

ABSTRACT

Stepniewska K., El-Hallah A., Busse P. 2011. *Migration dynamics and directional preferences of passerine migrants in Azraq (E Jordan) in spring 2008*. Ring 33, 1-2: 3-25.

Azraq ringing station is located in the Azraq Wetland Reserve in the eastern part of Jordan, on the Eastern Palearctic Flyway. It covers different types of habitat: reedbeds and a dry area with tamarisks (*Tamarix sp.*) and nitre bushes (*Nitraria billardierei*). In total, from 18 March till 28 April 2008, we caught 2767 birds from 64 species. Three species dominated distinctly, constituting 58% of total number of caught birds: the Reed Warbler (*Acrocephalus scirpaceus*) – 570, the Chiffchaff (*Phylloscopus collybita*) – 535 and the Lesser Whitethroat (*Sylvia curruca*) – 488 birds. The catching dynamics reveals the highest numbers of birds in the beginning of the studied period. The total number constantly decreased till 6 April and then subsequently increased. The first high peak of the dynamics at the end of March was due to intensive migration of Chiffchaffs and Lesser Whitethroats. The second one at the end of April was caused by pronounced migration of Reed Warblers and Blackcaps. High numbers of migrants in the beginning and at the end of the catching period reveal that we did not cover the whole migration season in Azraq, so it is necessary to begin the study much earlier and to finish later there.

We performed also 1169 directional preferences tests using Busse's orientation cage, mostly for the Reed Warbler. Directional preferences of tested birds reveal clear dominance of NW headings – towards European breeding grounds. The NE headings towards Asian breeding grounds were also present. There was a low share of reversed headings, especially SE. We suppose that birds showing NW headings could migrate from wintering grounds in Africa across the most southern coasts of the Arabian Peninsula; these flying to the NE seem to have crossed Egypt and then fly along the Arava Valley. Many species presented in this paper, like the Red-backed Shrike (*Lanius collurio*), could show loop-migration, flying in spring more eastern than in autumn.

High numbers of caught and observed birds, including habitat-specialists like numerous *Acrocephalus* warblers, reveal that the Azraq Wetland Reserve is a very important place for Palearctic migrants during their migration through desert areas of the Middle-East.

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Publication appointed to the SE European Bird Migration Network papers

Key words: spring migration, south-east flyway, seasonal dynamics, directional preferences, Middle East, Azraq, Jordan