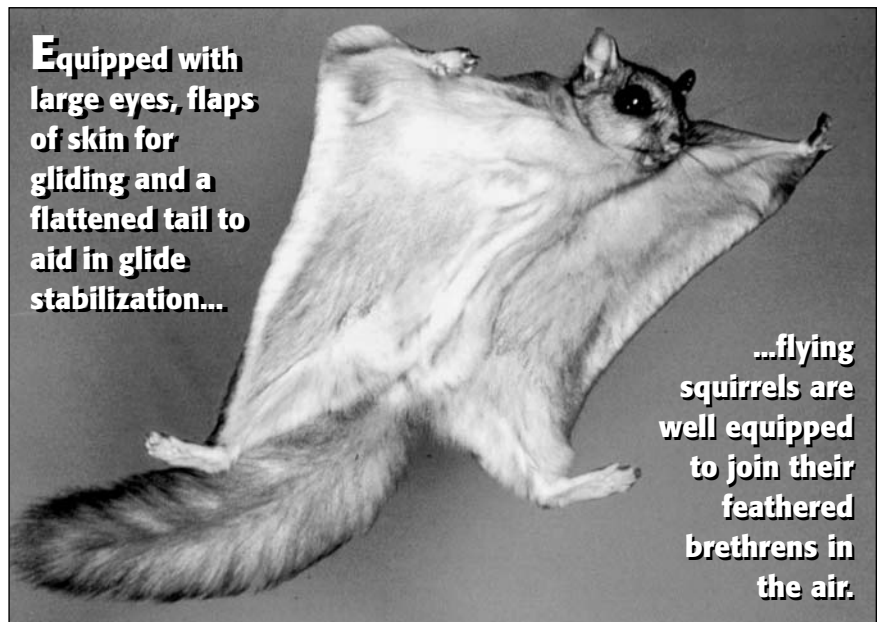


# Help a Flying Squirrel

by Susan Muehlherr and Steve Patterson

**O**ne of the joys of living so far in the countryside is the abundance of wildlife I get to see every day. Rabbits race me down the lane, deer stroll through the backyard (sometimes sampling my flowers), bats flit by in the evening and coyotes howl in the distance. One evening, while using a flashlight out the kitchen window to spy on a raccoon family, I spotted something furry in my flat bird feeder. As I illuminated the feeder, two pairs of eyes gleamed back at me. Perched there, enjoying a snack of sunflower seeds, were two squirrels. Well, I was partly right, because when I went outside for a closer look, they sailed away!

Intrigued, I searched the Canadian Wildlife Federation (CWF) web site the next day to discover more about my nocturnal visitors. By the descrip-



**Equipped with large eyes, flaps of skin for gliding and a flattened tail to aid in glide stabilization...**

**...flying squirrels are well equipped to join their feathered brethren in the air.**

Photo: Cy Hampson/Flyingsquirrels.com

tion given, I discovered they were most likely northern flying squirrels. Reading further, I found that they are the most common squirrel species in Canada, or at least a close second to the red squirrel. How could I help these adorable little creatures continue to live in my woods? By building flying squirrel nest boxes and situating them in suitable locations. If you're looking for something a little different to build this spring, why not give some flying squirrels a new home?

## What Type of Flying Squirrel Lives in Your Area?

Canada is host to two species of flying squirrel: the northern and the southern. Before starting to build, do your research first. Go to [www.FlyingSquirrels.com](http://www.FlyingSquirrels.com) and click on Range Maps to determine which species inhabits your geographic region. If you have both species present, you will want to make the access hole the larger of the two sizes indicated in the building plans.

## Squirrely Facts

- Unlike bats, flying squirrels, despite their name, are actually incapable of true flight. However, a patagium, a loose fold of skin which stretches between their front and hind legs, enables them to glide for distances of 20 metres or more.
- The large eyes of flying squirrels are packed with photoreceptors which facilitate effective night vision. This is necessary because, unlike red and grey squirrels who are active during the day, flying squirrels hide away during the day and become active about an hour after sunset. Their nocturnal nature makes them difficult to spot despite their wide distribution.
- Northern flying squirrels prefer older-growth coniferous forest, while the smaller southern species prefer older-growth deciduous forest. Both species will inhabit mixed forest. Good

tree cover is important to enable gliding between trees and for predator avoidance. Cavities in old trees and snags (dead or dying trees) are important nesting sites for flying squirrels.

- Habitat loss (deforestation) is one of the main threats to flying squirrel populations. Clear-cutting that creates large open spaces too expansive for gliding across is particularly detrimental. Nesting sites are another important consideration in the protection of flying squirrel habitat. If you live in a forested area that has few trees with cavity nesting sites, you can help flying squirrels by building nesting boxes for them.
- Flying squirrels are active year round. They are our most social squirrel species, and they possess a unique winter behaviour known as aggregation. Basically, the nest boxes are used during spring, summer and fall for refuge, and most importantly, as homes for female flying squirrels and their pups. Come winter, flying



**A litter can have up to six babies, or "pups", each weighing between 4 - 6 grams.**

Photo: Steve Patterson

squirrels "move house" to big trees with thicker walled cavities and more room. Of course, if they can find their way into someone's attic space, they will happily use that for the winter! Large groups of up to 40 southern flying squirrels or as many as 15 northern flying squirrels will come together during colder months and live in the same nest. Why? For biothermal regulation, using their combined body heat to keep warm.

- Courtesy of Canadian Wildlife Federation, Wild About Gardening web site and Steve Patterson.

# – Build a Tree House

## Simple Nesting Box Plans for Northern and Southern Flying Squirrels

by Steve Patterson

*Building, placing and cleaning to be performed under adult supervision only!*

### General Information

1. Ensure access hole size is no larger than 1 1/2" (3.8cm) in diameter for northern flying squirrels and no larger than 1 1/4" (3.2cm) diameter for southern flying squirrels. You may wish to install sheet metal around the entrance hole to prevent hole enlargement by unwanted species. No sharp edges please!
2. Nesting boxes must be dry inside. Run a bead of silicone caulking along length of top where it meets backing board to prevent water infiltration. Drill (4) 1/4" (.6cm) holes at lower sides and on bottom, for ventilation purposes. Tip – glue sheet rubber or vinyl to the top for even better protection.
3. Use natural (untreated) pine, fir or cedar. Board thickness – 3/4" (1.9cm) to 1" (2.5cm). DO NOT stain or paint interior or exterior. DO NOT use plywood or chipboard, as porcupines will destroy the box to get at the glue present in these products.
4. It is advisable to provide a hinged side-access door for cleaning purposes. Clean ONLY during winter months, as box will be vacant during this period. Be advised that bumblebees will often make nests out of flying squirrel nesting material and paper wasps use cavities to build their homes. For this reason, always be careful and wear protective equipment when cleaning a nesting box, especially when you are up a ladder!
5. Use wire to attach box to valuable trees; use non-rusting screws to attach to all other trees.

### Additional Options:

1. Install a block of wood inside the box, 1" (2.5cm) below the access hole, to foil raccoons – they can reach in to take baby squirrels.
2. Cut a 3/16" (.5cm) drip channel along the underside of the roof about 1/2" (1.2cm) from edge.

### Placement Tips for Higher Occupancy Rates

1. Place nesting boxes in your oldest stands of forest.
2. Min./Max. placement height – 10-26 feet (3m/8m). Place access hole facing north so that minimal sunlight enters and

prevailing winds do not blow directly into access hole.

3. If possible, place so that mammalian predators cannot reach the box via limbs of other trees.
4. Install several boxes per hectare as flying squirrels need secondary and tertiary nesting sites in case of predator trouble.
5. Monitor occasionally for occupancy by rapping tree trunk and watching access

hole. DO NOT over-monitor as squirrel(s) will leave area if harassed. X

– A former Cub in his younger days, contributor Steve Patterson has been studying flying squirrels since 1993, and gives presentations about flying squirrels and forest ecology to a variety of audience types across the province of Ontario. To learn more about these fascinating creatures, visit: [www.FlyingSquirrels.com](http://www.FlyingSquirrels.com).

### Nesting Box Construction

