

## Colour-ring study on Yellow-breasted Bunting *Emberiza aureola*

With the help of colour-ringing we want to study return rates as well as adult and juvenile survival between and within seasons. It will furthermore allow us to learn more about migratory connectivity. Collecting morphological, isotopic and genetic data from both breeding and wintering grounds will improve our understanding of which populations are facing the highest pressures regarding persecution or habitat loss. This work will also be a pre-study for upcoming projects using geolocators and PinPoint GPS-loggers to identify important stop-over and wintering sites.

All colour-ring combinations should be approved by the species coordinator before used in the field. Please contact Wieland Heim: [yellowbreastedbunting@gmx.de](mailto:yellowbreastedbunting@gmx.de)

The first project was started at Muraviovka Park/Far East Russia in 2015, see here: <http://www.cr-birding.org/node/3562>

There should be a country-specific colour-ring above the metal ring of the national ringing centre on the left leg, and an individual colour-code (two rings) on the right leg. The plastic colour rings have a diameter of 2.7 mm. So far, the Ecotone colours black, white, red, blue, green, yellow, orange and purple have been used, see here: <http://en.ecotone.com.pl/produkty/plain-rings-white-xcs.html>

Please refer to the following system (number of possible combinations in brackets):

China: **red** or **orange** above metal ring on left leg, two colour-rings right leg (256)

India and Thailand: **white** above metal ring on left leg, two colour-rings right leg (128)

Japan and South Korea: **green** above metal ring on left leg, two colour-rings right leg (128)

Kazakhstan: **blue** above metal ring on left leg, two colour-rings right leg (128)

Mongolia: **yellow** above metal ring on left leg, two colour-rings right leg (128)

Russia: black or **purple** above metal ring on left leg, two colour-rings right leg (256)

All trapped birds should be sexed, aged, measured, weighed and photographed. The following measurements should be taken according to the ESF Manual of Field Methods (Bairlein 1995): Wing length, Length of 8th Primary, Kipp distance (Measurement for wing pointedness), Tail length, Tarsus length, Bill length (Bill to skull), Bill width (at rear part of nostrils) and bill height (at rear part of nostrils). Fat and Muscle scores and information on moulting status should also be documented.

One tail feather should be collected for stable isotope analysis, and a swab sample for genetic studies.



Adult male, Muraviovka Park/Russia 2015 (W. Heim)



Adult female, Muraviovka Park/Russia 2015 (W. Heim)