Nest Box Design

It is important to standardize nest boxes as much as possible across Golondrinas sites. This will reduce the number of potential confounding factors in comparative studies, especially those asking questions about physiology and energetics.

The box suggested here is a simple nest box with a side that swings out to facilitate checking the box contents and cleaning. All lumber is 1-inch lumber, which is really about 0.75 in thick (1.9 cm). It is important to use rough cut lumber, or at least lumber that is unfinished on one side (with the rough surface facing the box interior). The rough surface provides a purchase for the young swallows when they are ready to leave the nest box and for the adults in their hundreds of visits to the box.

Nails or screws may be used for assembly--nails are a lot cheaper, but screws last better and make modifications of the box or replacement of some parts easier. If screws are used, it is best to use an uncommon head type--we use square drive screws in the states, as curious young humans are less likely to have a square-driver available. The box is mounted on a tree, fence post, or pole by threading wire through the holes drilled in the back, or by screwing the box directly onto the support.

If available lumber is thicker (or thinner) than suggested, the inside length and width (i.e. the floor dimensions) should be 5 x 5 in (or 12.7 x 12.7 cm).

The hinge for the swinging side is made with two aligned nails. Being careful that these nails are on the same line and perpendicular to the walls of the box insures that the side will swing out fully. The swinging side is held in place with a nail placed into an inclined drilled hole that goes through the front side and penetrates the swinging side (“keeper nail”). This hole should be drilled after the box is assembled, and when the “keeper” nail is installed, it is difficult to tell that the box is designed to open at all. This can be a real advantage in areas that have a lot of curious young humans about!

All boxes should be fitted with a simple ‘wig-wag’ trap, which greatly increases the efficiency of capturing adult breeding swallows for banding and experimental manipulations.

See figures below for measurements and configurations:
Measurements in INCHES:

- Air space (3/4" at rear)
- Hinge nails
- Front
- Swinging side
- Retaining nail
- Side view
- Front view

- Stationary side:
  - 10.0 in
  - 5.0 in

- Swinging side:
  - 11.0 in
  - 5.0 in
  - Hole drilled for retaining nail

- Front:
  - 6.5 in
  - 7.5 in
  - 1.50" hole

- Back:
  - 11.0 in
  - 6.5 in
  - Holes for mounting wire

- Roof:
  - 7.5 in
  - 5.0 in

- Floor corners removed for drainage and ventilation
Measurements in CENTIMETERS: