

## Short Communication

### A Preliminary Study of Some Nest-building Activities of Eurasian Magpie *Pica pica* in Meshkin-Shahr, Ardabil Province, Northwest Iran

FARAHAM AHMADZADEH<sup>1\*</sup> & HADI ASADI<sup>2</sup>

1. Environmental Sciences Research Institute, Shahid Beheshti University, Tehran

2. Meshkin-Shahr Agricultural Research station, Meshkin-Shahr, Ardabil

\* Correspondence Author. Email: f\_ahmadzade@sbu.ac.ir

Received 1 January 2006; accepted 29 April 2007

(*Pica pica*)



Eurasian Magpie *Pica pica* is an abundant bird with a wide distribution. It occupies a wide variety of habitats, but prefers open areas that possess a patchwork of dense bushes and suitable nesting trees, such as in farming areas and orchards. There is, however, little information about its ecology and behaviour in Iran.

This survey was conducted in the apple orchards (c. 100 km<sup>2</sup>) of Arablu village, Meshkin-Shahr, Ardabil province. For many years, it has been believed that the Eurasian Magpie is as a pest bird. But now, villagers know that the bird has an important role in mice control in farms especially in apple orchards and do not destroy its nest. So its population has been increased in recent years. In this region, the nest-building activity of all 23 pairs of Eurasian Magpie was studied from winter to spring 2006. As soon as two Eurasian Magpies were seen together, bonding was noted. The start and completion time of nest-building was

also recorded. Once a pair had completed the cup of the nest and before they started on the dome, the outer diameter and the height of the nest was measured.

The nest of Eurasian Magpie is distinguished from that of Hooded Crow *Corvus corone cornix* and Rook *C. frugilegus* in different ways. Eurasian Magpie makes its nest in bushes or smaller trees, or at a lower height in larger trees than either of these two species. In addition, Rooks nest in colonies while Carrion Crow solitary nests are usually in the highest parts of taller trees.

The results of this study showed that bonding occurred between 9 February and 1 March (Fig. 1). The earliest start time of nest building was 21 February and 19 March the last completion date. The mean duration of nest-building was 20.74 days, but there was much variation between breeding pairs. Some pairs left newly built nests after many days, sometimes nest-building failed, or nests were

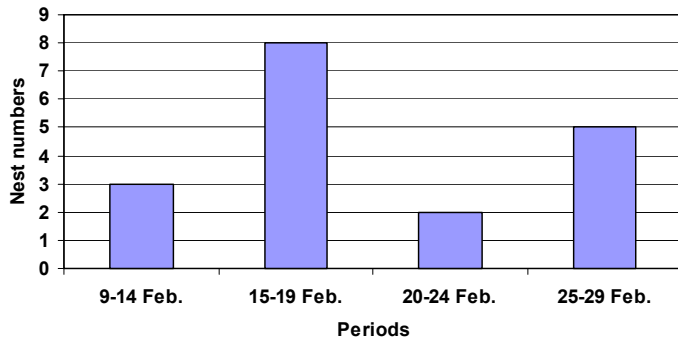


Figure 1. Start of bonding in pairs in Meshkin-Shahr.

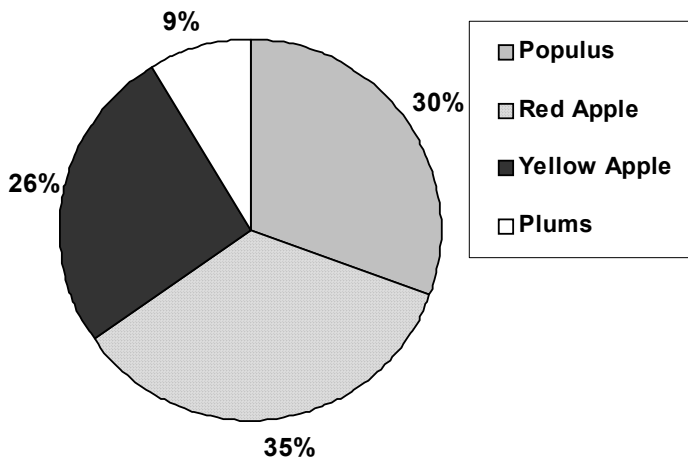


Figure 2. Type and percentage of trees used.

completed slowly due to disturbance by human activities.

We found that Eurasian Magpie makes its nest in farming regions in the centre of particular trees such as Poplar *Populus* spp., Red and Yellow Apple *Malus* spp. and Plum *Prunus* spp. (Fig. 2) and that these were always constructed relatively near to the ground. The most important materials used during nest-building are dry thickish twigs and mud, a coat applied in several layers. The bottom of the nest is covered with feathers, hair and other soft materials. The domed nest structure is very strong and is resistant to destruction by storms. The roofed nest entrance was always on the south side.

As mentioned by Hanzak (1977), the species seldom nests in large woods, preferring to nest in trees and bushes, sometimes at the height of a man. The nest is roofed over with a characteristic lattice work arch of foliage. The foundations consist mainly of thick twigs braced against the tree branches and are surmounted by a layer of mud and turf. The well is lined with small roots, leaves, blades of grass and hair. As a rule, magpies build a new nest every year.

In our study, nest-building was a cooperative activity. Old nests were not re-used. The mean height of nests above the ground was 4.7 m. The mean of the outer diameter and the height respectively were 33.8 and 21.6 cm. De Neve & Soler (2002) found that nest size may be related to the period of nesting and that females may assess a male's parental quality and willingness to invest in reproduction by his participation in nest building. Females may thus adjust their reproductive effort (*i.e.* clutch size) not only to their own abilities but also to those of their mates.

We feel that future research will help us to obtain more information on the breeding activities, the diet and trends of breeding populations of the Eurasian Magpie on a regional scale.

REFERENCES

De Neve L., Soler J.J. 2002. Nest-building activity and laying date influence female reproductive investment in magpies: an experimental study. *Animal Behaviour* **63**: 975–980.  
 Hanzak J. 1977. *A concise guide in colour of Birds' Eggs and Nests*. The Hamlyn Publishing Group Limited.

