

A TRANSPARENT NEST BOX FOR SWALLOWS

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The affinity that Violet-green Swallows (*Tachycineta thalassina*) and especially Tree Swallows (*Tachycineta bicolor*) have for nest boxes is well known. Nest boxes, properly placed and maintained, may be used for many years. In this note I report the use of plexiglass in the construction of swallow nest boxes. Plexiglass facilitates observation of nesting activities such as incubation, brooding and feeding of young. Prey items may be identified and interactions among young and adults observed. Photographs inside the nest box may also be obtained. Finally, transparent nest boxes can contribute immensely to natural history education of children and adults by providing close observation opportunities without disturbing the birds.

I constructed two nest boxes of wood and plexiglass. Both nest boxes were approximately 13 cm (5 in) × 13 cm (5 in) × 20 cm (8 in) with a 3.8 cm (1.5 in) diameter entrance. The bottom, top, front and back of both boxes were made of wood.

Box 1 had two sides made of plexiglass. Black paper was initially taped in successive 2.5 cm (1.0 in) horizontal strips over the outside of the plexiglass so that the box interior would resemble a natural dark cavity. After placement on a utility pole, the box was occupied by a breeding pair of Tree Swallows. Following hatching I removed, on successive nights, one strip of the black paper from each side. Removal of strips at night prevents a sudden increase in light intensity. The swallows accommodated to the daily increase in light with no detectable annoyance. The young were successfully reared and fledged. On one occasion an adult Tree Swallow became disoriented in the nest box and was observed fluttering against the plexiglass instead of using the entrance to leave. This bird may have been unfamiliar with the box since three different adult swallows were captured and banded in this nest box.

Box 2 was similar to box 1 except that only one side was constructed with plexiglass. The box was placed by a window so that the plexiglass side came in full contact with the window. Thus, the box interior could be viewed from inside the building. Again, the black paper strips were removed in succession but during incubation. The clutch was successfully hatched, reared and fledged. The adults were aware of my movements inside the house but continued normal activities unless I was moving only a couple of meters from the box. The birds did not appear disoriented with respect to the nest entrance.

Transparent boxes should not be used in open situations because they may trap birds unable to find the entrance. Placement of a box (having only one transparent side) with its transparent side against a window was successful. This technique may be extremely useful at nature centers for educational purposes. Potentially, similar nest boxes could be constructed for wrens, nuthatches and chickadees.

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