

# Use of nest baskets by Long-eared Owls *Asio otus* in Israel

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**Plate 1.** Long-eared Owl incubating in a nest basket, April 2007, Israel. © Motti Charter

The breeding success of Long-eared Owls *Asio otus* has been well studied in Europe and the USA (Glue & Hammond 1974, Glue 1977, Village 1981, Garner 1982, Korpimäki 1992, Garner & Milne 1997, Henrioux 2002) but little is known for the east Mediterranean region (Manners & Diekmann 1997). In Israel, Long-eared Owl numbers have increased dramatically since 2002, with breeding taking place in many suburban and urban habitats (Dovrat & Merose 2005). This increase is probably linked to the increased number of Hooded Crows *Corvus corone*, whose nests are also the primary nest sites used by Long-eared Owls in Israel. Many farmers and ordinary citizens have complained about the crows causing serious damage or constituting a pest, and consequently programmes have been established to eradicate or reduce the number of crows in certain areas, which is likely also to reduce the number of breeding Long-eared Owls (Hadjisterkotis 2003). In Europe (Village 1981, Garner 1982, Garner & Milne 1997) nest baskets have been used successfully as alternative nest sites for Long-eared Owls, but this has never been attempted in Israel.

Here we present the results of a preliminary study to determine whether nest baskets can be used successfully by Long-eared Owls in Israel. In December 2006, sixteen 40 cm diameter nest baskets (steel basket with soft padding for the interior) were positioned at a height of six metres above the ground in eucalyptus trees bordering agricultural fields in the Yizre'el valley, northeast Israel. All baskets were visited weekly. For each breeding attempt (defined as a nest in which eggs have been laid, Steenhof 1987), we recorded, when possible, the date of egg-laying, clutch size, brood size (number of young observed less than 1 week after hatching), and number of young that left the nest ('branchers', Korpimäki 1992). Data are presented as means  $\pm$  SE. Six nest baskets (37.5%) were occupied, and later branched young, during the 2007 breeding season (Plates 1 & 2). Even though the baskets

were only placed in December 2006, the first was occupied just a little over two months after placement. Clutch size was  $4.0 \pm 0.4$  ( $N = 4$ ), brood size was  $3.6 \pm 0.7$  ( $N = 5$ ) and number of branchers was  $3.0 \pm 0.6$  ( $N = 6$ ). Mean laying date was April  $1 \pm 12.0$  days, ranging from 26 February–18 May 2007 ( $N = 6$ ). The addition of nesting baskets appears to have been a success. The percentage of occupation of nest baskets was similar to that reported in England during years of highest occupation (Garner & Milne 1997). An additional 72 nest baskets were positioned before the 2008 breeding season in the Yizre'el valley with similar results (M Charter unpub data). The provision of nest baskets for Long-eared Owls may play an important role in pest control, as small mammals, mainly rodents, typically form between 83–96% of the diet of the Long-eared Owl (Mikkola 1983, Yosef 1997, M Charter unpub data).



**Plate 2.** A nest basket with three Long-eared Owl young in a eucalyptus tree, April 2007, Israel. © Motti Charter

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