Wader stopovers in Kamchatka and flagging of Eurasian Oystercatcher

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Wader stopovers in Kamchatka

Wader stopovers of the northern part of the Okhotsk sea are poorly investigated. If we would try to collect data about field researches of the stopovers along the Western coast of Kamchatka we would understand that are just a few sites along the coastline where there are large wader stopovers. Precisely it would be only 4 sites. At the vicinity of Sobolevo settlement, in the mouth of Moroshechnaya river (Gerasimov & Gerasimov 2000), in Khairusova-Belogolovaya estuary (Dorofeev & Kazansky 2013) and in Penzhina-Talovka river (Gerasimov 2005).

Khairusova-Belogolovaya river estuary

We started our wader investigation at Khairusova-Belogolovaya river estuary in 2015. They were based on data that we collected during Beluga whale expeditions in 2010-2012 years (Dorofeev & Kazansky 2013). During this expedition, we could collect data only about the number of species and the number of waders at this stopover. After checking literature we understood that it is one of the largest stopovers at the Okhotsk sea region and the largest on the western coast of Kamchatka.
On the right bank of the Khairusova river stays Ust`-Khairusovo settlement. You to travel to this settlement by airplane or helicopter. It is possible to rent a helicopter but we usually use regular airplanes or helicopter flights. They depart from the main airport of Kamchatka peninsula - Elizovo airport

At Khairusova-Belogolovaya estuary there is a large difference between low and high-level tides. It is up to 5.5-6 meters. That`s why here there is large mudflat (up to 50 sq.km.) were can feed many species of waders in the beginning of their southward migration.

This stopover forms at the end of June and lasts till the beginning of October. The maximum counts of waders were up to 28 000. Totally we observed 35 wader species, including Surfbird (*Calidris virgata*) - the first registration of this species in Eurasia (Wader Study, 2020, in press). The largest number of waders we observe in the first part of July.

Most numerous waders at our study area are Great Knot (*Calidris tenuirostris*), Black- (*Limosa limosa*) and Bar-tailed (*Limosa lapponica*) Godwits, Dunlins (*Calidris alpina*), and Red-necked Stints (*Calidris ruficollis*). Also Khairusova-Belogolovaya estuary is an important staging place for waders that are listed in Red Data Book of Russia – Far-eastern Curlew (*Numenius madagascariensis*), Oystercatcher (*Haematopus ostralegus*), Spoon-billed Sandpiper (*Calidris pygmaea*).

Flagging of Great Knots and Oystercatchers

Since 2016 we started a wader banding program. Firstly we were focused on catching and banding Great Knots. We found out that it was almost impossible to catch this species using mist-nets. But we constructed special trap – a modified variant of pull net (Dorofeev et al. 2019). Using this trap we marked with individual flags 948 Great and Red Knots. At our ringing site, we p ut on waders black¥yellow flags that are tagged to the left tibia. We always use plain black flags but most parts of yellow flags are engraved. We have 4 resights of Great Knots from Japan in 2016 and 2017 years.

Every year when we arrived to study area and started setting up our tent camp we observed from 2 to 3 alarming pairs of Oystercatchers near our camp. In 2016 we found the nest on the pebbled spit about 800 meters from our camp. The nest with three eggs was found on the 14th July. On the same day we observed chicks that were half-sized adult birds. So we suggest that it was a very late nest or,

probably, the second one. Unfortunately in a few days, the nest was predated by the Arctic Skua.

Every summer we made counts of Oystercatchers but the maximum we counted up to 10-15 birds. Near our camp breed 3-5 pairs. And as usual, we`ve seen only alarming adult birds but didn`t see any chicks. This wader is very shy and starts alarming from a far distance. But in 2019 our volunteer from Great Britain, Edward Stubbings showed the way how it is possible to catch rather large juveniles. Totally 15.07.2019 we caught three birds from two broods. We had metal rings and engraved flags for Far-Eastern Curlews. And according to BTO ringing info the same size of flags and rings could be used for Oystercatchers. Chicks were rather large for engraved flags so we marked them with standard metal ring and black¥yellow flags. It was the first time when Oystercatchers were marked with individual leg flags on the Far-East part of Russia.

We made several resights of flagged birds during our field season. One of the chicks (T4) disappeared. We suggest that this bird was predated by Arctic Skua, Red Fox or Gulls. But the rest two (T6 and T7) we`ve seen several times when they were rather large and were able to fly. The last resights of these birds were made on 05.08.2019. Juvenile birds were already large and were able to fly. We finished our field season on 15th of August.

Khairusova-Belogolovaya estuary is a very important site for migrating waders due to the high density of invertebrates and vast (up to 50 sq. km) mudflats. Large numbers of Great Knots and Black-tailed Godwits are feeding on small bivalve *Macoma balthica*. The same species is the main prey of Oystercatchers. Several times we observed Oystercatchers that were collecting this bivalve on the mudflats.

All pairs that we observed were living on the left bank of the Belogolovaya river and on the coastline between the mouth of the river and the cape Ambon. This is a rather remote region and local people don`t visit this part of the estuary. So Oystercatchers can breed here. The coastline near Ust`Khairusova settlement fits for nesting too. But there is an auto road through the sand beach to another settlement. Also, there is a large number of feral dogs that can predate chicks. So Oystercatchers are not able to use this suitable place for breeding.

In 2019 first chicks we observed on 7 June and first flying juveniles on 31 June. This year was rather typical so we suggest that these are approximately average dates.

Resighte Information from Japan

We hoped that we would be lucky and somebody would resight our birds within East Asian-Australasian Flyway. But we understood that chances are very low – we flagged only three juvenile birds. So we were very impressed when in autumn we received news that two our survived juvenile Oystercatcheres were observed in Japan. We are very grateful for people who tracked them and send us information. This is the first evidence that Oystercatchers from Kamchatka winter in Japan. As we know the most part of the wintering range of Oystercatchers lies to the south. It was very unrespectable for us that we would have so many resights from Japan during this autumn.

In the 40 km to the south from Khairusova-Belogolovaya estuary there is one very famous for waders place on the western coast of Kamchatka – Moroshechnaya river estuary. According to literature data (Gerasimov & Gerasimov 2000, Schuckard et al. 2006) this is one of the most known important sites for waders. This estuary is much smaller than Khairusova-Belogolovaya estuary (only about 14 square km). It is less important for waders than Khairusova-Belogolovaya estuary (Dorofeev & Kazansky 2013). But here in 2011, we observed large flocks of Oystercatchers, up to 200 birds.

Almost all of these birds were non-breeders. In 2018 we observed only 50 of them. Several breeding pairs also were observed. Today we cannot explain why non-breeders prefer to spend summer at Moroshechnaya estuary but not at Khairusova-Belogolovaya estuary.

We are very thankful for all the persons who made observations of marked birds. We also put engraved Black/Yellow flags on Great and Red Knots, Black- and Bar-tailed Godwits, Dunlins and Mongolian Plovers.

In 2020 we are planning to continue our wader investigations on the largest wader stopover on the western coast of the Kamchatka peninsula. Also, we are planning to put flags on Oystercatchers and hope next autumn we would hear news about tagged birds from Japan.

Fauna of Western Kamchatka

Besides waders in the estuary, we often observe Steller`s Sea Eagle, Peregrine Falcon, Hobby. There are not many passerines but from the beginning of August starts the migration of buntings. Near our camp, there is tundra-like habitat were bred Arctic Squa, Aleutian and Common Terns. Along Belogolovaya river breeds different species of ducks – Mallard, Teal, Wigeon, Pin-tailed Duck, Merganser, Tundra Bean Goose. In 2018-2019 we put 10 neckbands on Tundra Bean Goose. Some of them already were observed in Japan and Kores. Unfortunately, we used yellow neckbands but since 2020 we would use white ones.

Several salmon species spawn at Khairusova-Belogolovaya rivers. The most numerous are Chum and Humpback Salmon. But also in rather large numbers at these rivers spawn Red Salmon, Coho Salomon, Chinook Salmon, and Masu Salmon. Sometimes fisherman catch Arctic Char and White-spotted Char. In the sea, it is a very common King Crab.
Large numbers of salmons attract sea mammals. During high tide, many Beluga whales could be observed in the mouth of rivers. Very common are Bearded and Larga seals. Available fish also attracts Brown Bears so our tent camp stays within a special electric fence.

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