

# **Adopt-a-Box Flying Squirrel Nest Box Program**



Final Report to the Fundy Model Forest  
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**Project Overview:**

The purpose of this project was to involve local woodlot owners, students and community groups in learning about the northern flying squirrel and its role in the Acadian Forest. Because they are nocturnal, flying squirrels are rarely observed in nature, but have been found to readily use nest boxes when provided . By placing nest boxes on private and public land, local school children and landowners will have a good opportunity to learn about these elusive animals while helping to provide valuable scientific information on presence/absence, litter size, habitat use, time to leave nest, etc. Woodlot owners can take pride and knowing that flying squirrels (a mature forest indicator species used by the province) are utilizing their woodlots and incorporate this information into their woodlot management plans.

This project is part of a larger research effort by the University of New Brunswick to study the effects of forest fragmentation on flying squirrel survival. Equally important to understanding the population dynamics of flying squirrels is the litter size for flying squirrels in Eastern Canada. The only work done previous to this in Eastern Canada was Gerrow (1996) who located 2 natural nests, each with 2 young. Natural nests are usually located high in dead trees making it difficult to reach and count young. By installing nest boxes in the study area the reproductive success of the flying squirrel will be easier to observe.

**Results**

In the spring of 2008, all nest boxes were checked on private and public lands. Of the 100 existing nest boxes only 5 were used by flying squirrels, however many showed signs of nesting activities. In over 60% of boxes nesting materials were found in the nest box. In a box on the Mapleton Acadian Nature Trail 5 young flying squirrels were found that were only a few days old. This box was located beside the walking trail and offers visitors to the trail to see the nest boxes and learn about the Nest Box Project. Other boxes were found with flying squirrels, however young were only located in one box. From other research done using telemetry, it would seem that 2008 was a poor spring year for flying squirrels.

This year three area schools; Petitcodiac, J.M.A. Armstrong, Sussex and Riverside Consolidated made a total of 100 flying squirrel nest boxes as part of a flying squirrel research project conducted by the University of New Brunswick. We travelled to schools and gave a total of 10 flying squirrel educational presentations (3 at Petitcodiac, 2 at J.M.A. Armstrong, 5 classes at Sussex and 1 at Riverside-Albert Elementary). The school presentations featured a power-point presentation on flying squirrels and highlighted their important role in the Acadian Forest. These presentations were very well received by students and teachers. The total number of students involved at all schools was approximately 220. Other schools in the area have also expressed an interest in joining this program.

All information recorded at the nest boxes will be added to the flying squirrel website ([www.fundyflyingsquirrel.com](http://www.fundyflyingsquirrel.com)). Not all of the data from this past year has been added.

Figure 1 Home page of flying squirrel educational website

**FUNDY FLYING SQUIRREL PROJECT**

**HOME PAGE**  
**RESEARCH**  
**NEST BOXES**  
**IMAGE GALLERY**  
**THE DREY**  
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**THE FUNDY FLYING SQUIRREL PROJECT**

The Fundy Flying Squirrel Project is conducting research in southern New Brunswick in and around Fundy National Park. It is long-term study of the population dynamics of the northern flying squirrel in relation to habitat fragmentation. Habitat fragmentation can be defined as the breaking apart of large areas of mature forest into smaller parts. The forests of New Brunswick have become younger and more fragmented than in the past and this can create problems for animals that require older forests.

The purpose of this website is to provide information to the general public, students and community groups about the northern flying squirrel and how you can help monitor them in southern New Brunswick by helping to build nest boxes or by putting up nest boxes on your own property. I hope you find this website interesting and informative. If you have any questions contact me at: [fundyflyingsquirrel@gmail.com](mailto:fundyflyingsquirrel@gmail.com)

**RESEARCH**  
Learn about the different types of research that we are doing with the northern flying squirrel and how we follow some of them with radio collars. Visit our research blog to find out what is happening now.

**NEST BOXES**  
Learn how students and woodlot owners are helping to monitor flying squirrels using nest boxes. See maps and data on nest boxes.

**IMAGE GALLERY**  
Pictures taken conducting flying squirrel research in New Brunswick. Meet some of the flying squirrels that we study.

**THE DREY**  
A collection of interesting facts and fun activities

**LINKS**  
Here you will find links to other cool sites about flying squirrels and the environment.

We would like to extend a **BIG THANKS** to all our partners in this research.

Fundy National Park of Canada  
Fundy Model Forest  
Wildlife Trust Fund  
Environmental Trust Fund  
Pollett River Watershed Private Woodlot Owners Group

Elgin Eco Association  
Petitcodiac High School  
JMK High School  
Riverside-Albert Consolidated

Figure 2 Nest box education page

**FUNDY FLYING SQUIRREL PROJECT**

# NEST BOXES

**Nest Box** **Dave**

In 2006, three local schools made 80 nest boxes for the flying squirrel project. These schools were JMK High School in Salisbury, Petitcodiac High School, and Riverside-Albert Consolidated. The boxes were made in school shop classes where students learned about flying squirrels and their environment. All of the squirrel boxes were placed on woodlots in the area of the Pollett River Watershed area and Caledonia Gorge trail in southern New Brunswick.

**P.R.H.S. MAIN ENTRANCE**

Click here to view plans for flying squirrel nest box.

These boxes will be monitored in the spring and summer of 2007 for any nesting activity. We will keep this website updated with new flying squirrel nest box information. If you click on the map below you can zoom into the different area to see where the boxes are and which ones have had flying squirrels, red squirrels or other interesting creatures.

**Figure 3** A day at Riverside Consolidated



**Figure 4** Five very young flying squirrels inside a nest box on Mapleton Nature Trail.



**Figure 5** Catching a flying squirrel in a nest box



**Figure 6** Young flying squirrels (3 weeks)



*Final report to FMF-Adopt-a-Box Flying Squirrel Nest Box Program*

Flying Squirrel Night Hikes and Acadian Forest School Group Hikes

During the summer two special event night hikes were done in cooperation with Fundy National Park which took visitors out into the forest at night to search for radio collared flying squirrels. These events were very popular with 42 visitors signing up for the special event. In addition to the night hikes, 496 school children participated in fall Acadian Forest/Flying Squirrel hikes and summer time “Going Squirrely” day hikes. Some of these hikes involved students that had participated earlier in nest box construction.

Including all in class presentations and guided walks, 970 people were reached by the Adopt-the-box-Flying Squirrel Program in 2008.

**Budget Summary for 2007-2008:**

Expense	Partner/Funding Source		
	FMF	Parks Canada	In-kind
Project Coordinator (Salary May-October)	0	16,000	0
Field Technician to visit boxes, schools, and install boxes.	6,000	0	0
Travel (rental and gas)	3,500	1,000	0
Equipment and materials	1,000	0	0
Website	0	90	0
Nest Box labour	0	0	1,000
DNR truck rentals (in kind)	0	0	1,000
Parks Canada interpreters	0	0	1,000
<b>TOTALS</b>	<b>10,500</b>	<b>17,090</b>	<b>3,000</b>

**Partners and Affiliations:**

Parks Canada (Fundy National Park) -Interpretation and Warden Service

Area Schools -Petitcodiac Regional High School

-J.M.A. Armstrong High School (Salisbury)

-Riverside-Albert Elementary (Riverside-Albert)

-Sussex Middle School

Pollett River Watershed Group

Elgin Eco Association (EEA)

Department of Natural Resources (Fish and Wildlife Branch)

Irishtown Nature Park (2 nest boxes installed)

Elmhurst Woods (4 nest boxes installed)

Park behind Sussex Middle School (4 boxes installed)

Environmental Trust Fund

### **Communications and Events**

- 10 classroom presentations and nest box building sessions (220 students- grades 1-9)
- Acadian Forest/Flying Squirrel guided walks were given on flying squirrels in Fundy National Park (398 total)
- Two night hike programs were done at Fundy National Park (40 visitors)
- A “Going Squirrely Program” was coordinated with FNP (98 visitors)
- 1 guided hike at Mapleton Nature Trail as part of Elgin Days
- Evening Program at Fundy National Park on flying squirrel (58 in attendance)
- 1 guided hike with 1<sup>st</sup> Chocolate River Scout Troup to check nest boxes.
- 2 guided night-hikes in Fundy National Park (40 in attendance)
- 1 evening slide show with the Kennebecasis Naturalist Society

In all cases the Fundy Model Forest was acknowledged as a funding contributor to the Adopt-a-Box Education Nest Box Program.

### **Future Work (2009)**

- 1) Flying Squirrel Nest Boxes will be continued to be monitored in spring, summer and fall for nesting activity.
- 2) The Flying Squirrel Research website ([www.fundyflyingsquirrel.com](http://www.fundyflyingsquirrel.com)) will continue to be updated. This website will provide more information to students about the flying squirrels research project and how they are being used as an indicator of sustainable forest management.

### **References**

**Gerrow. S. 1996.** Home Range, Habitat Use, Nesting Ecology and Diet of the Northern Flying Squirrel in Southern New Brunswick. Acadia University. Masters Thesis