

Huttunen M.J. 2004. *Orientation and migratory activity of Song Thrushes (Turdus philomelos) in northern Italy: cage and release experiments under overcast conditions*. Ring 26, 1: 23-39.

Abstract

The autumn orientation and migratory activity of Song Thrushes at different periods around sunset were recorded in northern Italy using orientation cages and release experiments, mostly under overcast skies. The aim of the experiments was to examine the importance of timing and energetic condition for the orientation and relative migratory activity of Song Thrushes located close to the wintering area. The data demonstrate that the birds tested during sunset showed a mean orientation that coincided with the average sunset azimuth. The birds that were tested after sunset chose headings towards the south, significantly different from tests at sunset, showing oriented *Zugunruhe* in visually cueless situations. Lean migrants in funnel cages displayed relatively more activity than migrants with larger fat stores, but they also showed more scattered directional choices. A bird's energetic state did seem to affect the likelihood of undertaking night migration. Test birds with relatively small fat reserves at release were more likely to perform landing flights than birds with larger fat deposits. Although nocturnal passerine migrants generally show well-oriented responses only shortly after sunset, both cage and release experiments 1-2 h after sunset indicate that timing may not be critical for the initial orientation of Song Thrushes. However, cage tests performed before sunset resulted in more unclear responses by the test birds than tests performed after sunset.

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Key words: Song Thrush, *Turdus philomelos*, orientation, migratory activity, cage experiments, release experiments