

Spoon-billed Sandpiper survey and conservation in Russia in 2019-2022



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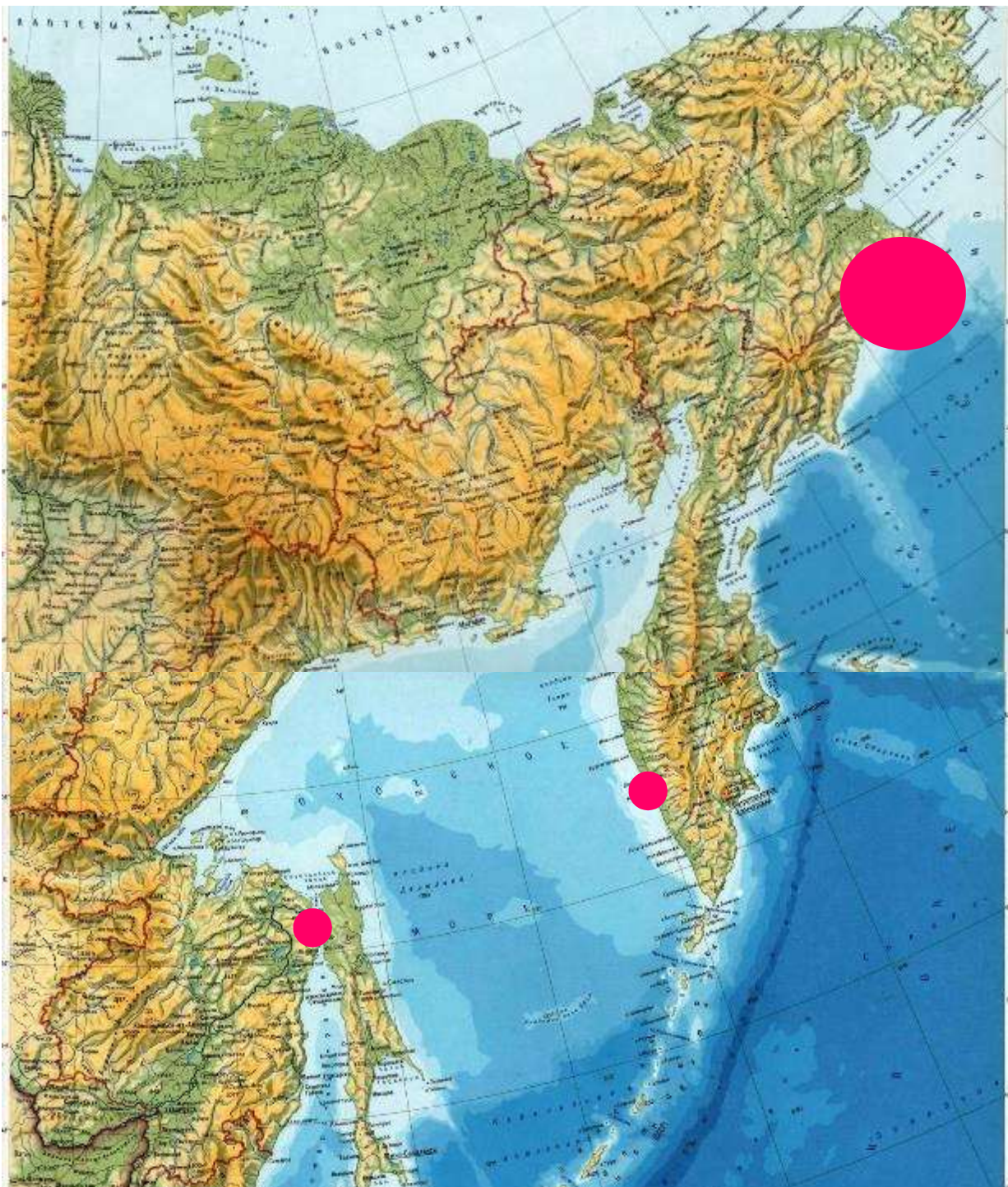
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ENDANGERED in 2005
CRITICALLY ENDANGERED
in 2009

*Flagship Species for the
Flyway conservation*





**Main points
of SBS
activity on
Far-East of
Russia in
2019-2022:
CHUKOTKA**

Meinypilgyno area – the key breeding site



Main directions of SBS conservation work in the breeding grounds in Russia in 2019-2022:



The Spoon-billed Sandpiper (SbS)

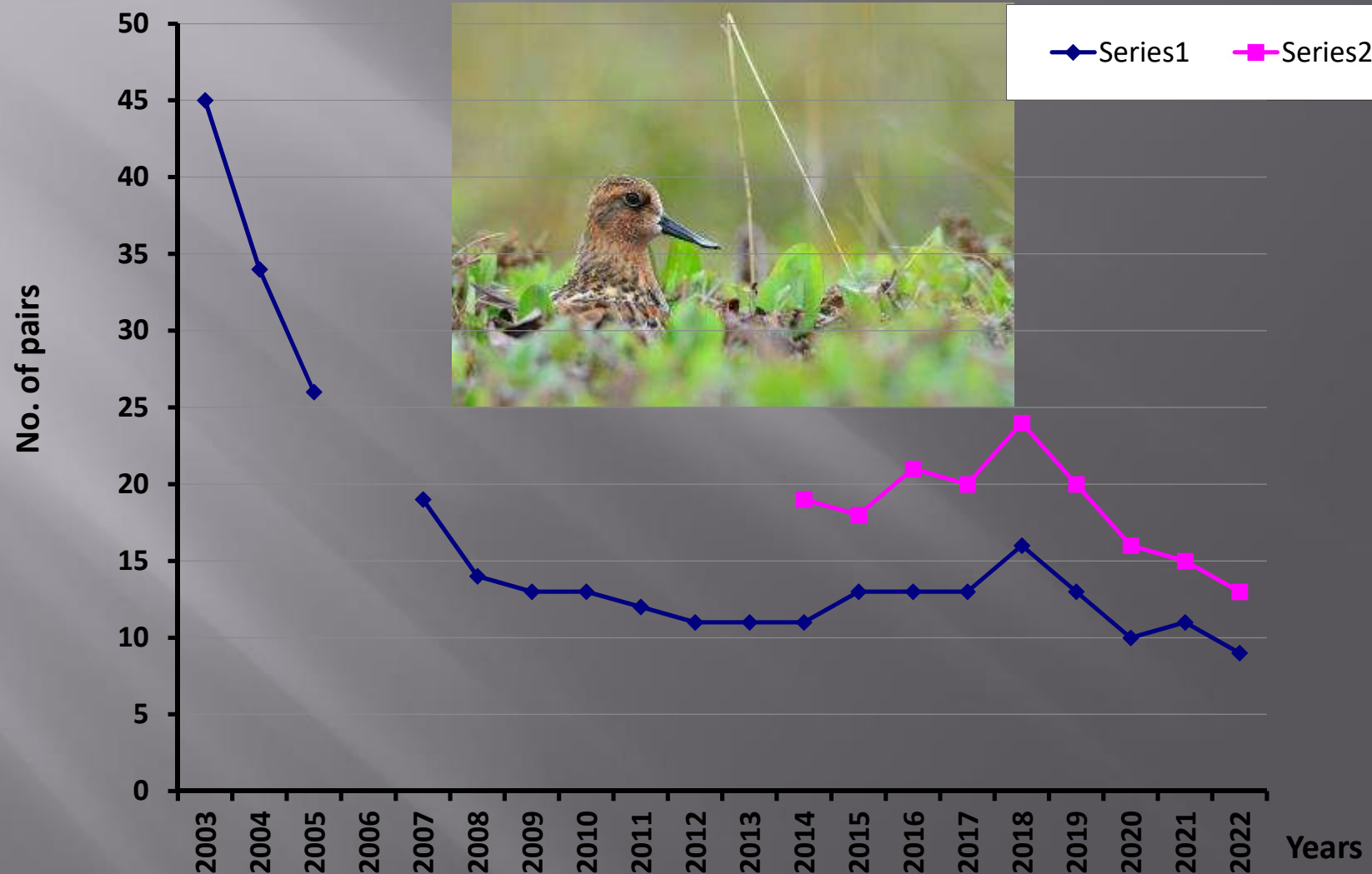
Eurynorhynchus pygmeus (L., 1758)

- Monitoring of the key breeding sites;
- Breeding biology, productivity/survival
- Predation pressure and other threats;
- Colour flagging and ringing programs;
- Keeping breeding records Data Base;
- Planning of protected areas in the breeding grounds
- Education, awareness and advocacy work;
- Head Starting programme;
- Collection of samples and genetic analysis;
- Ringing at Kamchatka stopover
- GIS modelling, Habitat change
- Food study: soil invertebrates;
- Surveys of the unknown breeding grounds in Chukotka, – planning for 2023;

SbS spatial distribution in the monitoring area near Meinypilgyno in 2003–2022 (“nests places”).



SbS population estimates in the monitoring area near Meinypilgyno in 2003–2022.



HeadStarting project 2012-2021



- Collecting eggs
- Incubation
- Rising up of the chicks (inside and at the pen)
- Realize and post-realize monitoring



Results of the HeadStarting Project

Numbers of HS SBS released in 2012–2021 and returned in 2014-2022 to the natal area in subsequent year(s).

=Year	No. of eggs collected	No. of chicks hatched	Young released		No. of birds returned									<u>Total 29</u>
			No.	% of eggs	2014	2015	2016	2017	2018	2019	2020	2021	2022	
2012	17	10	9	70.3	1	1	0	0	0	0	0	0	0	
2013	20	17	16	75.0	0	3	2	0	0	0	0	0	0	
2014	32	27	26	83.9	-	1	2	2	2	2	0	0	0	
2015	33	29	28	84.8	-	-	1	4	1	1	1	1	0	
2016	35	31	30	85.7	-	-	-	2	3	2	2	1	1	
2017	38*	30	30	83.3	-	-	-	-	0	1	1	2**	2	
2018	35	25	22	62.8	-	-	-	-	-	0	0	1	0	
2019	38	26	23	60.5	-	-	-	-	-	-	0	5	2	
2020	30	27	22	73.3	-	-	-	-	-	-	-	0	2	
2021	38	29	28	73.7	-	-	-	-	-	-	-	-	0	
2022	0	n/a	n/a	n/a	-	-	-	-	-	-	-	-	-	
Total	278	251	234	84.2	1	5	5	8	6	6	3	10	7	

Note: “-” – not applicable; * – two thin-shelled eggs were damaged; ** – one additional breeding bird was found in a remote area, which likely was missed in the previous summer(s).

HeadStarted SBS find their way back to the breeding grounds

Return rate of HS and wild chicks

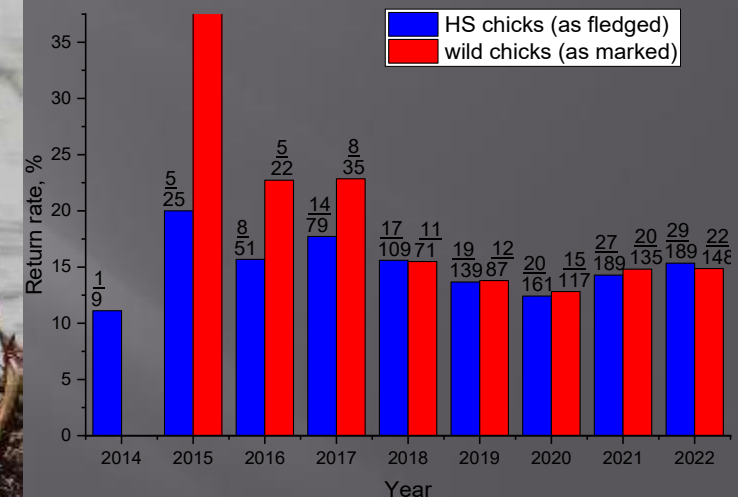
(the upper number indicates the cumulative number of chicks returned by the year, the lower figure shows the number of birds in the age of 2+ years that potentially could return)



SbS male 'White EH' hatched and raised in captivity in 2020, on its territory on 6 June 2022.




SbS male 'White XC' hatched and raised in captivity in 2020, returned to the natal area in 2022, but remained solitary.



Since 2017 head-started birds has returned and bred successfully in pairs

Colour-marking of wild adult SbS

Numbers of breeding Spoon-billed Sandpipers colour-marked as adults near Meinypilgyno in 2013–2022 and recorded back to the study area in subsequent year(s).

Year	No. marked (M+F)*	No. returned (M+F)								
		2014	2015	2016	2017	2018	2019	2020	2021	2022
2013	8 (4+4)	4 (2+2)**	6 (3+3)	3 (1+2)	2 (1+1)	2 (1+1)	2 (1+1)	2 (1+1)	0	0
2014	14 (7+7)	-	7 (4+3)	6 (4+2)	5 (3+2)	3 (2+1)	1 (0+1)	1 (0+1)	1 (0+1)	1 (0+1)
2015	9 (4+5)	-	-	5 (3+2)	4 (2+1)	5 (3+2)	3 (2+1)	2 (2+0)	2 (2+0)	2 (2+0)
2016	11 (7+4)				7 (4+3)	5 (2+3)	4 (1+3)	2 (0+2)	2 (0+2)	1 (0+1)
2017	7 (3+4)				-	5 (2+3)	3 (1+2)	4 (1+3)	4 (1+3)	4 (1+3)
2018	8 (4+4)				-	-	7 (4+3)	5 (2+3)	5 (2+3)	2 (1+1)
2019	7 (5+2)				-	-	-	4 (3+1)	4 (3+1)	2 (1+1)
2020	2 (2+0)				-	-	-	-	1 (1+0)	1 (1+0)
2021	1 (0+1)				-	-	-	-	-	1 (0+1)
2022	1 (1+0)				--	-	-	-	-	-
Total	68 (38+30)	6 (3+3)	13 (7+6)	14 (8+6)	19 (11+7)	20 (10+10)	20 (9+11)	20 (9+11)	19 (9+10)	14 (6+8)
Resighting of marked birds alive in previous year		50%** (75%)	72.2%	63.6%	76.0%	76.9%	71.4%	74.1%	86.4%	73.7%

Note: «-» – not applicable; * – M = male, F = female; ** – this figure is an underestimate because one pair which was observed breeding locally in 2015 and 2016 has not been recorded in 2014.

Colour-marking of SbS wild chicks

Numbers of wild Spoon-billed Sandpiper chicks ringed and colour-marked with engraved leg flags in the Meinypilgyno vicinity in 2013–2022 and numbers of previously colour-marked birds returned back to the natal area.



Flagging of a SbS chick on 05 July 2022.

Year	No. marked (Lime engraved leg flag)	No. recorded back into the natal area
2013	3	
2014	19	
2015	13	1
2016	38	4
2017	16	7
2018	30	8
2019	26	6
2020	20	7
2021	18	11
2022	13	8
<i>Total</i>	<i>178</i>	<i>21 individuals</i>

Study of Spoon-billed Sandpiper diet and soil-dwelling invertebrates population

Wolf spiders:



Crane flies:



Carrion beetles:



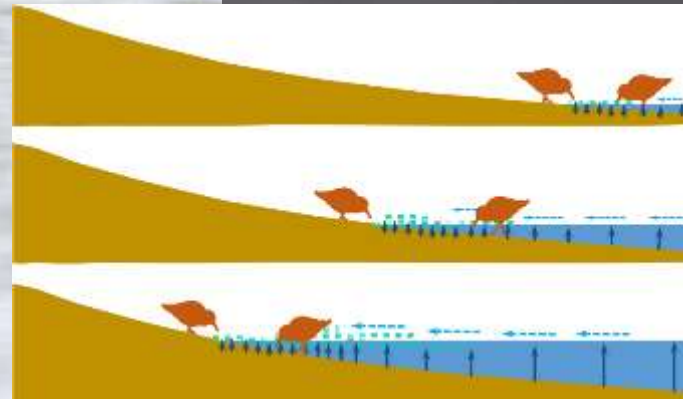
Nonbiting midge



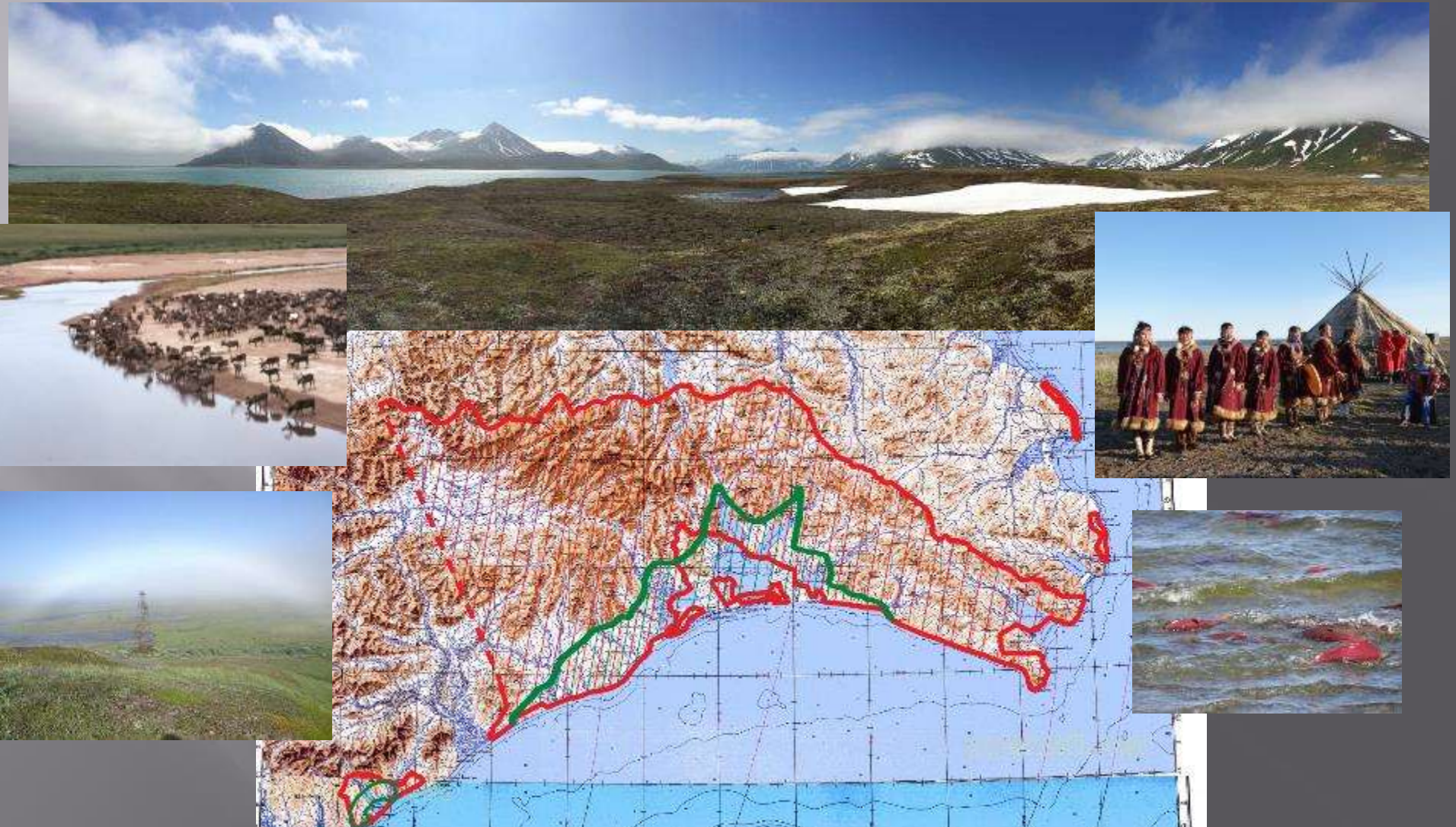
Ground-beetles



The year 2021 was notable for a high level of flooding in all former Spoon-billed Sandpiper feeding sites. Spoon-billed Sandpiper was visually observed in the beginning of June pecking at invertebrates from water of "floating" invertebrate groups. The real food items of Spoon-billed Sandpiper were: springtails, ground beetles, rove beetles and wolf spiders (Lycosidae).



Nature Park “The Land of Spoon-billed Sandpiper”
– the area decreased from 1.5 millions ha (15,000 sq.km) in more than 5 times.



Awareness work - News on Web:

• Телеграм-канал газеты «Крайний север» - <https://www.ks87.ru/nauka-i-turizm/165/14448>

• Новости Чукотки - info@prochukotku.ru - https://prochukotku.ru/news/priroda/uchyeniye_zavershili_nabluydenie_za_krasnoknizhnymi_kulikami_na_chukotke/
• Телеграмм-страница Губернатора ЯАО – Р.В.Копина - <https://t.me/s/romankopin?q=%D0%BB%D0%BE%D0%BF%D0%B0%D1%82%D0%B5%D0%BD%D1%8C>

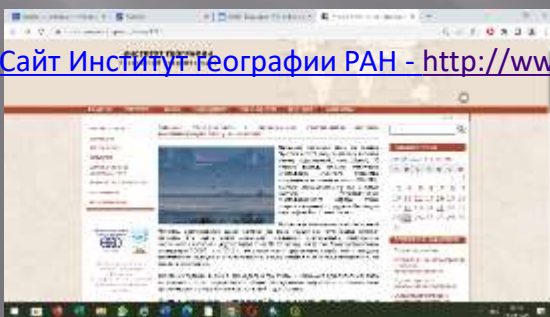
• Новости Чукотки - info@prochukotku.ru –
• Справятся сами - Проект по спасению редкого кулика на Чукотке изменил формат (prochukotku.ru)

• Новости Чукотки - info@prochukotku.ru - На Чукотке приступили к кольцеванию птенцов краснокнижного кулика-лопатня (prochukotku.ru)

• <https://birdsrussia.ru/news/novosti-organizatsii/zavershaetsya-chukotskaya-ekspeditsiya-rosip-po-izucheniyu-i-okhrane-kulika-lopatnya/>

• <https://birdsrussia.ru/news/novosti-organizatsii/itogi-chukotskoy-ekspeditsii-rosip/>

Сайт Институт географии РАН - <http://www.igras.ru/news/3312>



Awareness work: Wildlife Table Game



The expedition team in 2022:



International and Russian expedition team of BirdsRussia in Chukotka in 2018-2021



2018 – International team...

2019 – Russian team...

2020 – Russian team....

2021 – Russian team....



Thank you very much for your attention!

BirdsRussia team is grateful to all supporters of the project:

MCF, MHS, RSPB, WWT, NABU, BCF, HE, Chukotka administration,
and others as well as volunteers and local people, who all made the success of the
field work. MCF, MHS, WCS, Arccona & NABU are the main donors of
the project of SBS conservation in Chukotka in 2022



MCF
红树林
基金会



Special thanks and memory for the
LEADER of our Chukotka expedition
since 2000, many projects and
activities – Dr.E.Syroechkovskiy

*Photos by authors and K.Klokov, D.Nizovtsev, T.Noah, Yu. Artyukhin,, C.Zoeckler,
B.Scampion, C.Miller, WWT, Heritage Expedition.*

Main Spring migration routes

1738 км

US Dept of State Geographer
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SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus

Google

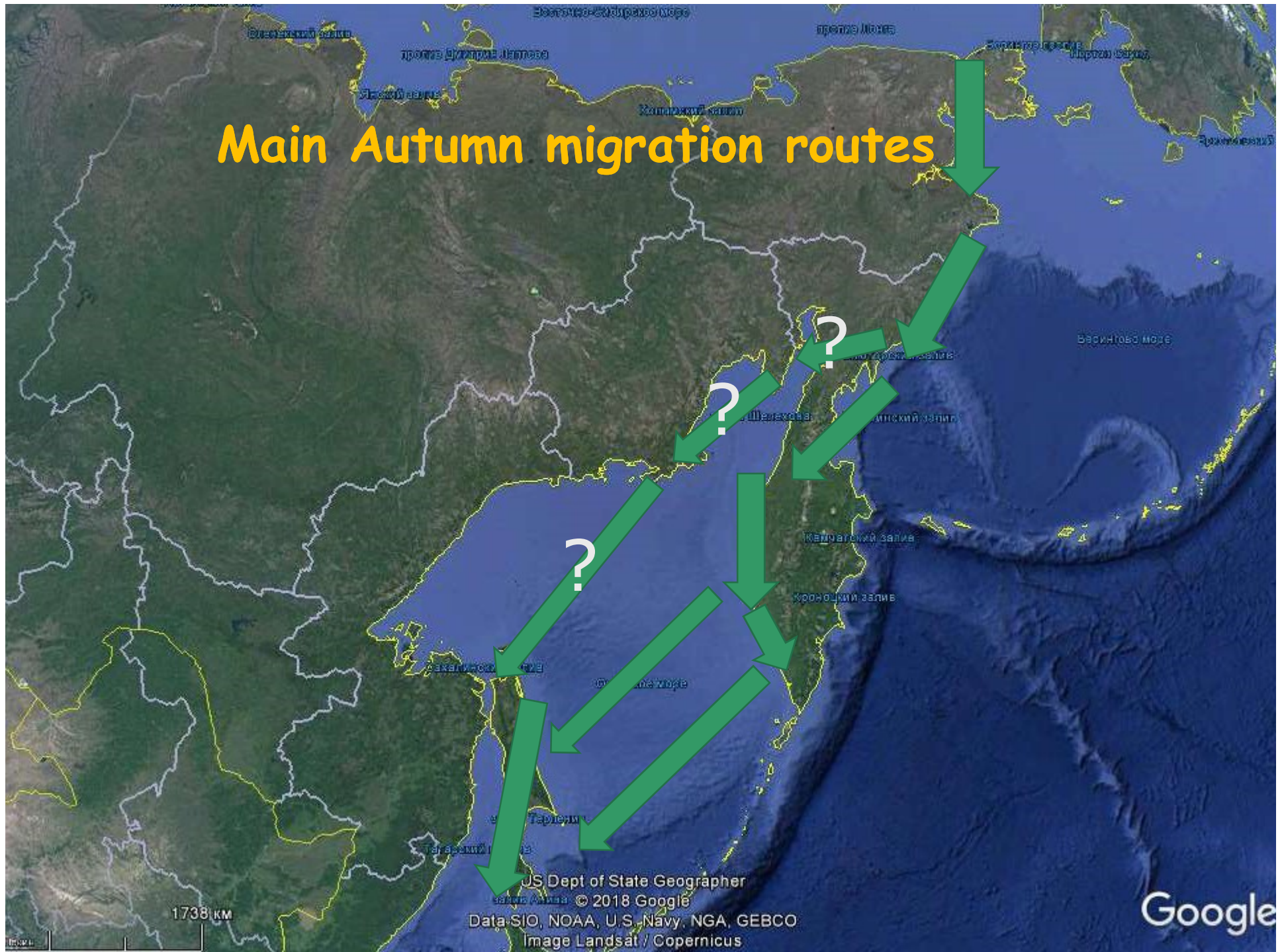
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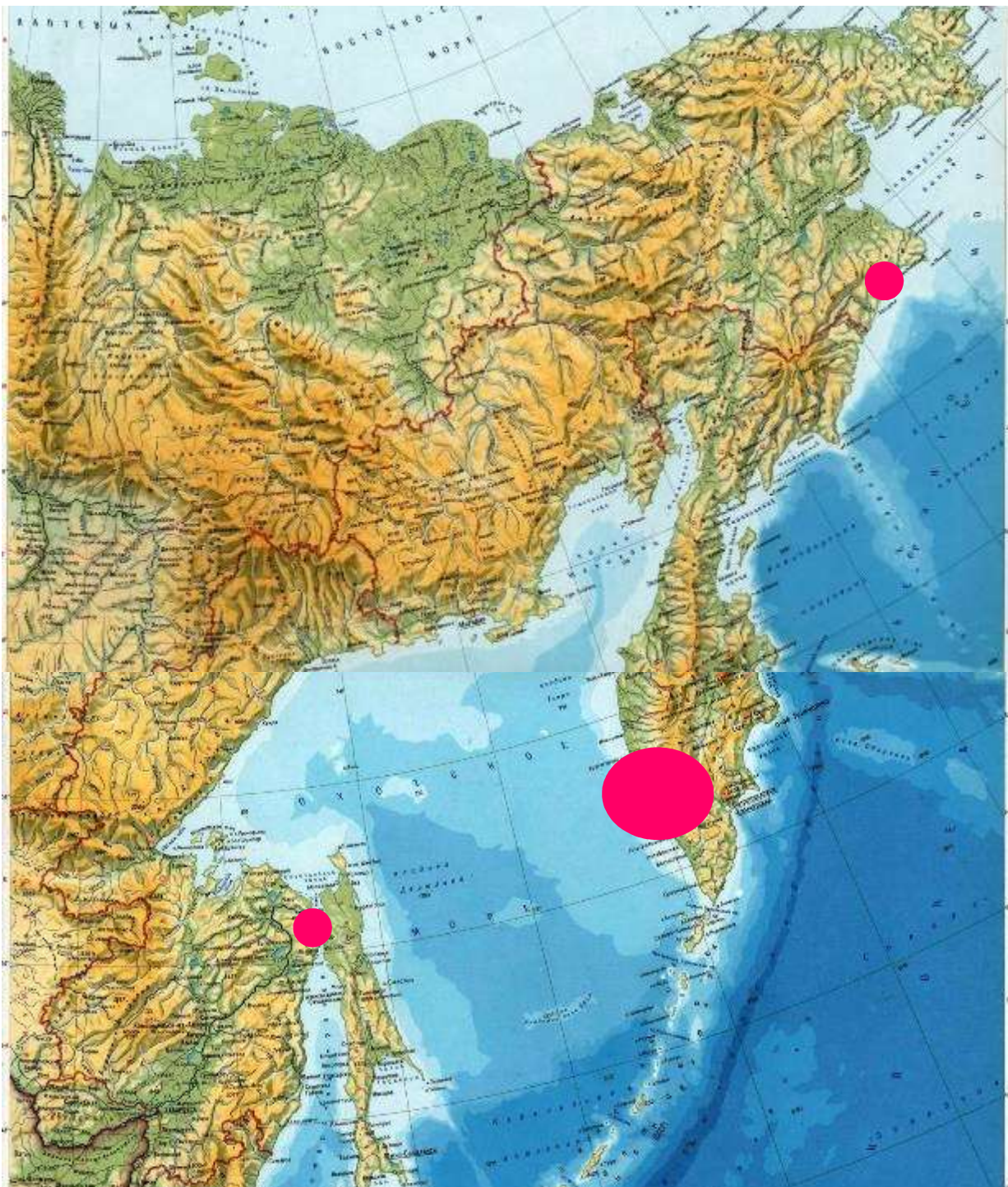
SIO, NOAA, U.S. Navy, NGA, GEBCO

Image Landsat / Copernicus

Google

Main Autumn migration routes





**Main points
of SBS
survey and
observations,
Russian Far
East in 2019-
2022:
West
KAMCHATKA**

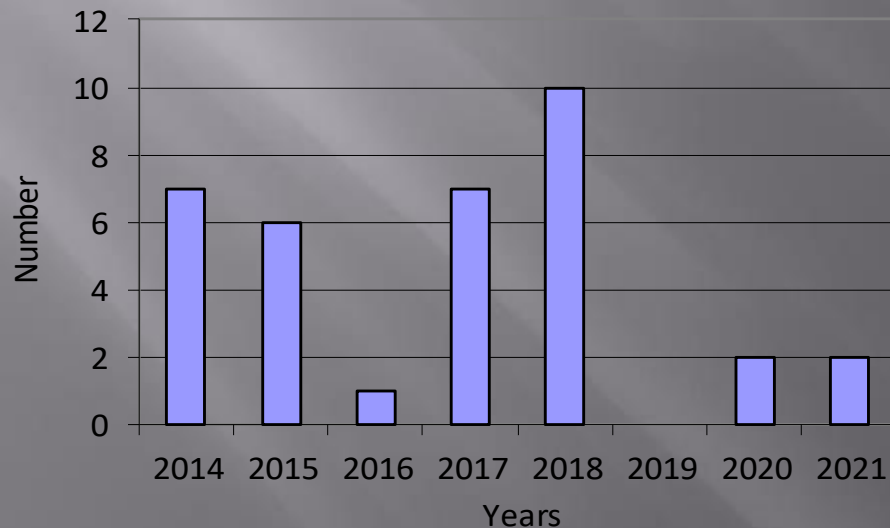
Monitoring of key wader stopover sites with banding and color flagging. SBS migration studies since 2014.



In 2019-2021 3 300 waders were caught and ringed.

With 4 SBS : 2 in 2020 and 2 in 2021

Y.N. Gerasimov, E.R. Dukhova, V.M. Kovaleva, Yu.R. Zavgarova



In 2021, first Spoon-billed Sandpipe (UE) with weight of 23.7 g (including flag) was caught 21.30 on 16 August; second bird (UK) with weight of 28.6 g (including flag) was caught 7.40 on 25 August.

Monitoring of key wader stopover sites with banding and color flagging. SBS migration study

Vorovskaya River lagoon,
Kamchatka
2018-2021



Support:

AWCF

RSPB

MHS

NABU

Special thanks to Nigel Clark for plastic and individual flags for SBS supporting

2014



2015



2016



2017



2018

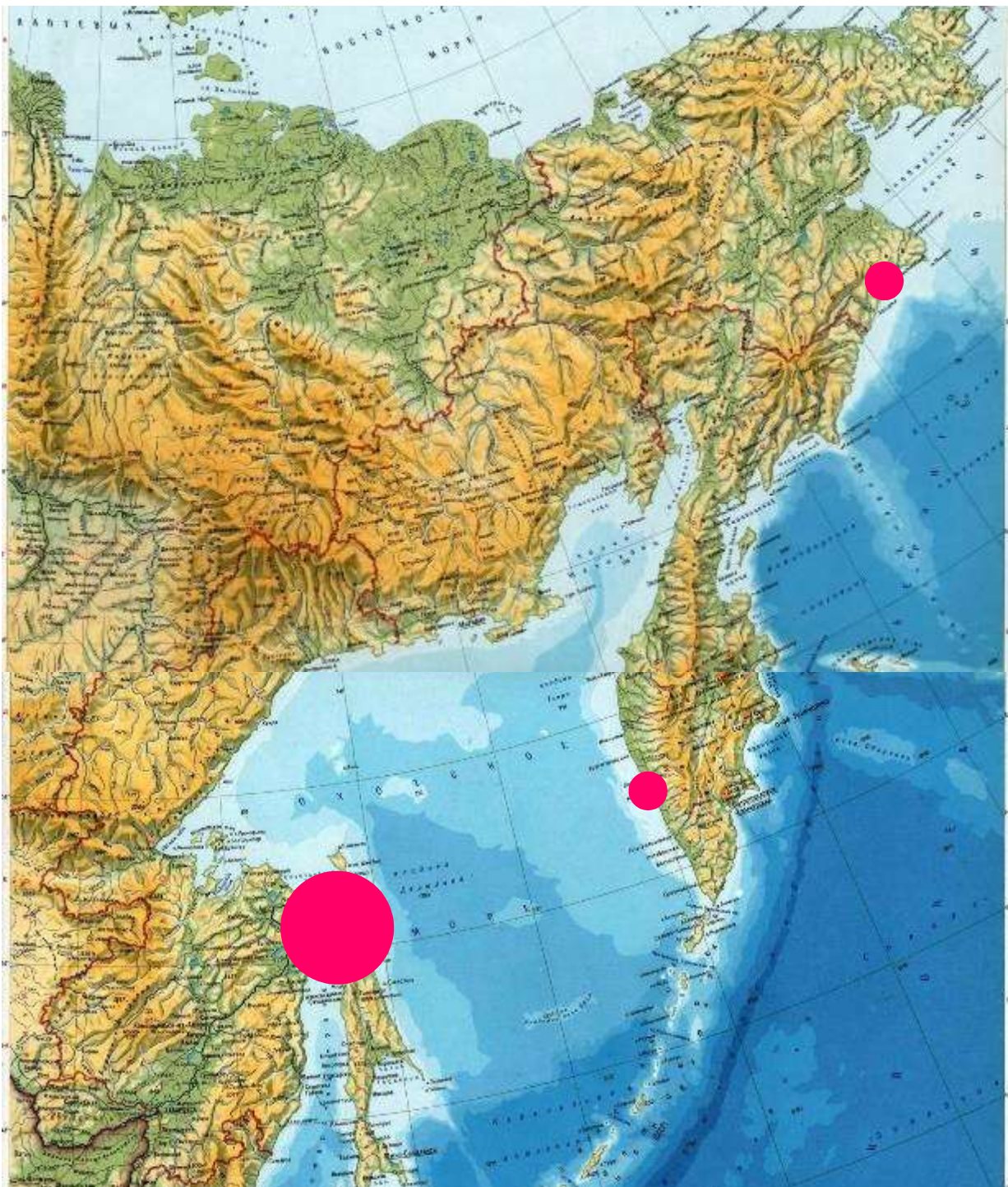




31 Spoon-billed Sandpipers were caught in 2014-2018 among 11 400 waders (for 5 years)

And only 4 Spoon-billed Sandpipers were caught in 2019-2021 among 3 300 waders (for 3 years)





**Main points
of SBS
survey and
observation,
Russian Far
East in 2019-
2022:**

**Khabarovsk
Region**

South migration of 40 waders species total number 360 000 in August 2022. 12 SBS sightings in Schastya Bay, Khabarovsk Region, 2022 by Yu.Gluschenko, D.Korobov, V.Pronkevich SBS with flag 24





Thank you very much for your attention!