### ARCTIC BIRDS BREEDING CONDITIONS SURVEY

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

Co-ordinated collection of environmental data from many Arctic localities gives insights not only into ecological processes acting at wide scales, but also provides valuable information for the conservation of sites and species. This questionnaire 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. Although being initially focused on waders and wildfowl the database currently accumulates data on other groups of arctic terrestrial birds, as their responses to changing environment has often much in common.

The form is in two parts. This first section aims to summarise general information on environmental conditions at locations where field studies have been undertaken.

A second part (optional) produced in different versions for different parts of the Arctic, enables more detailed information on the presence and breeding success of individual species to be recorded. There are three versions of Part 2, one for Greenland, Iceland, Svalbard and Scandinavia, one for Alaska and Canada, and one for Russia.

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 <a href="http://www.arcticbirds.net">http://www.arcticbirds.net</a>. 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

PART ONE: please complete a separate form for each year and each site visited									
YEA	R:								
	1. FIELD TEAM								
1.1	RESPONDENT:	1.6	PROJECT/SURVEY NAME:						
1.2	ADDRESS:								
1.3 1.4 1.5	PHONE: FAX: E-MAIL:	1.7	Start (D/M/Y): Finish (D/M/Y):						
	2. SURV	/EY	SITE						
The	The objective of this section is to summarise broad information on the site.								
2.1	COUNTRY	2.5	PRINCIPAL TYPES OF HUMAN ACT						
2.2	SITE NAME:								
			nities of a permanent human settlement icate if now abandoned)						
2.3	CO-ORDINATES (latitude and longitude - these are essential to provide; give limits to a wider area and/or fill in separate form(s) if pronounced diversity of conditions occurred across the	(mii	Area affected by industrial development (mineral exploration/mining)						
		stat	Permanent meteorological/polar/reserve station						
	study area):		Summer only field camp (including tent camps)						
2.4	ALTITUDE (do common and/common in 111 cm		a acca : c: ccacc::a: ::a:g, ::c:g						
2.4	ALTITUDE (the average and/or range in which most of the study area falls, in metres above mean sea level):	Area used by reindeer herders							

Other (specify):

## 3. WEATHER AND SNOW-MELT

The objective of this section is to gain a broad idea of the major weather patterns during the arctic summer liable to affect the productivity of breeding birds.

3.1	SNOW STILL PRESENT ON ARRIVAL IN FIELD (excluding apparently permanent snow-banks)?						Yes □	I No [	_	
3.2	DATE OF ESTIMATED 50% SNOW COVER ON FLAT AREAS (excluding apparently permanent snow-banks):									
3.3	DATE OF ICE BREAK-UP ON MAJOR RIVERS:									
3.4	DATE OF 'FINAL' LOSS OF SNOW COVER ON FLAT AREAS:									
3.5	5 HOW MANY MAJOR SNOW FALLS OCCURRED IN THE PERIODS:									
1-	i-30 April 1-15 May 15 July 16-31 July HAVE YOU VISITED THE S	_	1-15 Aug	ust	16-31 Au		_	I 6-30 June No □		
3.7	WAS THE SEASON	warm	□, □, □,	average	☐, or	late  cold  rainy	i	n timing n temperature n humidity	<b>)</b>	
3.8 GENERAL COMMENTS ON THE WEATHER CONDITIONS: (please note occurrence of extreme weather e.g. floods, heavy hail storms, etc., and their possible influence on bird abundance and breeding success)										

### 4. FAUNA IN STUDY AREA

The objective of this section is to summarise the main animal groups present and give indications of their breeding status (if known)

WERE ANY OF THE FOLLOWING ANIMALS PRESENT AND/OR BREEDING IN THE STUDY AREA? (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.

Group of animals	Present	Abundance			Breeding performance			Were
·		occasional / rare	Frequent/ Common	Abundant	Breeding?	Hatching successful?	Fledging successful?	more detailed studies made?
Arctic Fox								
Red Fox								
Ermine/Stout								
Mink								
Lemmings								
Voles								
Waders/Shorebirds								
Swans								
Geese								
Ducks								
Birds of prey								
incl. Rough-Legged Buzzard/Hawk								
Ptarmigans/Grouse								
Cranes								
Skuas/Jaegers								
incl. Pomarine Skua/Jaeger								
Gulls and Terns								
Owls								
incl. Snowy Owl								
Passerines								
Other:								

# 5. BREEDING CONDITIONS AND BIRD REPRODUCTIVE PERFORMANCE

5.1	PLEASE GIVE GENERAL CHARACTERISTIC OF BIRD BREEDING CONDITIONS AT THE STUD SITE; THE FOLLOWING MATTERS ARE OF SPECIAL IMPORTANCE: BETWEEN YEAR CHANC BIRD ABUNDANCE, HATCHING/BREEDING SUCCESS, ITS DEPENDENCE ON PREDATORS' ACTIVITIES AND ABIOTIC CONDITIONS:								
5.2	INDUST	CHARACTERISE II RIAL DEVELOPME NG SUCCESS IN T	NT, HABITAT DE	<b>GRADATION</b>				IG,	
5.3		EVALUATE BIRD H							
	POOR		AVERAGE/MC				GOOD	ш	
5.4		GIVE REFERENCE webpages, other po			T SOURCES OF	INFORMAT	ION		
		e to give more det c region (available						or the	

#### PLEASE RETURN FORM TO

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

Thank you for completing this form!