



Fundy Model Forest

~Partners in Sustainability~

Report Title: Adopt-A-Box Flying Squirrel Nest Box Program

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***The Fundy Model Forest...
...Partners in Sustainability***

“The Fundy Model Forest (FMF) is a partnership of 38 organizations that are promoting sustainable forest management practices in the Acadian Forest region.”

Atlantic Society of Fish and Wildlife Biologists
Canadian Institute of Forestry
Canadian Forest Service
City of Moncton
Conservation Council of New Brunswick
Fisheries and Oceans Canada
Indian and Northern Affairs Canada
Eel Ground First Nation
Elgin Eco Association
Elmhurst Outdoors
Environment Canada
Fawcett Lumber Company
Fundy Environmental Action Group
Fundy National Park
Greater Fundy Ecosystem Research Group
INFOR, Inc.
J.D. Irving, Limited
KC Irving Chair for Sustainable Development
Maritime College of Forest Technology
NB Department of the Environment and Local Government
NB Department of Natural Resources
NB Federation of Naturalists
New Brunswick Federation of Woodlot Owners
NB Premier's Round Table on the Environment & Economy
New Brunswick School District 2
New Brunswick School District 6
Nova Forest Alliance
Petitcodiac Sportsman's Club
Red Bank First Nation
Remsoft Inc.
Southern New Brunswick Wood Cooperative Limited
Sussex and District Chamber of Commerce
Sussex Fish and Game Association
Town of Sussex
Université de Moncton
University of NB, Fredericton - Faculty of Forestry
University of NB - Saint John Campus
Village of Petitcodiac
Washademoak Environmentalists



Adopt-a-Box Flying Squirrel Nest Box Program

Final Report to the Fundy Model Forest
March 11/2007

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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. 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 studying the effects of forest fragmentation on flying squirrel survival. One missing gap in estimating 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 in hard to reach cavities. Cavity nests are hard to reach and difficult to observe and count the young. By installing nest boxes in the GFE the reproductive success of the flying squirrel will be easier to observe compared to natural nests.

Results

This year three area schools; Petitcodiac, J.M.A. Armstrong, and Riverside-Albert Consolidated made a total of 80 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 5 flying squirrel educational presentations (3 at Petitcodiac, 1 at J.M.A. Armstrong 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 140. Other schools in the area have also expressed an interest in joining this program.

All completed nest boxes were placed on private and public lands in southern New Brunswick (for map see www.fundyflyingsquirrel.com under the nest box section). Nineteen of these boxes were placed along the new Mapleton Acadian Forest Nature Trail in Elgin. All of the boxes were monitored during the summer and fall by flying squirrel researchers for any nesting or denning activity. By the fall of 2006, 30 nest boxes showed some signs of activity. We expect more boxes to be active this coming summer after the boxes have overwintered.

A website about the flying squirrel research (www.fundyflyingsquirrel.com) was completed in March of 2007. Part of the nest box section is a map which shows actual nest box locations, students name and what activity has been recorded at the box. This section will be updated as new information becomes available.

Figure 1 Home page of flying squirrel educational website





THE FUNDY FLYING SQUIRREL PROJECT

HOME PAGE

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

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	Elgin Eco Association
Fundy Model Forest	Petitcodiac High School
Wildlife Trust Fund	JMK High School
Environmental Trust Fund	Riverside-Albert Consolidated
Pollett River Watershed Private Woodlot Owners Group	

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Figure 2 Nest box education page

FUNNY FLYING SQUIRREL PROJECT

NEST BOXES

HOME PAGE
RESEARCH
NEST BOXES
IMAGE GALLERY
THE DREY
LINKS
RESEARCH BLOG

In 2006, three local schools made 80 nest boxes for the flying squirrel project. These schools were JMK High School in Salisbury, Petiscodiac 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.

[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.

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

The Mapleton Acadian Forest Trail was completed in the summer of 2006 and a grand opening event attracted over a 100 people. A total of 19 nest boxes created by local students were installed along the trail. One interpretive panel on the trail focuses directly on flying squirrels and the adopt-a-nest-box project. This trail has been successful in bringing more people to the Elgin area. See www.elgineco.com for more information about the Mapleton Acadian Forest Trail.

Budget Summary for 2006-2007:

Partner/Funding Source			
Expense	FMF	ETF	In-kind
Field Technician to visit schools, install boxes, and visit boxes.	1,000	2387	
Travel (rental and gas)	2,000	3472	
Equipment and materials	1,000	2317	
Website	1,000	1824	
Nest Box labour			1,000
DNR truck rentals			1,000
Parks Canada interpreters			500
TOTALS	5,000	10,000	2,500

Partners and Affiliations:

Environmental Trust Fund

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

Area Schools -Petitcodiac Regional High School

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

-Riverside-Albert Consolidated (Riverside-Albert)

Pollett River Watershed Group

Elgin Eco Association

Department of Natural Resources (Fish and Wildlife Branch)

Irishtown Nature Park (2 nest boxes installed)

Elmhurst Woods (4 nest boxes installed)

Communications and Events

- 5 classroom presentations (140 students- grades 9-10)
- 2-guided walks were given on flying squirrels in Fundy National Park (50 students- grades 10-12)
- 1 presentation at Elmhurst Woods (100 students grades 3-4)
- Forestry Fair-Sussex Balloon Festival- booth on flying squirrels (~300 visitors)
- 1 presentation on flying squirrels at Irishtown Nature Park (50 students-grades 6)
- CBC radio afternoon show about nest boxes built by students
- INFOR magazine article “ Are flying squirrels gliding in your woodlot”

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- Forestry Chronicle article-Model Forest News “Students build nest boxes for squirrels”
- King County Record- Newspaper article-“True Gliders”

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

Future Work (2007)

- 1) Flying squirrel nest boxes will be continued to be monitored in spring, summer and fall for nesting activity.
- 2) I have applied for more funding from Parks Canada to continue making nest boxes and visiting schools.
- 3) This summer live night vision web cameras will be installed in several nest boxes to give a live webcast of nightly flying squirrel activity.
- 4) The flying squirrel research website (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