MINISTRY OF NATURAL RESOURSES AND ENVIRONMENT

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All-Russian Research Institute for Environmental Protection

Long-distance migrating waders in the northern part of the Okhotsk Sea

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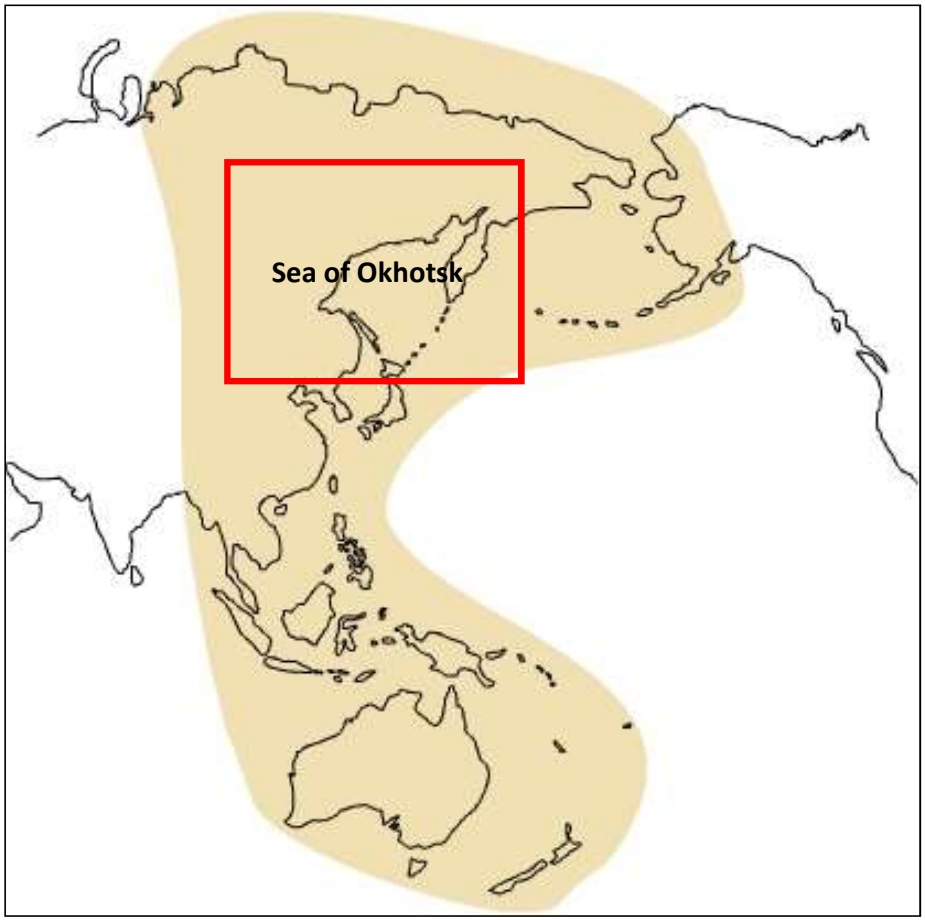
11th meeting of partners EAAFP
12 March 2023
Brisbane, Australia

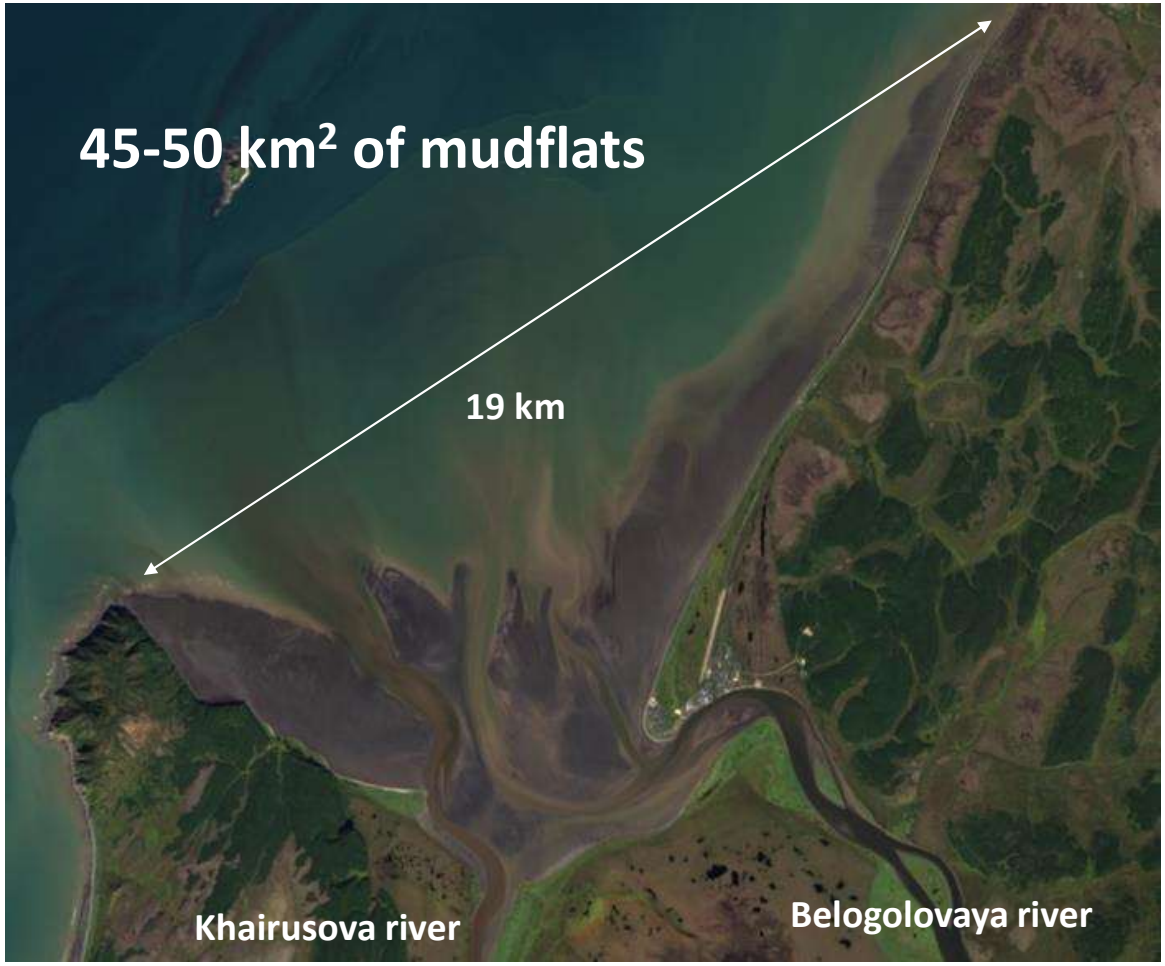
EAAF



http://www.awsg.org.au

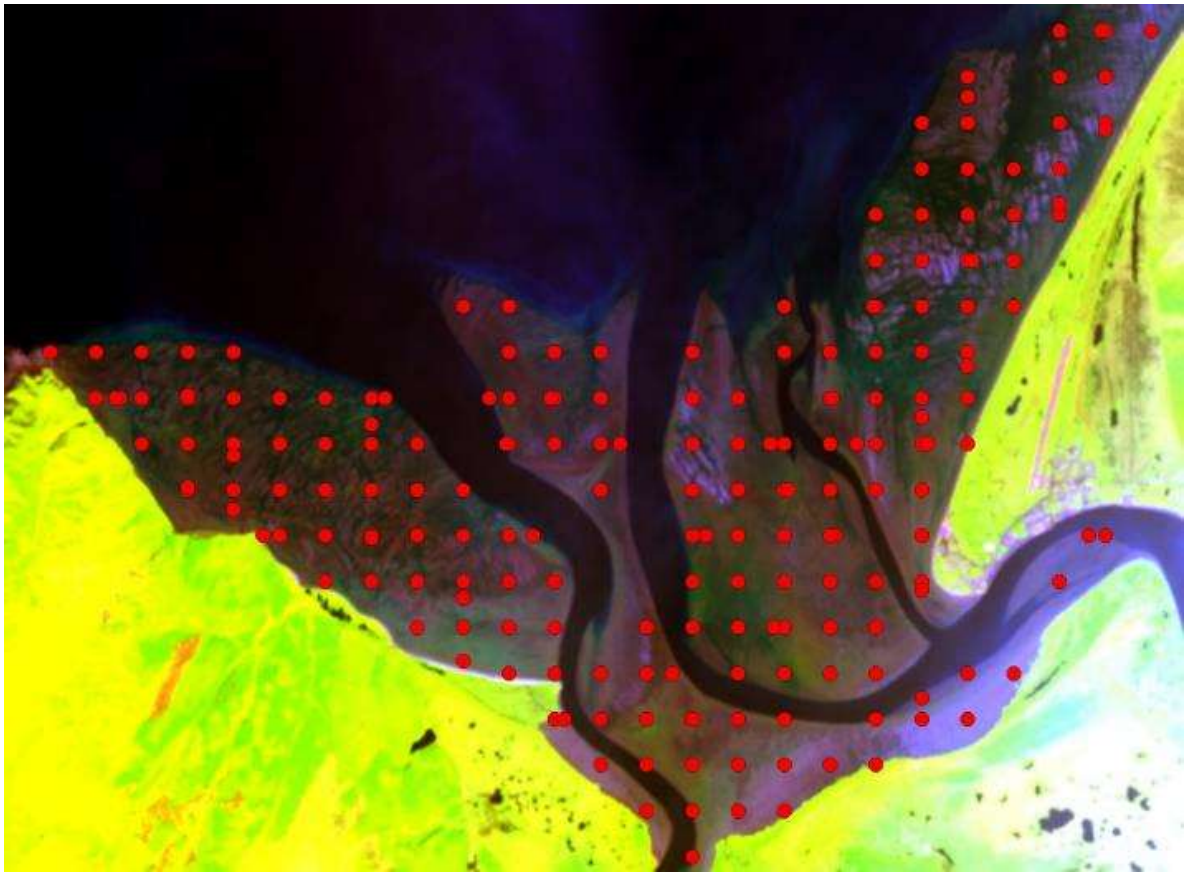
Study area

Study area



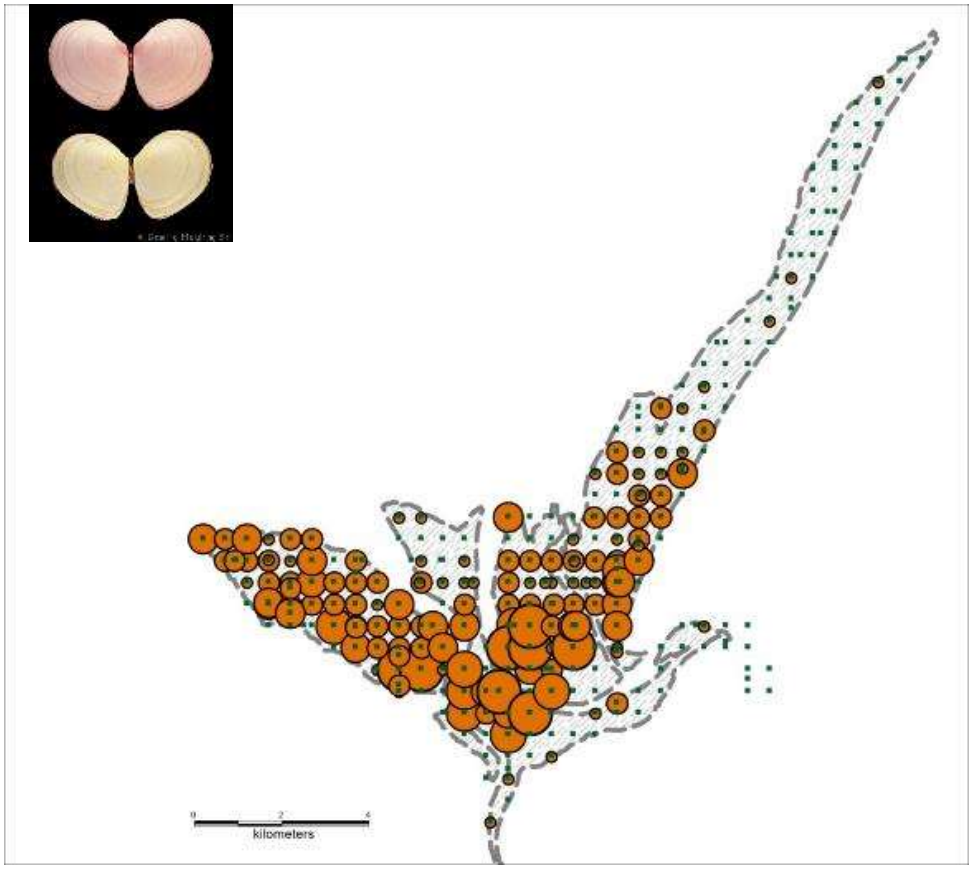
- The largest known square of mudflats on the western coast of Kamchatka
- Hight density of benthos
- Up to 34 waders species, including EN and CR (Spoon-billed Sandpiper)
- On the peak of migration up to 28 000 of waders
- Most numerous are long-distance migrating waders

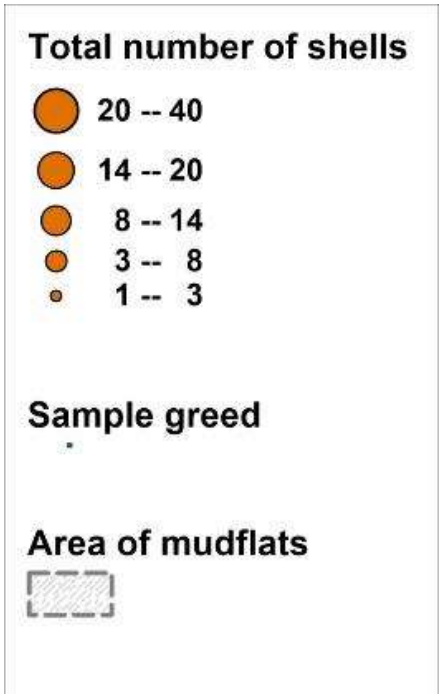
What about benthos?



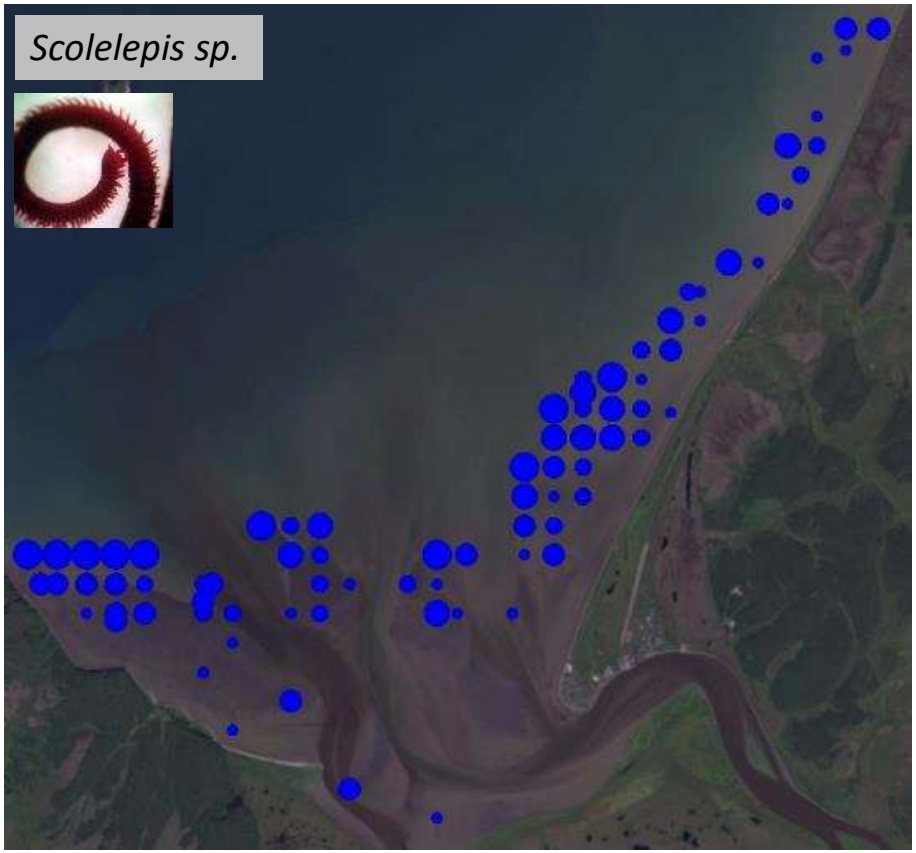
- Sample greed 500m
- More than 280 samples
- High density of benthos
- High density of *Macima balthica* – main prey some wader species

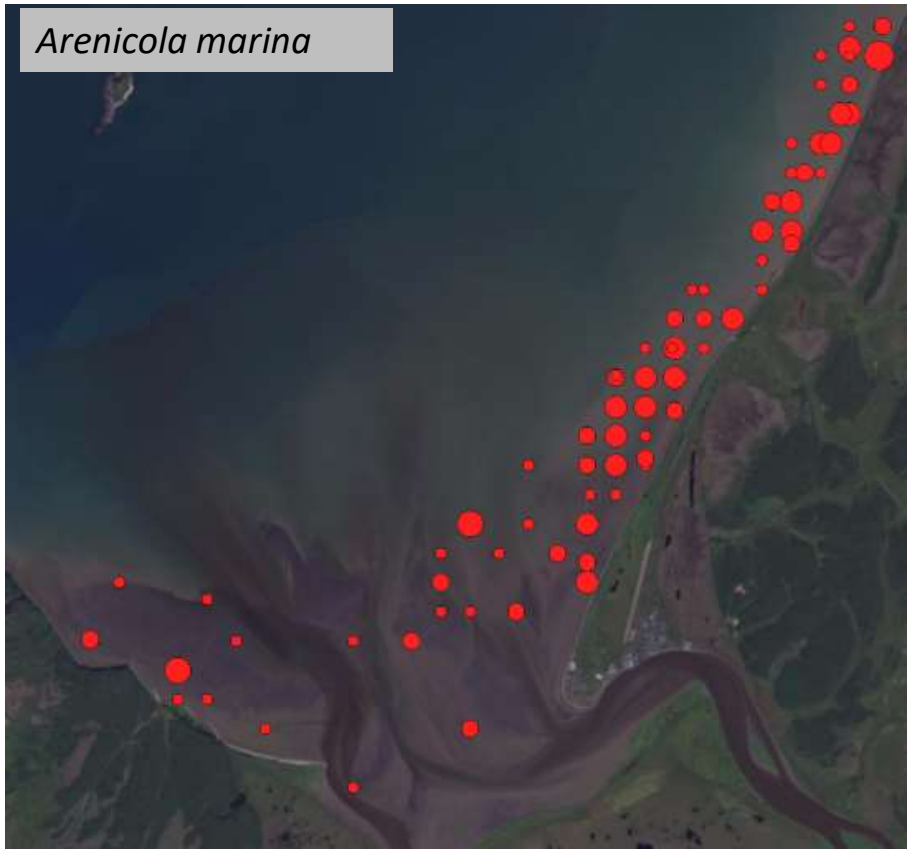
Distribution of *Macoma balthica*
(individuals per sample)





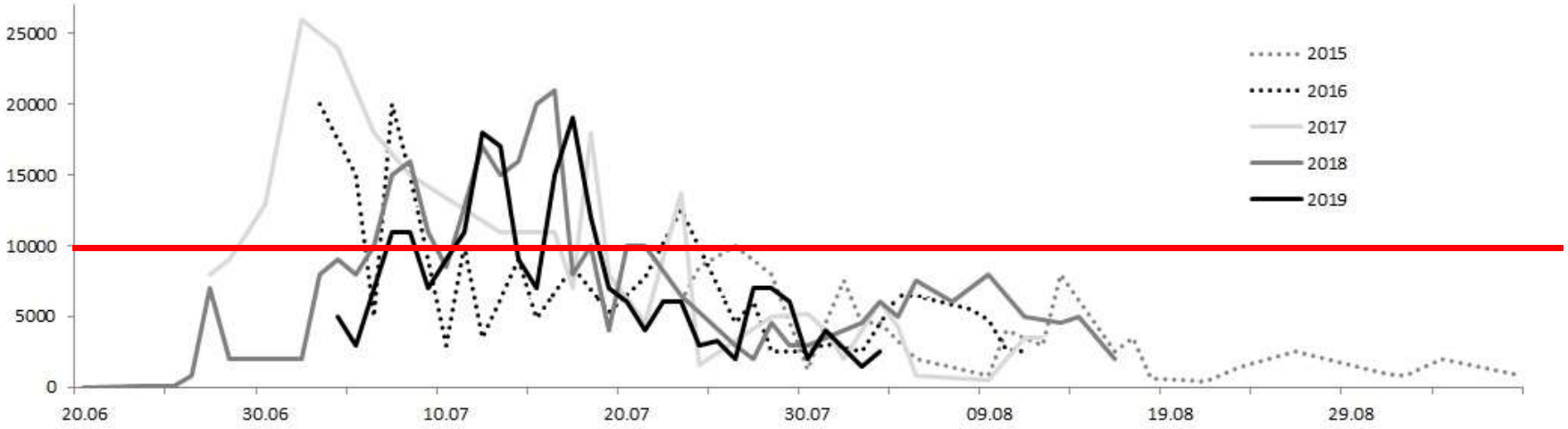
Distribution of worms





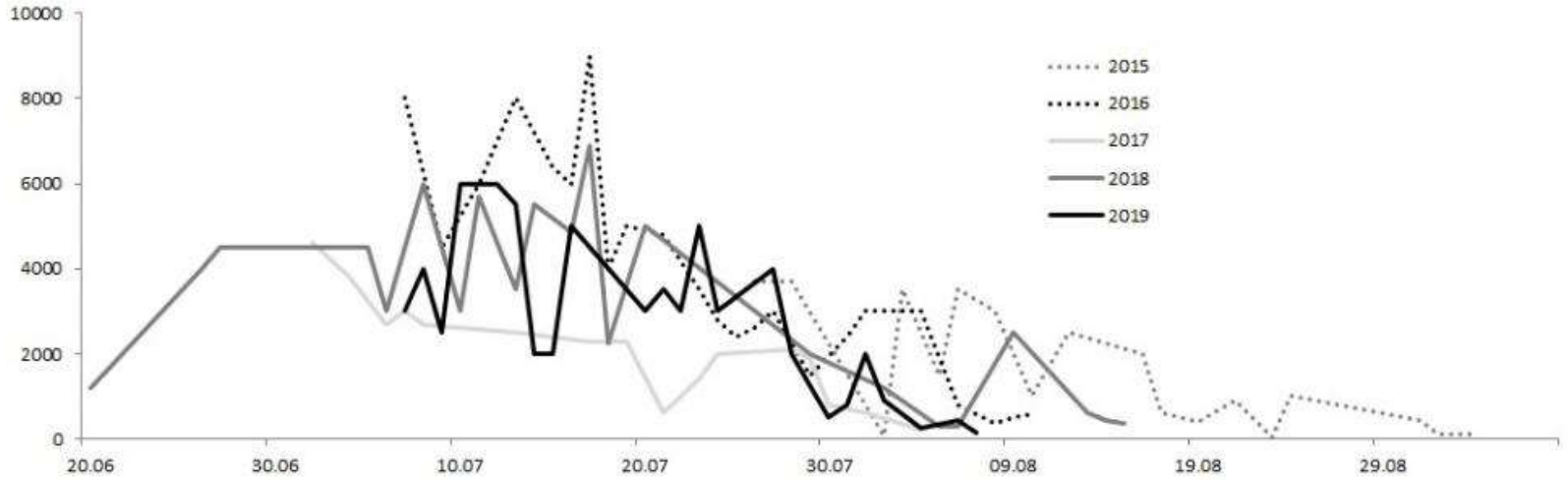
Great Knot

- up to 8% of world population on the peak of migration
- from the end of July to beginning of August not less than 1% of world population



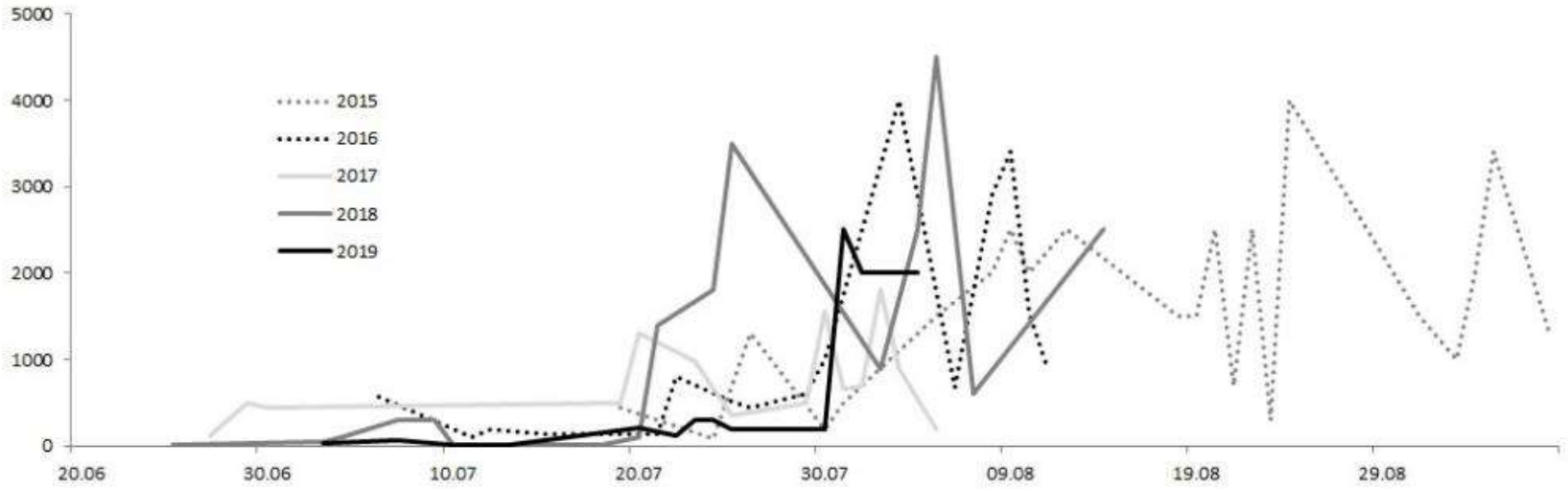
Black-tailed Godwit

- up to 9 000 on the peak of migration
- peak of migration in July



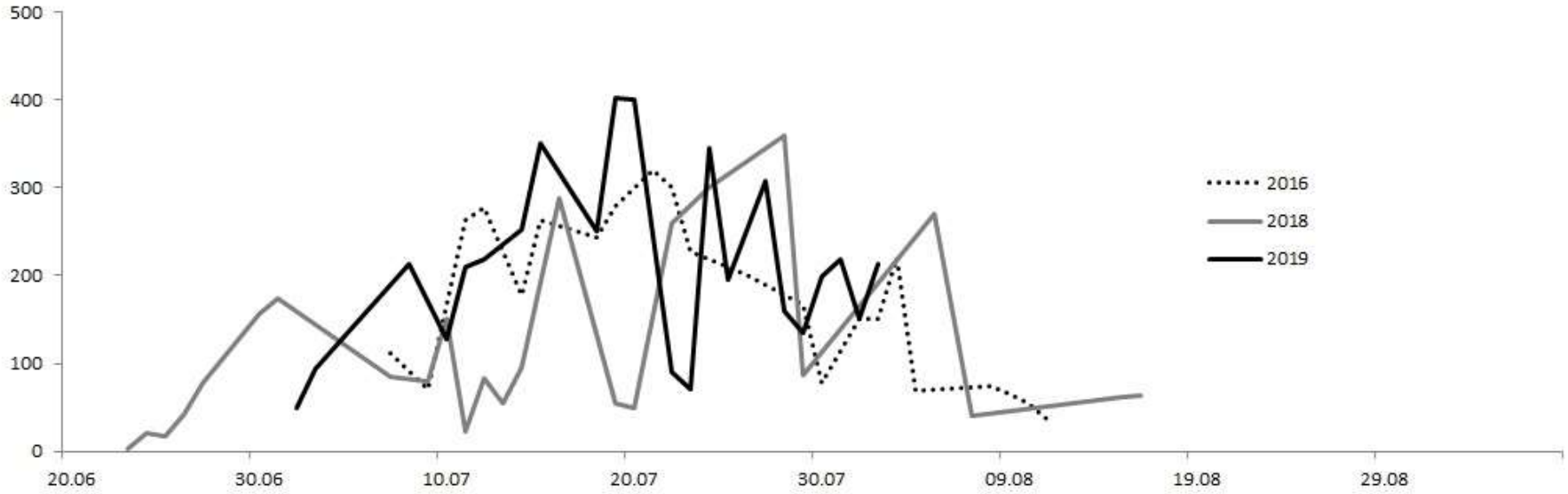
Anadyr Bar-tailed Godwit

- up to 4 500 on the peak of migration
- 45% of world population
- peak of migration in August



Far Eastern Curlew

- up to 500 on the peak of migration
- peak of migration in July

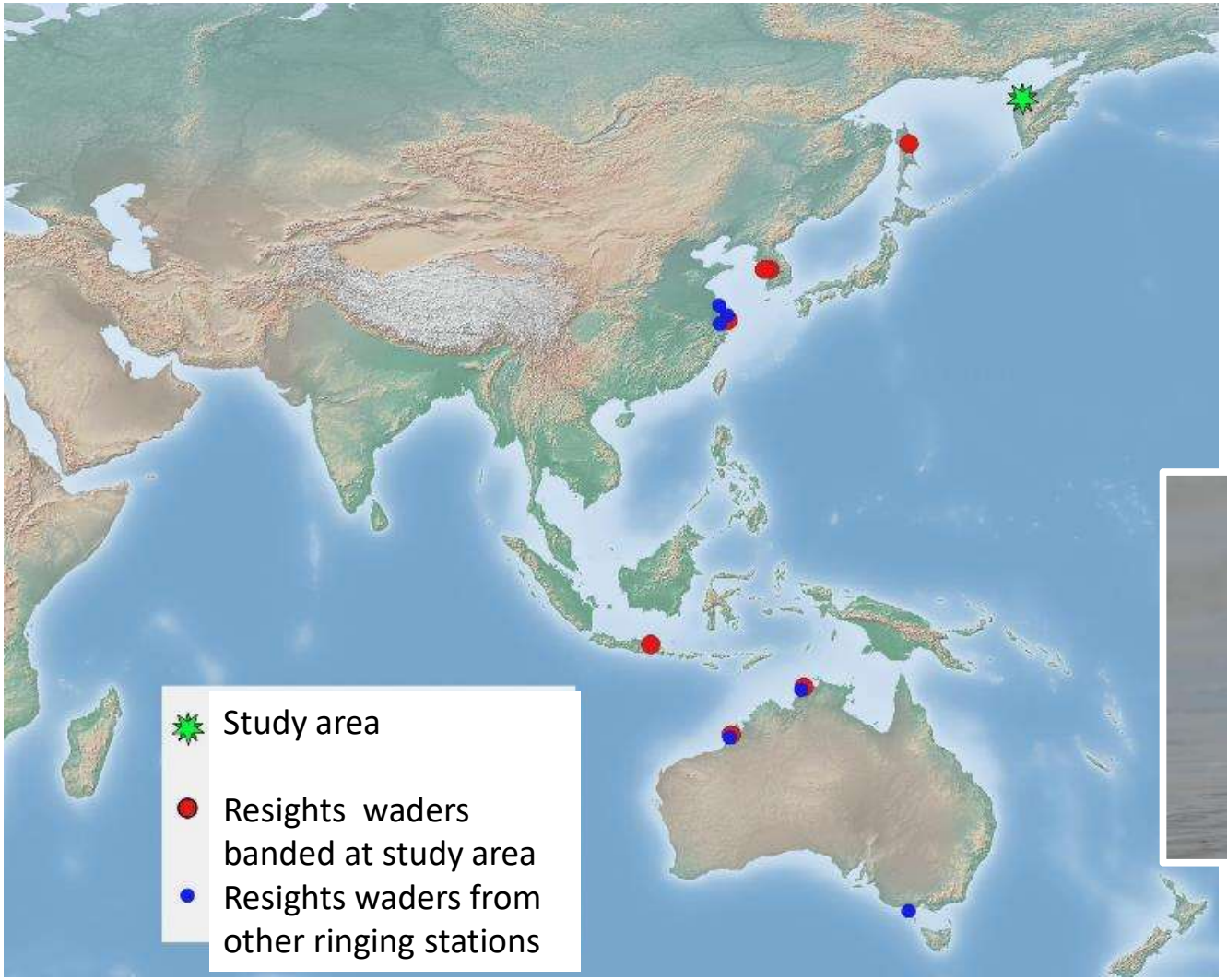


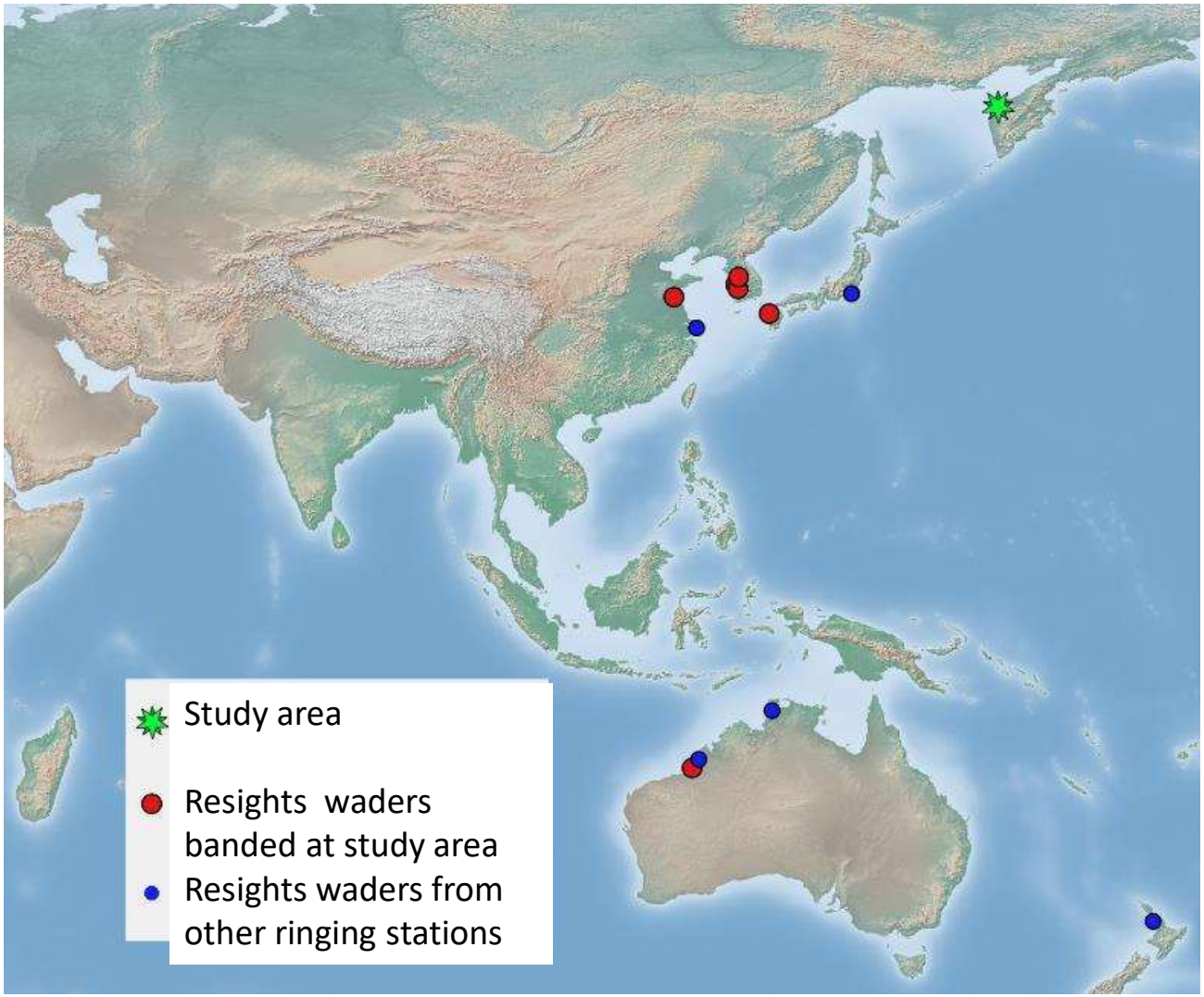
Catching and banding

In 2016-2022 we marked more than 1200 waders with engraved leg flags

Scanning and reading ELF and combinations

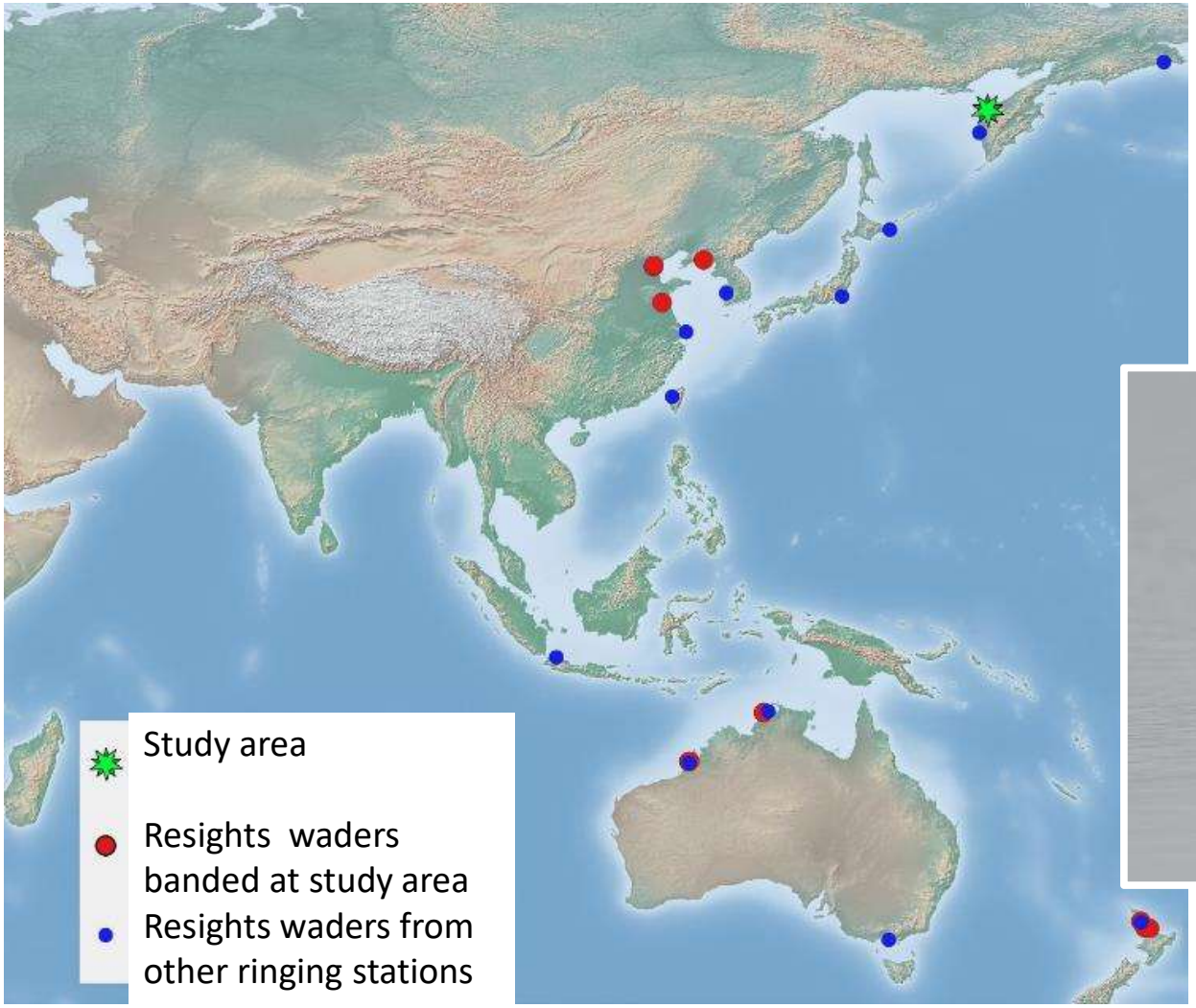
Black-tailed Godwit



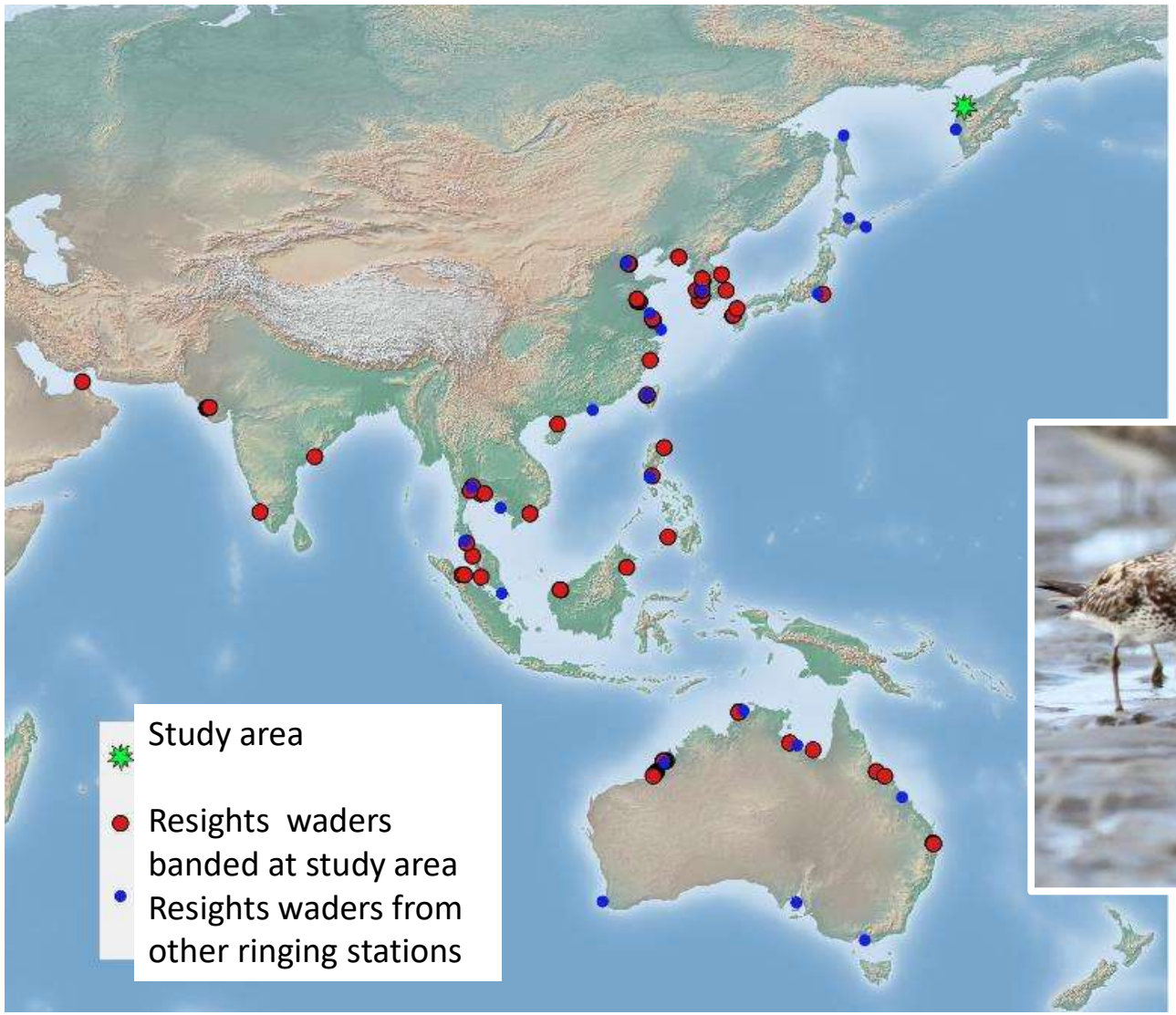


Anadyr Bar-tailed Godwit

Red Knot


Study area
Resights waders banded at study area
Resights waders from other ringing stations

Great Knot


Study area
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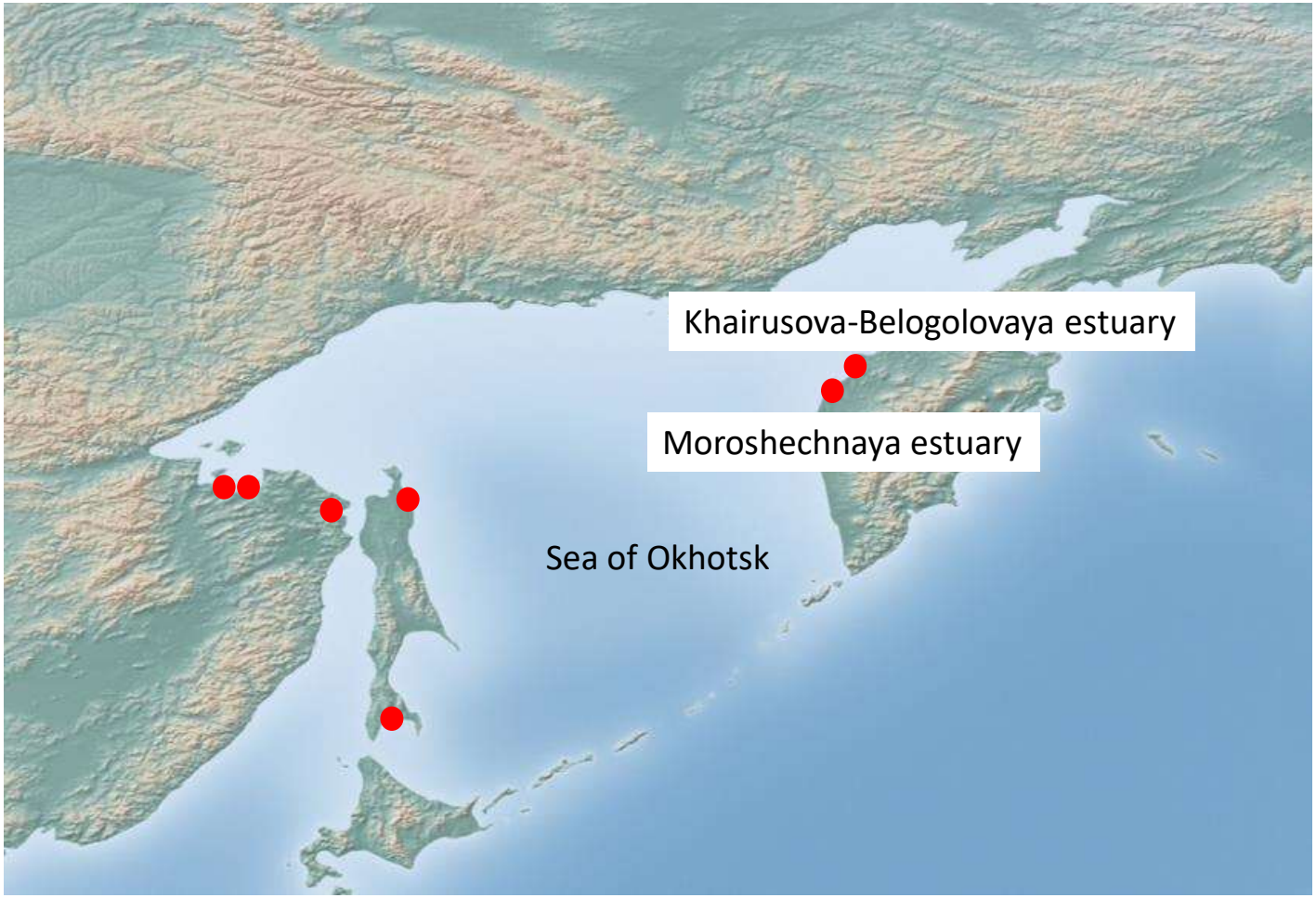

● Stopovers of long-distance migrating waders

Conclusions

- Khairusova-Belogolovaya estuary is a key site for Great Knot and three long-distance migrating waders - Far-Eastern Curlew, Black- and Bar-tailed Godwits
- According to Ramsar convention criteria this is the site of the international importance
- According to resights Great Knot from all wintering grounds use this area
- Vast tidal complex with rich benthos complex is unique for Northern part of the Okhotsk sea
- Nowadays this area doesn`t have any protected status

All-Russian Research Institute for Environmental Protection

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للمحافظة على الكائنات الحية
The Mohamed bin Zayed SPECIES CONSERVATION FUND

university of groningen

IWSG

Ministry of Environment
National Institute of Biological Resources

PRK

NIOZ Royal Netherlands Institute for Sea Research

AWSG
Australasian Wader Studies Group

Global Flyway Network
The shorebird ecological demographics & conservation initiative

Oriental BIRD CLUB

Publications

short communication Wader Study 127(1): xx–xx. doi:10.18194/ws.00179

To Russia with love – first record of Surfbird *Calidris virgata* in Eurasia

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Keywords: distribution, Great Knot, Kamchatka, Khairusova Belogolovaya estuary, vagrant

In July 2019, a Surfbird *Calidris virgata* was observed on the Khairusova-Belogolovaya river estuary (57.07°N, 156.68°E) on the Kamchatka Peninsula in the Russian Far East. Here we provide details about this first record of a Surfbird in Eurasia.

The Surfbird breeds in Alaska, USA and northwestern Canada, and winters along the Pacific east coast between southern Alaska and southern Chile. It nests in rocky alpine tundra and prefers rocky surf-pounded coastlines during migration and in winter (Senner & McCaffery 1997). It is morphologically similar to the Great Knot *Calidris tenuirostris* and has a similar breeding ecology to both Great Knot and Red Knot *C. canutus* (Piersma *et al.* 1996, Tomkovich *et al.* 1998).

The Khairusova-Belogolovaya estuary is well-known as one of the main wader stopovers on the Kamchatka peninsula (Dorofeev & Kazansky 2013). On an annual basis since 2015, systematic attempts have been made to assess the numbers, phenology and movements of waders using the estuary on southbound migration. The most observed and photographed it foraging in mixed-species flocks of Great Knots and a few Red Knots, the two congeners it could be confused with. In summary, these features included: a relatively short and stout bill with the characteristic yellow base to the lower mandible (Fig 1a); a broad white wing bar at the base of the primaries and secondaries (Fig. 1b); sturdy yellow legs (Fig. 1a–c); diffuse dark smudging on the breast (Fig. 1a,c); an immaculate white base of the tail offset by a broad black subterminal band and narrow white tips to the rectrices (Fig 1b); and the overall paler forehead, supercilium, cheek, and throat (Fig. 1c). Compared to the accompanying Great Knots, it was similar in size and appearance but slightly more compact. However, it was the shorter, yellow-based bill and yellow legs that were immediately obvious and strikingly different (Fig. 1c).

The paler forehead, supercilium, cheek and throat gave the bird a rather pale-headed appearance compared to the majority of Great Knots which were in breeding plumage. In flight, the broad white tail base and black

Post-breeding stopover sites of waders in the estuaries of the Khairusovo, Belogolovaya and Moroshechnaya rivers, western Kamchatka Peninsula, Russia, 2010–2012

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Dorofeev, D.S. & Kazansky, F.V. 2013. Post-breeding stopover sites of waders in the estuaries of the Khairusovo, Belogolovaya and Moroshechnaya rivers, western Kamchatka Peninsula, Russia, 2010–2012. *Wader Study Group Bull.* 120(2): 119–123.

Keywords: East Asian–Australasian Flyway, Kamchatka, waders, stopover site, resightings

During the northern summer and autumn seasons of 2010–2012 we collected data on the numbers of waders that stop on the estuaries of the rivers Khairusovo, Belogolovaya and Moroshechnaya on the west-central

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A modified pull-net for catching Great Knot at roost sites

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Keywords: wader trapping, Red Knot, net trap, bird ringing

Trapping Great Knots *Calidris tenuirostris* at the Khairusova-Belogolovaya river estuary in 2016 using mist nets was not very efficient, with only 14 birds being caught in 13 days. We therefore had to find another capture method. We could not use cannon nets (Minton 2003) as gunpowder is difficult to acquire in Russia and even harder to transport to the research site. In addition, the equipment required is heavy (Standen *et al.* 2014) and therefore difficult to transport to our site. We decided to try to use a pull net (called a Taynik in Russia) and based our design on Bub (1991) and Noskov *et al.* (1984), adapted for Great Knot trapping at roost sites. Our pull net is very light, no more than 7 kg ready-assembled, and uses two elastic pulls, which make it very fast. It is silent and easy to install and can be operated by just two people.

Net construction

Our pull net (Fig. 1) measures 4 x 5.8 m, with netting which is 5 x 6 m, but we would recommend using a larger piece of netting to give more 'bag'. The mesh size is 12 mm each side and the netting thread is 0.8 mm thick. A 7 mm diameter rope which does not have any give (we used a halyard) is tied to the front of the net (Fig. 1, A & B), with about 6–7 m of rope beyond the net on both sides. This is called the main rope (#1 in Fig. 1). A thin rope (3–4 mm in diameter) goes around the edge of the net and is attached in several places. Two rope loops are attached to the back of the net (D & E).

The pull net also includes two 'elastics' (#2 in Fig. 1; we use latex resistance bands that are designed for fitness