Bewick’s Wren
(Thryomanes bewickii)

Bewick’s Wrens are medium-sized wrens with a long tail and a striking white eyebrow. You’ll often find them in bushes and thickets, flicking their tails side to side, hopping and searching for insects. Like all wrens, Bewick’s is very active and seems intent on investigating every nook and cranny of its surroundings.

Bewick’s Wren has faced major population declines in the last 100 years, especially east of the Mississippi River where it was once common but has now disappeared almost entirely. The species also shows some population losses in western portions of its range, including Arizona. The most likely cause of its disappearance in certain regions is the expansion of the House Wren’s breeding range. House Wrens aggressively destroy Bewick’s Wrens’ nests and eggs when their breeding grounds overlap. Bewick’s Wrens have shown population increases through nestbox programs in Arizona, Texas, and New Mexico.

**HABITAT** Bewick’s Wrens nest in desert foothills to riparian woodlands. They have also been documented nesting in densely vegetated desert dry washes, especially where ample hackberry and mesquite are available.

**FOOD PREFERENCES**: Bewick’s Wrens eat insects and small invertebrates. Common prey include beetles, bees, caterpillars, moths grasshoppers etc. They also occasionally eat seeds and fruit.

**BOX MOUNTING** Nest heights range from 2 to 24 feet, but the average is 5.9 feet above ground. Wrens appreciate dense vegetation near their nests.

**NESTING FACTS** In Arizona, most nest construction may not begin until late April, though occupied nests have been observed as early as the end of March. Breeding activity peaks from late May to late June. Bewick’s Wrens can successfully fledge two broods a year. They have been found nesting in woodpecker holes, mail boxes, brush heaps, tin cans, baskets, cow skulls in pastures, and old clothing. Their nests consist of mostly twigs and grass. Bewick’s Wrens lay 3-8 eggs, mostly white with reddish-brown spots.
Ash-throated Flycatcher
(*Myiarchus cinerascens*)

Ash-throated Flycatcher is a common species in warm months in rural and wild areas of the Southwest and northern Mexico. It is migratory and spends winters mostly in the Pacific coastal plain of Mexico, Guatemala, El Salvador and Honduras. Some also winter on the northeast Atlantic slope of Mexico. A few over-winter in southern Arizona.

Ash-throated Flycatchers are difficult to distinguish from other members of the genus *Myiarchus*, including our local Brown-crested Flycatchers and the Dusky-capped Flycatcher of mountain canyons, with which the Ash-throated Flycatcher overlaps. However, compared to Brown-crested Flycatcher they have proportionately smaller bills and more blending of the ash-gray and dull yellow colors on the breast and belly. It is a little bigger than the Dusky-capped Flycatcher, which lacks the orange-brown tail of the other two. They also can be separated by their calls.

Ash-throated Flycatcher is rarely seen in urban and suburban areas of central and southern Arizona, except where there are edges of natural open space. One study at the University of Arizona found that in the greater Tucson area Ash-throated Flycatcher was associated with large natural areas and washes, rather than with particular characteristics of neighborhoods. This may result from lack of foraging habitat in suburban areas but it also may simply result from a lack of suitable nesting cavities.

Tucson Audubon’s nestbox program seeks to support populations of Ash-throated Flycatchers on the urban fringe and create new nesting opportunities in the rest of suburbia. They are highly opportunistic nesters and adapt easily to human activity. With this flexibility, Ash-throated Flycatchers provide ample opportunities for people to learn about the needs and habits of nesting birds. Their noisy whistles and acrobatic insect catching make them an enjoyable species to study as they go about their nesting rituals.

**HABITAT**  Ash-throated Flycatchers nest in both sparse desert scrub and riparian corridors but are less tied to tree canopy than their cousins the Brown-crested flycatcher and the Great-crested Flycatcher. When nesting in riparian woodlands they are more likely to forage out into desert scrub. That makes them easier to find and see in open desert areas.

**FOOD PREFERENCES**  During breeding season the main food sources is arthropods (insects, spiders and others). These are usually caught in low foliage, on the ground or on short flights between perches rather than on the wing in open areas. Sometimes they also eat fruit, and rarely small reptiles and mammals.
NESTING FACTS  After migrating to Mexico for the winter, Ash-throated Flycatchers return to their breeding grounds in Arizona in late February and early March. They build nests in woodpecker holes and natural cavities of saguaros, mesquite, and palo verdes.

Their nests are lined with fur they find around the nesting area. They lay eggs from late March to mid-May with peak activity in April. They can reproduce quickly, with time from pair formation to fledging of young ranging from 30 to 42 days! After laying begins, there is typically one egg laid per day. Most nests have 4 or 5 eggs but as many as 7 have been reported. Eggs are cream to ivory colored with streaks of reddish brown.

BOX MOUNTING  Ash-throated Flycatchers readily use wooden nestboxes. Boxes should be placed between 4.5 and 20 feet high, with 8 feet being ideal. Boxes mounted in mesquite trees or in the vicinity of other shade sources should help to keep nest temperatures from rising too high.

Brown-crested Flycatcher  
(Myiarchus tyrannulus)

This flycatcher tends to spend warm summer months in areas of the Southwest and northern Mexico. A member of the family Myiarchus, the Brown-crested Flycatcher can be difficult to distinguish from other members of the same family, such as the Ash-throated Flycatcher and Dusky-capped Flycatcher. They have an olive brown color on head and back, with a significant crest and large, heavy bill, which helps distinguish it from the Ash-throated Flycatcher. The throat and breast are a pale gray, and the belly and undertail coverts are yellow, paler than those of the Ash-throated Flycatcher. They have two dull wingbars and rufous (reddish brown) remiges (primary and secondary flight feathers). The inner webs of their tail feathers are also a rufous color, which extends to the tip—another difference between them and the Ash-throated Flycatcher. They can also be distinguished by call.
HABITAT The Brown-crested Flycatcher is most commonly seen in giant-cactus and riparian communities, and less commonly in pine-oak woodlands and desert-mesquite areas. They are less widespread in dry desert habitats than their cousin, the Ash-throated Flycatcher, and depend more on larger trees for nesting. Brown-crested Flycatchers are more likely than Ash-throated Flycatchers to nest in suburbs of southern Arizona cities. They typically build nests in woodpecker holes, and also commonly use other natural cavities, such as in saguaros and dead or dying limbs of sycamore, cottonwood, and willow trees. They have also been seen nesting in artificial cavities, such as holes in fence posts, tin cans placed in trees or nest boxes.

FOOD PREFERENCES During breeding season the main food source is arthropods (insects, spiders and others). These are usually caught in low foliage, on the ground or on short flights between perches rather than on the wing in open areas. Sometimes they also eat fruit, and rarely small reptiles and mammals.

NESTING FACTS They lay eggs from late March to late July with peak activity in May and early June. Most nests have 4 or 5 eggs but as many as 7 and as few as 2 have been reported. Eggs are slightly glossy, cream or buff colored with thin or thick streaks or blotches usually brown or purple. Ash-throated and Brown-crested Flycatcher nests are very similar both consisting of fur.

BOX MOUNTING Boxes should be placed between 5 and 30 feet high. Boxes mounted in mesquite trees or in the vicinity of other shade sources should help to keep nest temperatures from rising too high. They may be mounted on dead or live trees, or poles or posts.

INSTALLATION TIPS
We recommend installing the nestbox around February for these species to ensure they get discovered by the first migrants.
You can install the nestbox directly on the tree, or on a house or pole next to the tree. Make sure there is no branch access to the front of the box for a bobcat to climb on. If you live somewhere where snakes, raccoons and other nest predators are prevalent, please consider predator guards:
Use outdoor grade screws of 3-4 inches long to account for nestbox thickness and bark thickness. This does not harm the tree, it simply scars over the screw. If using screws is not an option, you can use thick bailing wire and affix it so there isn’t too much movement that may cause the eggs to fall out. Beware that wire may strangle a live tree branch.
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 1¾-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 x 6 inch (15.2 cm x 15.2 cm) interior floor size. It is 11¾ 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 ¼ 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" x 9¾" x 6' (2.2 cm x 24.8 cm x 1.8 m) rough-cut (unplaned) grade 3 cedar. Rough-cut or planed pine may be substituted, but has a shorter life span.
- ½" x 9 ¼" (1.3 cm x 23.5 cm) maple dowel (optional)
- Twenty 1 ½" (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
- ¼" (.313 cm), ½" (.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 %" (1.6 cm) off each of the four corners of the floor to create drainage holes. Alternatively, drill four or five %" (.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 %" (.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 %" (.6 cm) drip edge below the bottom of the floor (which already has %", or 1.6 cm, cut off the corners, or four %", .6 cm, drainage holes drilled through it). The side should have three %" (1 cm) vent holes drilled horizontally near the top.

**2.** Nail or screw the back to the joined side and floor, maintaining the %" (.6 cm) drip edge. You may want to drill a %" (.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 ¼" (.6 cm) drip edge at the bottom and a ¼" 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 Crested s in open deciduous, deciduous-coniferous, or coniferous woods, or along the edges of wooded areas. Ash-throated Flycatchers prefer open woodlands of piñon-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 6¾-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.