



Project acronym: SEX-DOT

Project title: Sex roles and breeding behaviour of Eurasian Dotterel

Project leader: Vojtech Kubelka, University of South Bohemia, Czech Republic

Discipline: Life Sciences & Biotech: Other - Life Sciences & Biotech

Station(s): Kevo Subarctic Research Station (Finland)

Eurasian Dotterel (*Eudromias morinellus*) is a charismatic member of shorebirds group, breeding scattered at remote tundra mountain tops across Euroasia, performing reversed sex roles and nearly exclusively male incubation as well as chick care. However, a few studies have suggested that female participation in parental care could be higher than previously suggested. Therefore our main aim is to investigate the breeding ecology of Eurasian Dotterel in detail and understand the sex roles of this unique and challenging shorebird species.

Objectives:

- 1) To investigate and closely monitor courtship, incubation and chick care of Eurasian Dotterel (at least 15 breeding attempts), as well as additional species: Eurasian Golden Plover, Common Ringed Plover, together with climate change and human pressure variables
- 2) To collect blood samples from target shorebirds species for another INTERACT project (Disentangling the Population Structure of Arctic Waders led by Kees Wanders).
- 3) To collect information on climate change and human impact variables (mostly disturbance), protect nests close to the paths against trampling and educating tourists on how to behave in Arctic mountain tundra.

In the previous research in the area, we targeted mostly blood sampling from Dotterels and Golden Plovers (*Pluvialis apricaria*) in the region (partially supported by INTERACT grant: Disentangling the Population Structure of Arctic Waders led by Kees Wanders) and we collected the first data on breeding ecology. Now, we understand the study species and locations well and we can ambitiously aim at the complete data collection from all breeding stages (courtship, incubation, chick care) for the same breeding attempts.

The fieldwork locality consists of several mountain tops with mountain tundra covered with stones, lichens, mosses, sparse vegetation (200–400 m above the sea level) around Utsjoki village. We will investigate repeatedly in detail ca 24 km² of dotterel suitable habitat – ca 13 km² at Ailegas Utsjoki, 10 km² at Nuvvus, 2 km² at Njallavári and 2 km² at Rišnjárvári. We will target Eurasian Dotterel but collect the same data also for several pairs of Golden Plover and Common Ringed Plover (*Charadrius hiaticula*), if present.