

Keşaplı Didrickson Ö., Didrickson J., Busse P. 2007. *Autumn migration dynamics, body mass, fat load and stopover behaviour of the Willow Warbler (Phylloscopus trochilus) at Manyas Kuşçenneti National Park (NW Turkey)*. Ring 29, 1-2: 67-89.

### **Abstract**

Turkey is located on one of the major migratory routes between Palearctic and Afrotropical regions. Despite its importance for many species, few studies exist on bird migration over Turkey. In this study, autumn migration dynamics and stopover behaviour of the Willow Warbler, a passage migrant in Turkey, was documented and analysed at Manyas Kuşçenneti National Park (NW Turkey). Birds were mist-netted, ringed, measured, weighed and fat scored from mid-August in 2002 and end of August in 2003 to end of October in both years. Totally, 543 and 929 Willow Warblers were ringed in 2002 and 2003, respectively. For 2002 and 2003 respectively, fat score values (mean  $\pm$  SE) were  $4.63 \pm 0.06$  and  $3.84 \pm 0.05$ , while body mass reached  $11.38 \pm 0.07$  and  $10.37 \pm 0.05$  g for birds captured for the first time. Fat scores in 2003 showed a bimodal distribution with peaks of T2 and T5, indicating populations or groups with different migratory strategies. The number of retraps constituted 9.2-12.1% of birds captured. In both years, minimum stopover length ranged from 1 to 15 or 16 days with a median of 5 days (averages 5.26 and 5.54, respectively). The majority of the retraps put on significant fat in both years. Retraps continued to put on weight for up to two weeks after they had arrived. In this second study documenting the Willow Warbler migration in Turkey, it was revealed that such wetlands as Manyas Kuşçenneti National Park provide crucial stopover habitat for possibly several populations of the species enabling them to gain necessary fat loads before crossing two major ecological barriers, the Mediterranean Sea and the Sahara.

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**Key words:** *Phylloscopus trochilus*, Willow Warbler, migration, stopover behaviour, fat load, Western Turkey