Southern Flying Squirrel Nest Box Plans

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Welcoming these nocturnal aerialists to your yard is a magical experience that transforms your nighttime garden into a hub of activity. Building a nest box for Southern Flying Squirrels offers a rare glimpse into their social, huddling behaviors and high-speed glides that standard birdhouses simply cannot provide.

Nest Box Specifications

Entrance hole	1.5 inches (38 mm)
Floor dimensions	4.25 x 4.25 inches (108 x 108 mm)
Interior depth	8.25 inches (210 mm)
Mount height	10-20 feet (3-6 m) above ground
Facing direction	North or northeast, to protect the interior from the hot afternoon sun and prevailing westerly winds

Mount boxes on mature hardwood trees like oaks or maples, ideally within 20 feet (6 m) of other trees to facilitate gliding paths. For social winter huddling, installing 2-3 boxes in a small grove can support a larger colony and increase success rates.

Cut List

From a 1x6 x 6 ft

Panel	Dimensions	Qty	Notes
Front	5.50" x 9.25"	1	Drill 1.5" entrance hole 7" from the bottom, centered. Scuff the interior wood below the hole to provide a ladder for kits.
Back	5.50" x 16"	1	Extends above and below the box for easy mounting to tree trunks.
Side	5.50" x 9"	2	Cut top edge at a 10-degree angle to match the roof slope; one side should be hinged for cleaning.

Roof	7.25" x 9.50"	1	Use 1x8 material to provide a 1.5" side overhang and a 2" front overhang to keep rain out.
Floor	4" x 4"	1	Recess 1/4" inside the front and side panels; trim corners 1/2" for drainage.

All body panels (front, back, sides) are cut from the standard 1x6 board. The floor is ripped to 4" to fit inside the 3/4" thick walls. The roof must be cut from a wider 1x8 board to ensure a proper drip edge on all sides.

Materials & Construction

Wood: 3/4-inch (19 mm) untreated cedar, cypress, or redwood. Never use pressure-treated lumber or plywood.

Boards: One 1" x 6" x 6' untreated cedar board provides the main body, plus a 10-inch scrap of 1" x 8" for the roof.

Hardware: 20x 1-5/8" galvanized deck screws, 2x 1-1/2" exterior hinges, 1x brass swing latch or hook and eye, 2x 3" exterior mounting screws or 1/4" lag bolts

Ventilation: Drill two 1/4-inch (6 mm) holes near the top of each side panel to provide cross-ventilation during summer months.

Drainage: Clip the four corners of the floor panel at 45-degree angles to provide 1/2-inch gaps for moisture and waste drainage.

Predator guard: Install a metal hole protector (reinforcing ring) to prevent larger squirrels from gnawing the hole wider. A 24-inch (61 cm) wide galvanized metal tree wrap should be placed 4 feet (1.2 m) below the box to stop climbing snakes and raccoons.

Materials Checklist

- 1x 1" x 6" x 6' cedar board
- 1x 1" x 8" x 10" cedar scrap (for roof)
- 20x 1-5/8" galvanized deck screws
- 2x 1-1/2" exterior hinges
- 1x brass swing latch
- Exterior wood glue
- 1-1/2" hole saw
- Drill with 1/16" and 1/4" bits
- Measuring tape and carpenter's square

Sandpaper (80-grit)

24" wide galvanized flashing (for predator baffle)

2x 3" mounting screws

Seasonal Timeline

Install: Late autumn or early winter is ideal, as these squirrels look for warm communal nesting sites before the first hard freeze.

Nesting start: Nesting typically begins in late February in the Southeast and Southwest. In the Northeast and Midwest, peak nesting occurs in April and May, with a frequent second brood in late summer.

Clutch size: 2-7 kits (usually 3-4)

Incubation: 40 days

Fledging: 6-8 weeks until weaning; fully independent at 2.5 months

Cleaning: Clean the box in late autumn (October) before the winter huddle season begins. Remove all old nesting material and scrub with a 1:10 bleach-water solution if parasites are present.

Regional Considerations

Southern Flying Squirrels are found throughout the eastern half of North America, from the Atlantic coast to the edge of the Great Plains, and from southeastern Canada down to Florida and the Gulf Coast.

In southern latitudes, these squirrels may breed year-round, whereas northern populations are strictly limited by spring thaw and the availability of mast (acorns and nuts). Higher elevation populations typically delay nesting until late spring to avoid late frosts.

Raccoons, rat snakes, and domestic cats are the primary threats. The recommended 1.5-inch entrance hole prevents larger raccoons from reaching in, while a tree-trunk baffle stops climbers from reaching the box.

Camera Placement

Because Southern Flying Squirrels are strictly nocturnal, a camera with high-quality Infrared (IR) night vision is essential. Mount a small, wide-angle USB 'cube' camera to the underside of the roof, focusing downward to capture their social huddling behavior. Ensure the lens is positioned away from the

entrance hole to avoid 'washout' from outside ambient light.

For external monitoring, place a wireless outdoor camera on a neighboring tree trunk about 5-8 feet away, aimed at the entrance hole. This allows you to witness their spectacular 'launch' and 'landing' maneuvers. Cable management is critical; route all wires behind the box or inside a protective conduit to prevent the squirrels' sharp teeth from chewing through them.

A trail camera with a 'no-glow' flash is a great alternative for the perimeter, as it won't startle the animals during their active hours. Since these squirrels are highly social, especially in winter, use a camera that supports motion-activated recording to capture the peak activity just after dusk and before dawn.

Powering with a USB solar panel

Mount a 5V USB solar panel with a built-in battery 1-2 ft above the box on the same post, angled 30-45 degrees from vertical and facing south. Run the USB cable down the post inside split loom conduit (squirrels will chew unshielded wire), enter the box through the same grommeted hole as the camera cable, and seal with exterior silicone. Choose a panel with a 5-10 Ah battery buffer so the camera runs through cloudy days.

Common Problems & Solutions

Grey squirrel chewing the hole wider: Attach a 1.5-inch metal hole protector or a piece of slate with a 1.5-inch hole over the entrance.

Box remains empty for a year: Ensure the box is at least 10 feet high and near a 'highway' of interconnected tree canopies; move it to a more mature hardwood stand.

Ants or wasps colonizing the box: Apply a thin layer of unscented bar soap to the interior ceiling to prevent wasps, and keep the area around the tree base clear of debris to deter ants.

Aggressive Red Squirrel competition: Install multiple boxes in the same area to reduce territorial pressure, as Southern Flying Squirrels are more social.