# **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:

1.2 ADDRESS:

1.3 PHONE: 1.4 FAX:

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?	<b>density,</b> nests,pairs/ sq.km
Oystercatcher								
Haematopus ostralegus Greater Golden Plover								
Pluvialis apricaria			_	_				
Ringed Plover Charadrius hiaticula								
Dotterel								
Eudromius morinellus		_						
Black-tailed Godwit Limosa limosa								
Bar-tailed Godwit								
<i>Limosa lapponica</i> Whimbrel								
Numenius phaeopus								
Eurasian Curlew								
Numenius arquata Spotted Redshank								
Tringa erythropus								
Redshank <i>Tringa totanus</i>								
Greenshank								
Tringa nebularia					_	—		
Wood Sandpiper Tringa glareola								
Common Sandpiper								
Actitis hypoleucos								
Turnstone Arenaria interpres								
Red-necked Phalarope								
Phalaropus lobatus Grey (Red) Phalarope								
Phalaropus fulicarius								
Great Snipe								
<i>Gallinago media</i> Common Snipe								
Gallinago gallinago		_	_	_	_	-		
Jack Snipe Lymnocryptes minimus								
Knot								
Calidris canutus Sanderling								
Calidris alba								
Little Stint								
Calidris minuta Temminck's Stint								
Calidris temminckii	_	_	_	_			_	
Baird's Sandpiper Calidris bairdii								
Purple Sandpiper								
Calidris maritima		_	_	_	_			
Dunlin Calidris alpina								
Broad-billed Sandpiper								
<i>Limicola falcinellus</i> Ruff								
Philomachus pugnax								

# Arctic birds breeding conditions survey

## 2.2 Wildfowl

Species		Å	Abundance		Bre	eding perform	ance	Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	<b>density,</b> nests,pairs/ sq.km
Whooper Swan								
<i>Cygnus cygnus</i> Bewick's Swan								
Cygnus bewickii								
Bean Goose Anser fabalis								
Pink-footed Goose								
Anser brachyrhynchus	_					—	_	
White-fronted Goose Anser albifrons								
Lesser White-fronted								
Goose Anser erythropus								
Greyleg Goose								
Anser anser		_	_			—		
Snow Goose Anser caerulescens								
Canada Goose								
Branta canadensis Barnacle Goose								
Branta leucopsis								
Brent Goose (Black Brant) Branta bernicla								
European Wigeon								
Anas penelope			_	_	_			
Teal (Green-winged Teal) Anas crecca								
Mallard								
Anas platyrhynchos Pintail								
Anas acuta		_				—	_	
Northern Shoveler Anas clypeata								
Tufted Duck								
<i>Aythya fuligula</i> Greater Scaup								
Aythya marila								
Eider Somateria mollissima								
King Eider								
Somateria spectabilis Harleguin Duck								
Histrionicus histrionicus		_				_		
Long-tailed Duck Clangula hyemalis								
Common (Black) Scoter								
<i>Melanitta nigra</i> Velvet (White-winged)							_	
Scoter								
Melanitta fusca				_	_	_		
Barrow's Goldeneye Bucephala islandica								
Common Goldeneye								
Bucephala clangula Red-breasted Merganser								
Mergus serrator							_	
Common Merganser (Goosanser)								
Mergus merganser								

### 2.3 Other species

2.3 Other species Species		Å	Abundance		Breeding performance			Average nest/pair
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ sq.km
<i>Divers/Grebes/</i> <i>Cormorants</i> Red-throated Diver or Loon								
Gavia stellata								
Black-throated Diver Gavia arctica								
Great Northern Diver Gavia immer								
Slavonian (Horned) Grebe Podiceps auritus								
Northern Fulmar								
Fulmarus glacialis Great Cormorant								
Phalacrocorax carbo Shag								
Phalacrocorax aristotelis Birds of prey	_	_			-	_	_	
Osprey								
Pandion haliaeetus White-tailed Eagle								
Haliaeetus albicilla Hen (Northern) Harrier								
Circus cyaneus Northern Goshawk								
Accipiter gentilis Rough-legged Buzzard	_	_	_			_	_	
Buteo lagopus								
Golden Eagle Aquila chrysaetos								
Eurasian Kestrel Falco tinnunculus								
Merlin (Pigeon Hawk) Falco columbarius								
Gyrfalcon Falco rusticolus								
Peregrine								
Falco peregrinus <b>Grouse</b>								
Willow Ptarmigan Lagopus lagopus								
Rock Ptarmigan								
Capercaillie								
Tetrao urogallus Skuas/Gulls/Terns								
Great Skua								
<i>Stercorarius skua</i> Arctic Skua (Parasitic								
Jaeger) Stercorarius parasiticus								
Long-tailed Skua or Jaeger Stercorarius longicaudus								
lvory Gull Pagophila eburnea								
Common (Mew) Gull Larus canus								
Herring Gull								
Larus argentatus Lesser Black-backed Gull								
Larus fuscus Great Black-backed Gull								
Larus marinus Glaucous Gull								
Larus hyperboreus	9		9	4				

# Arctic birds breeding conditions survey

Species		Abundance		Breeding performance			Average nest/pair	
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ sq.km
Iceland Gull Larus glaucoides								
Black-headed Gull								
<i>Larus ridibundus</i> Ross's Gull								
Rhodostethia rosea	_	—				_	_	
Kittiwake (Black-legged Kittiwake) <i>Rissa trydactyla</i>								
Sabine's Gull								
<i>Xema sabini</i> Common Tern								
<i>Sterna hirundo</i> Arctic Tern							_	
Sterna paradisaea								
<i>Auks</i> Little Auk (Dovekie)								
Alle alle Razorbill	_	—	_		_	—	_	
Alca torda								
Bronnich's Guillemot (Thick-billed Murre)								
<i>Uria lomvia</i> Guillemot (Common Murre)								
<i>Uria aalge</i> Black Guillemot								
Cepphus grylle						—	_	
Common Puffin Fratercula arctica								
Owls	_	_	_	_		_	_	
Snowy Owl Nyctea scandiaca								
Short-eared Owl								
Asio flammeus <b>Passerines</b>								
(Eurasian) Skylark								
<i>Alauda arvensis</i> Shore (Homed) Lark								
Eremophila alpestris	_	—	_		—	_	_	
Sand Martin (Bank Swallow)								
<i>Riparia riparia</i> Barn Swallow								
Hirundo rustica						—		
House Martin Delicon urbica								
Yellow Wagtail <i>Motacilla flava</i>								
White Wagtail <i>Motacilla alba</i>								
Meadow Pipit								
Anthus pratensis Red-throated Pipit								
<i>Anthus cervinus</i> American Pipit						—		
Anthus rubescens								
Water Pipit Anthus spinoletta								
Great Grey(Northern) Shrike								
Lanius excubitor		_				_	_	
Common Dipper Cinclus cinclus								
Dunnock Prunella modularis								
Bluethroat								
<i>Luscinia svecica</i> Wheatear								
Oenanthe oenanthe	9	-	-	-	9	-		

#### Arctic birds breeding conditions survey

Species		Abundance		Breeding performance			Average nest/pair	
	Present	Occasional/ rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	density, nests,pairs/ sq.km
Fieldfare								
<i>Turdus pilaris</i> Redwing								
Turdus iliacus			_			—		
Sedge Warbler Acrocephalus								
schoenobanus Willow Warbler								
Phylloscopus trochilus Chiffchaff								
Phylloscopus collybitus								
Arctic Warbler								
Phylloscopus borealis Willow Tit								
Parus montanus		_				_	_	
Siberian Tit Parus cinctus								
Yellow Hammer Emberiza citrinella								
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 Pine Grosbeak								
Pinicola enucleator House Sparrow								
Passer domesticus Tree Sparrow								
Passer montanus European Starling								
Sturnus vulgaris								
Perisoreus infaustus								
(Black-billed) Magpie <i>Pica pica</i>								
Hooded Crow Corvus cornix								
(Common) Raven Corvus corax								
Other (give names):								
,								

# 3. Seabird breeding colonies

3.1 Were seabird colonies present: Yes □;3.2 If yes, please list species in the colony:

No **D**. If yes, how many:....

## 4. Bird breeding density surveys

4.1 Did you make any surveys of breeding	g shorebirds/waders	□; wildfowl □; or ot	her species 🛛
4.2 If yes, what method(s) did you use:	Intensive nest search	□; Transect pl	ot 🛛 🛄;
Territory mapping $\Box$ ; Line tra	ansect 🛛 📮;	Timed plot search	□;
Other (please name method)			

#### 4.3 Give summary of breeding density surveys made:

Total survey area	No. of survey plots	Size of survey plot(s) (ha)	Brief description of methods

## 5. Non-breeding aggregations of birds

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, or feeding?	Numbers

# 6. Lemmings/voles

6.1 Were lemmings □; or voles □; present in your study area?6.2 If so, please complete the table below:

Species present (list names)	(tick Rare	one box per species)		How often did you meet lemmings/voles? Did abundance change during the summer? I f so, how? Do you have capture data?

#### PLEASE RETURN FORM TO THE FOLLOWING ADDRESS:

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

## Thank you for completing this form!