Great Crested Flycatcher/Ash-throated Flycatcher Nestbox

This box is basically a larger version of the standard slant-roof, side-opening bluebird nestbox, but with a 2-inch (5.1 cm) diameter entrance hole. A 1¼-inch (4.4 cm) diameter entrance hole may be sufficient to permit entry by these flycatchers, but most authors recommend the larger size, especially for the Great Crested Flycatcher.

The box has a 6 × 6 inch (15.2 cm × 15.2 cm) interior floor size. It is 11½ inches (30.1 cm) deep at the back, and 8 inches (20.3 cm) from the bottom rim of the entrance hole to the floor. It may be advantageous to add ¾ inch to 2 inches (1.9–5.1 cm) of wood chips (not cedar, which can irritate nestlings) to the bottom of this box prior to the nesting season.

Materials
- ¾" × 9¼" × 6’ (2.2 cm × 24.8 cm × 1.8 m) rough-cut (unplaned) grade 3 cedar. Rough-cut or planed pine may be substituted, but has a shorter life span.
- ½" × 9 ¼" (1.3 cm × 23.5 cm) maple dowel (optional)
- Twenty 1¼" (4 cm) drywall screws or 6d (2", or 5.1 cm) galvanized ring-shank wood siding nails
- Two 4d (1 ½", or 3.8 cm) galvanized finishing nails
- One right-angle screw

Tools
- Table saw, saber saw, jigsaw (two bevel cuts are required), or carpenter’s saw and miter box
- 2" (5.1 cm) diameter keyhole saw or expansion bit, to cut entrance hole
- ½" (.313 cm), ¼" (.625 cm), and ¾" (.938 cm) drill bits
- Power or hand drill
- Claw hammer
- Tape measure or yard (meter) stick
- Carpenter’s square
- Pencil
- Phillips-head screwdriver or power drill fitted with screwdriver bits (optional)
- Sandpaper (optional)
- Rasp or awl (if smooth lumber is used, the inside of the front will have to be roughened up)

Cutting and Preparation Notes
Be sure to allow for the width of the saw blade when measuring. The grain of the lumber should run lengthwise, to prevent warping and cracking. Cedar resists warping, so if you are building your box of pine, you may want to use cedar for the roof.
Cut ¾" (1.6 cm) off each of the four corners of the floor to create drainage holes. Alternatively, drill four or five ¼" (.6 cm) drainage holes in the floor. The back of the roof and the top of the front must be beveled at 5 degrees for a better fit. This amounts to cutting ⅛" (.3 cm) off the edges of both.

**NOTE:** Cedar may split, so predrill nail holes. Make sure seams are tight. If unable to make angle cut to roof, attach dowel.

**Cutting Diagram**

**Assembly**

1. Nail or screw side 1 to the floor, being sure to leave a ¼" (.6 cm) drip edge below the bottom of the floor (which already has ⅛", or 1.6 cm, cut off the corners, or four ¼", .6 cm, drainage holes drilled through it). The side should have three ¾" (1 cm) vent holes drilled horizontally near the top.

2. Nail or screw the back to the joined side and floor, maintaining the ¼" (.6 cm) drip edge. You may want to drill a ⅛" (.3 cm) hole in the center of both the projecting portions of the backboard (above and below) prior to assembly; this can also be done just prior to mounting.

3. Attach the front, making sure that it is flush with side 1 (the center of the 2", or 5.1 cm, diameter entrance hole should be located 2" down from the top of the front). If you are using planed lumber, you must roughen
up the inside of the front, below the hole, with a rasp, awl, or other sharp implement.

4. Now fit side 2 (the one that will swing out) in place, creating the 4/8" (.6 cm) drip edge at the bottom and a 4/8" gap at the top. While holding side 2 flush with the front, drill two small-diameter guide holes opposite each other near the top. Insert two 4d (1½", or 3.8 cm) galvanized finishing nails into the guide holes as pivots, but do not drive them in fully. Use the right-angle screw to hold side 2, first drilling a small guide hole at the proper point, near the lower edge of the front.

5. Finally, make sure that the pivoting side will open properly with the roof in place, and that the roof is centered. Now drive in the two pivot nails fully, then nail or screw the roof to the assembled box.

Painting/Staining
As with other designs, wood treatment is not necessary. Indeed, flycatchers may be more likely to use unpainted nestboxes.

Location
Site boxes for Great Cresteds in open deciduous, deciduous-coniferous, or coniferous woods, or along the edges of wooded areas. Ash-throated Flycatchers prefer open woodlands of pinyon-juniper, as well as chaparral and riverside groves. They also nest in oak canyons and desert washes. For both species, place boxes about 8 feet (2.4 m) above the ground, although 4½ to 20 feet (1.4–6.1 m) is acceptable. The entrance hole should be clear of obstructing vegetation.

Mounting
Attach boxes directly to tree trunks for these flycatchers. (In central Florida, boxes were successfully mounted on recently cut 6½-inch (17.1 cm) diameter slash pines that had limb stubs left on them.) Drive two 2½-inch (6.4 cm) lag screws through the predrilled holes in the backboard. Be sure to protect the birds from predators by affixing predator guards such as a 30-inch (76 cm) wide sheet of aluminum wrapped and secured around the trunk. See pages 164–167 for more about predator guards.

Where starlings are a problem, you may want to suspend your boxes from a 16-inch (40.6 cm) length of chain or flexible wire. In areas where squirrels gnaw nestbox entrance holes, you may need to screw a metal plate with a 2-inch (5.1 cm) diameter hole over the outside of the box.