Ecological factsheet

Swift boxes

GZP2 Permanent swift box (woodcrete)
GZP4 Permanent swift box (woodcrete)
GZTH1 Temporary external swift box (woodcrete)
GZP3 Permanent swift box (plywood, woodcrete)
UNG1 Uni Nest Box Swift (plywood, woodcrete)

General information

Occupancy rate

The occupancy rate of swift boxes in general varies. In Amsterdam and the municipality of Utrecht, for example, occupancy is around 8% (De Jong & Wonders, 2018; Gierzwaluwwebsite, 2024), while at various other locations occupancy ranges between 1% and 25% (Verburg, 2020). A German study into the use of swift boxes installed in urban areas as a compensatory measure for refurbishment projects found an occupancy rate of 24.3% by swifts (Schaub et al., 2015).
This study also examined the influence of different nest box characteristics on occupancy rate. Older nest boxes had a higher probability of occupancy than newer ones. Swifts also showed a slight preference for boxes with a northern orientation. In addition, swifts preferred boxes that were not installed too close together (Schaub et al., 2015). Attraction calls were not used for any of the nest boxes in this study.
In general, nest boxes are a better alternative than special swift roof tiles. Temperatures under roof tiles can become very high (Bij12, 2023). Although nest boxes offer better thermal buffering, it remains important to install swift nest boxes on east- and north-facing facades, and not on south- or west-facing facades.

Attraction calls

For swifts, the use of attraction calls can increase the chance of success of a new nesting site, because swifts are attracted to the calls of other swifts (Bij12, 2023; Van Oudheusden, 2006). Possible explanations are that the presence of other swifts increases the chance of reproduction, provides better protection from predators, makes foraging more efficient in a group, and may indicate that suitable nesting opportunities are present (Reed & Dobson, 1993).
The use of attraction calls for swifts is particularly recommended if the distance between the new nesting site and the original nesting site is more than 50 metres, if the new nesting site is on another building, or if the new nesting site has a different character from the original nesting site. More information on the use of attraction calls can be found in Unitura's 2021 Mitigation Handbook (available under 'Downloads' on our website).

Formal requirements for provisions

Various institutes set requirements for nesting opportunities for swifts. For which functions/species/types of nesting sites do the swift boxes meet these requirements?

Knowledge Document requirements

The following requirements apply to a swift nesting site according to the Swift Knowledge Document; see also p. 39 of the Knowledge Document (Bij12, 2023):

Roost/nesting site type	Internal dimension requirements	Complies
Nesting opportunity	Box: length 25 cm, width 13 cm | height 13 cm | floor area 350 cm^2 | side-wall diagonal 20 cm** Entrance hole: 6.5 cm wide, 3 cm high | 2 to 3 cm from side | 2 to 3 cm (max. 5 cm) from floor	Yes

**The length and width dimensions must meet the minimum requirements in such a ratio that they form a floor area of at least 350 cm^2. The width and height must form a side wall with a diagonal of at least 20 cm. A combination of only the minimum dimensions is not sufficient.

NKNB requirements

The following requirements apply to a swift nesting site according to the NKNB:

Species	Roost/nesting site	Internal dimension requirements	Complies
Swift	Nesting opportunity	Box: floor area 350 cm^2 | height 13 cm | diagonal dimension in narrowest direction 20 cm Entrance hole: 6.5 to 8 cm wide, 3 cm high | max. 2 cm from floor | approx. 2 cm from side	Yes

Source: https://nknb.nl/soort/gierzwaluw/

Proven effectiveness

Definition used here

The extent to which it is plausible that a provision, when installed correctly, will be used by specific species for specific functions. This plausibility must be supported by data.

Proven effectiveness:

Species	Roost/nesting site	Functionality	Status
Swift	Nesting site	++	Scientifically proven

Source: https://nknb.nl/maatregel/gierzwaluwkast-in-gevel/#5

Sources

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