanoleuca								
Spotted Sandpiper Actitis macularia								
Wandering Tattler Heteroscelus incanus								
Ruddy Turnstone Arenaria interpres								
Black Turnstone Arenaria melanocephalus								
Red-necked Phalarope Phalaropus lobatus								
Grey Phalarope Phalaropus fulicarius								
Wilson Snipe Gallinago delicata								
Short-billed Dowitcher Limnodromus griseus								
Long-billed Dowitcher Limnodromus scolopaceus								
Surfbird Aphriza virgata								

Species		,	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ 1 sq.km
Red Knot Calidris canutus								
Sanderling Calidris alba								
Semipalmated Sandpiper Calidris pusilla								
Western Sandpiper Calidris mauri								
Red-necked Stint Calidris ruficollis								
Least Sandpiper Calidris minutilla								
White-rumped Sandpiper Calidris fuscicollis								
Baird's Sandpiper Calidris bairdii								
Pectoral Sandpiper Calidris melanotos								
Purple Sandpiper Calidris maritima								
Rock Sandpiper Calidris ptilocnemis								
Dunlin Calidris alpina								
Curlew Sandpiper Calidris ferruginea								
Stilt Sandpiper Micropalama himantopus								
Buff-breasted Sandpiper Tryngites subruficollis								

## 2.2 Wildfowl

Species		Abundance Breeding performance					ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ 1 sq.km
Trumpter Swan Cygnus buccinator								
Whistling Swan Cygnus columbianus								
Greater White-fronted Goose Anser albifrons								
Snow Goose Anser caerulescens								
Ross's Goose Anser rossii								
Emperor Goose  Anser canagicus								
Canada Goose Branta canadensis								
Brant (Brent Goose) Branta bernicla								
American Wigeon  Anas americana								
Green-winged Teal Anas crecca								

Species			Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ 1 sq.km
Mallard Anas platyrhynchos								
Pintail Anas acuta								
Northern Shoveler Anas clypeata								
Greater Scaup Aythya marila								
Lesser Scaup Aythya affinis								
Common Eider Somateria mollissima								
King Eider Somateria spectabilis								
Spectacled Eider Somateria fischeri								
Steller's Eider Polysticta stelleri								
Harlequin Duck Histrionicus histrionicus								
Long-tailed Duck Clangula hyemalis								
Black (Common) Scoter  Melanitta nigra								
Surf Scoter  Melanitta perspicillata								
White-winged Scoter  Melanitta fusca		۵						
Barrow's Goldeneye Bucephala islandica								
Red-breasted Merganser Mergus serrator								
Common Merganser Mergus merganser								

2.3 Other species

Species		,	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ 1 sq.km
Loons/Grebes/ Cormorants								
Red-throated Loon Gavia stellata								
Pacific Loon Gavia pacifica								
Common Loon Gavia immer								
Yellow-billed Loon Gavia adamsii								
Red-necked Grebe Podiceps grisegena								
Horned (Slavonian) Grebe Podiceps auritus								
Northern Fulmar <i>Fulmarus glacialis</i>								

Species		A	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ 1 sq.km
Double-crested Cormorant Phalacrocorax auritus								
Pelagic Cormorant Phalacrocorax pelagicus								
Red-faced Cormorant Phalacrocorax urile								
Birds of prey								
Osprey Pandion haliaeetus								
Bald Eagle Haliaeetus leucocephalus								
Northern (Hen) Harrier Circus cyaneus								
Rough-legged Hawk  Buteo lagopus								
Golden Eagle Aquila chrysaetos								
Merlin Falco columbarius								
Gyrfalcon Falco rusticolus								
Peregrine Falcon Falco peregrinus								
Ptarmigan (Grouse)								
Willow Ptarmigan Lagopus lagopus								
Rock Ptarmigan Lagopus mutus								
Cranes								
Sandhill Crane Grus canadensis								
Skuas/Gulls/Terns								
Pomarine Jaeger Stercorarius pomarinus								
Parasitic Jaeger Stercorarius parasiticus								
Long-tailed Jaeger Stercorarius longicaudus								
lvory Gull Pagophila eburnea								
Mew (Common) Gull Larus canus								
Herring Gull Larus argentatus								
Thayer's Gull Larus thayeri								
Great Black-backed Gull Larus marinus								
Glaucous-winged Gull Larus glaucescens								
Glaucous Gull								
Larus hyperboreus Iceland Gull								
Larus glaucoides Bonaparte's Gull Larus philadelphia								

Species		,	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ 1 sq.km
Ross's Gull Rhodostethia rosea								,
Black-legged Kittiwake Rissa trydactyla								
Sabine's Gull  Xema sabini								
Arctic Tern Sterna paradisaea								
Aleutian Tern Sterna aleutica								
Auks								
Dovekie (Little Auk) Alle alle								
Razorbill Alca torda								
Thick-billed Murre <i>Uria lomvia</i>								
Common Murre (Guillemot)  Uria aalge								
Black Guillemot Cepphus grylle								
Pigeon Guillemot Cepphus columba								
Kittlitz's Murrelet Brachyramphus brevirostris								
Ancient Murrelet Synthliboramphus antiquus								
Cassin's Auklet Ptychorampus aleuticus								
Parakeet Auklet								
Cyclorrynchus psittacula Crested Auklet								
Aethia cristatella Least Auklet								
Aethia pusilla Whiskered Auklet								
Aethia pygmaea Rhinoceros Auklet								
Cerorinca monocerata Atlantic Puffin								
Fratercula arctica Horned Puffin								
Fratercula corniculata Tufted Puffin								
Lunda cirrhara <b>Owls</b>								
Snowy Owl Nyctea scandiaca								
Short-eared Owl Asio flammeus								

Species		,	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ 1 sq.km
Passerines				)				
Say's Phoebe Sayornis saya								
Horned (Shore) Lark Eremophila alpestris								
Bank Swallow (Sand Martin) Riparia riparia								
American Cliff Swallow Petrochelidon pyrrhonota								
Yellow Wagtail Motacilla flava								
White Wagtail Motacilla alba								
Red-throated Pipit Anthus cervinus								
American Pipit Anthus rubescens								
Northern (Great Grey) Strike Lanius excubitor								
American Dipper Cinclus mexacanus								
Bluethroat  Luscinia svecica								
Northern Wheatear Oenanthe oenanthe								
Gray-checked Thrush Catharus minimus								
American Robin Turdus migratorius								
Arctic Warbler  Phylloscopus borealis								
Gray-headed Chickadee Parus cinctus								
Chickadee (Boreal Tit) Parus hudsonicus								
Lapland Longspur Calcarius lapponicus								
Smith's Longspur Calcarius pictus								
Snow Bunting Plectrophenax nivalis								
McKay's Bunting Plectrophenax hyperboreus								
Fox Sparrow Passerela iliaca								
Harris's Sparrow Zonotrichia querula								
White-crowned Sparrow Zonotrichia leucophrys								
Golden-crowned Sparrow Zonotrichia atricapilla								
Savannah Sparrow Passerculus sandwichensis								

Species		,	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs, 1 sq.km
American Tree Sparrow Spizella arborea								
Orange-crowned Warbler Vermivora celata								
Yellow Warbler Dendroica petechia								
Blackpoll Warbler Dendroica striata								
Northern Waterthrush Seiurus noveboracensis								
Wilson's Warbler Wilsonia pusilla								
Rusty Blackbird Euphagus carolinus								
Common Redpoll Acanthis flammea								
Hoary (Arctic) Redpoll Acanthis hornemanni								
Grey-crowned Rosy Finch Leucosticte tephrocotis								
Pine Grosbeak Pinicola enucleator								
Gray Jay Perisoreus canadensis								
Black-billed Magpie Pica pica								
Common Raven Corvus corax								
Other (give names):								
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3. Seabird breeding colonies										
3.1 Were seabird colonies present?: Yes □; No □. If yes, how many:										

4. Bird breeding density 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)											
-	4.3 Give summary of breeding density surveys made:										
Total survey area	No.	of survey plots	Brief description of methods								
	5. N	on-breedi	ng ag	grega	ations of bird	ls					
<ul> <li>5.1 Were any aggregations of moulting, roosting, or feeding birds present?</li> <li>Yes □; No □.</li> <li>5.2 If yes, please list species and numbers:</li> </ul>											
Species		Moulting, roos	sting, or fe	eding?		Numbers					
		6. Le	emmir	igs/v	oles						
6.1 Were lemmings □; or voles □; present in your study area? 6.2 If so, please complete the table below:											
Species present (list names)	(tica Rare	Abundance k one box per spe Common	cies) Abundant	chang	often did you meet lem ge during the summer? u have capture data?	mings/voles? Did abundance Plfso, how?					
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### PLEASE RETURN FORM TO THE FOLLOWING ADDRESS:

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

Thank you for completing this form!