

## **Development of a nest box for the hazel dormouse (*Muscardinus avellanarius*) to minimize competition with hole-breeding passerines and the edible dormouse**

Dr. Karl-Heinz Schmidt, Dr. Carina Scherbaum-Heberer, Bettina Koppmann-Rumpf

In the course of a long-term study on hole nesting species in nest boxes over 38 years, an advancement in egg-laying of hole-breeding passerines as well as an advanced appearance of edible dormouse (*Glis glis*) could be detected. The present study focuses on minimizing the resulting competition for the hazel dormouse (*Muscardinus avellanarius*). Therefore a total of 60 wooden nest boxes varying in area (12 x 12 cm and 6 x 6 cm) and entrance holes (32 mm and 21 mm respectively) were placed in groups of four along a hedgerow and hence investigated weekly for use by birds, edible dormice and hazel dormice for two consecutive years. Birds and edible dormice avoid the nest boxes with small entrance holes. The same is true for the hazel dormouse which avoids or only seldom uses them but prefers the small nest boxes with small area and big entrance holes. Thus installing additional nest boxes with small holes close to bird nest boxes may not be helpful in minimizing competition for the hazel dormouse. However, if solely nest boxes with small entrance holes are present, use by hazel dormouse can be detected.