

Fundy Model Forest

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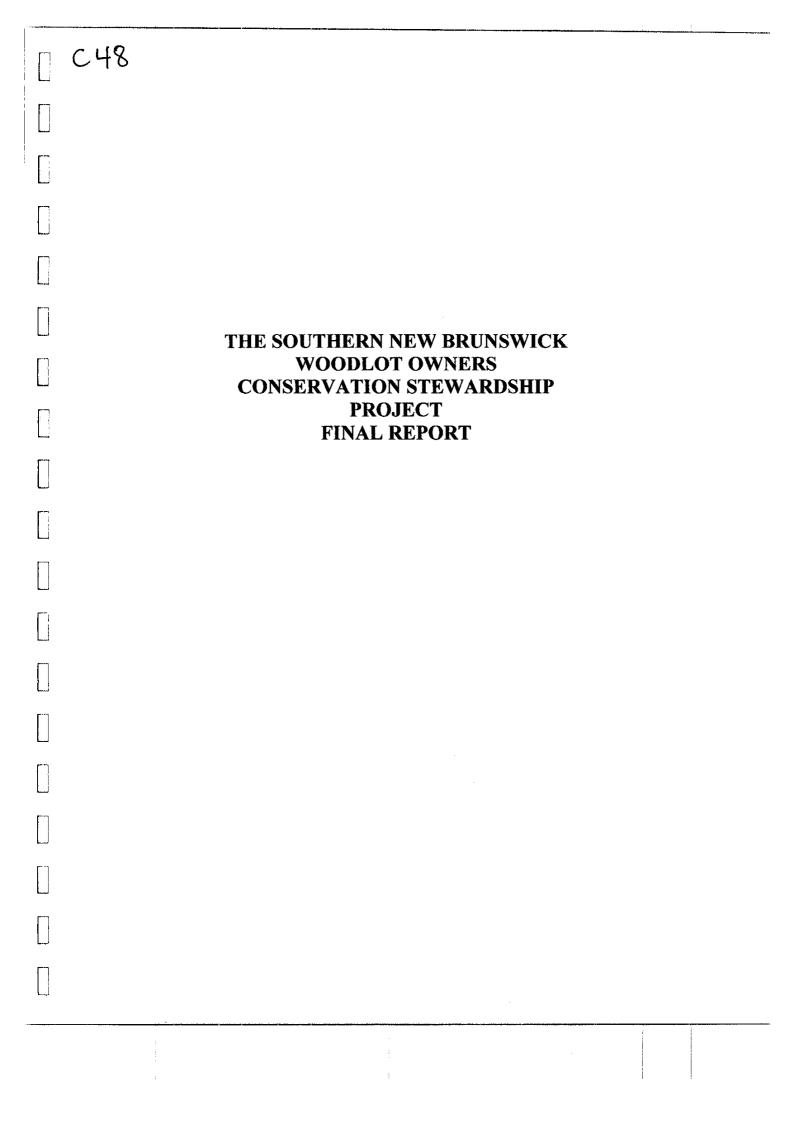
The Fundy Model Forest... ...Partners in Sustainability

"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







The Southern New Brunswick Woodlot Owners Conservation Stewardship Project

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Final Report

Beth Fletcher, Samantha Hines-Clark & John Foley Project Coordinators

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Acknowledgments

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Thanks are also extended to Julie Singleton for her commitment in developing the "Conservation Guidelines for Ecologically Sensitive Forested Sites On Private Woodlots Within The Fundy Model Forest" manual ,"What's In Your Woodlot?" brochure, the "Landowner Stewardship Certificate" and the project logo. Thanks must also be extended to Debbie Perry and Caroline Simpson for editing the conservation guidelines manual, and the woodlot pamphlet.

Last and certainly not least, Andrew MacDougall who provided the field experience and Dr. July Loo who has provided much needed expertise over the time span of the project.

Introduction

The Fundy Model Forest program was launched in 1991 by the Canadian Forest Service as a Green Plan initiative. The goal of the program was to establish a network of large-scale working models of sustainable forestry in each of the major forest regions of Canada. The models are intended to reflect the various types of land tenure and major uses of the forest. In order to demonstrate sustainable development in forestry, ten model forests were established across the country, each with a sponsor and a number of partners.

The Fundy Model Forest is a 420,000 hectare working forest located in southeastern New Brunswick between Moncton and Saint John (see attached map, Appendix A). The landscape of the area is diverse, containing a mixture of large tracts of forest ranging from spruce-fir bottom lands forested slope, to tolerant hardwood ridges; as well as scenic river valleys, open farmland, lakes, marshes, ponds, bogs and other wetlands. There are presently more than twenty partners involved in the FMF including: research organizations, industry, universities, Fundy National Park, conservation groups, sport fishing and hunting organizations, the town of Sussex, the local school district, and several provincial and federal government agencies.

The FMF program aims to balance environmental sustainability with the continued use of its lands for social and economic activities. To meet the challenges faced in the development of a balanced forest management plan, it was recognized that twelve major issues needed consideration. Two of these issues were critical natural area management and protection of biological diversity. Protecting biological diversity entails maintaining genetic, species, and community diversity across the forest. The FMF Gap Analysis project was established in order to provide some of the biodiversity information required in the development of a balanced management'plan for the FMF. The Gap Analysis project involved identifying critical natural areas, within the boundaries of the FMF, which represent biological diversity. Conducted over a three year period, the project was designed to find and fill the "gaps" in nature. Therefore, a project was developed to identify areas within the FMF which require protection for a variety of reasons including: the presence of rare species, unique species assemblages, diverse assemblage of species, sensitive habitat, or representative remnants of once common, late-successional forest types. Of the seventy sites that were identified, thirty-five are located partially or solely on private lands, twenty-seven are located on crown land and twenty-one are located either partially or solely on Irving freehold.

Some examples of priority sites found on private woodlots are the North River Wet Cedar site, Waterford Escarpment, as well as Big Bluff/Rockville Escarpment. The North River site consist of an extensive stand of eastern white cedar (*Thuja occidentalis*) and black spruce (*Picea mariana*) located along the edges of a large stillwater pond off the North River. The cedar understory contains numerous rare or otherwise significant ground flora species including: showy lady's-slipper (*Cypripedium reginae*) a rare and possibly endangered plant in New Brunswick, as well as the boreal aster (*Aster borealis*) which is very rare in New Brunswick.

Waterford escarpment includes a variety of habitat types and associated vegetative formations. An old growth tolerant hardwood stand is located on the ridge top with associated ground flora. Also present is an extensive stand of ironwood highly unusual for New Brunswick. The site hosts several uncommon plant species in association with the cliffs, ledges, and escarpments: hairy rock cress (*Arabis hirsuta*), drummond's rock cress (*Arabis drummondii*),

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bearberry (*Arctostaphylos uva-ursi*), and great-spurred violet (*Viola selkerkii*). Big Bluff/Rockville Escarpment hosts three ecological features: 1) rock escarpment; 2) talus pine/hemlock slope; and 3) alluvial hardwood bottomland. The alluvial bottomland is very significant because it provides the necessary conditions to support two uncommon plant species - *Allium tricoccum* (wild leek) and *Sanguinaria canadensis* (bloodroot). The hardwood stand is dominated by mature white ash, sugar maple, ironwood and butternut.

These are only three examples of the types of unique sites that have been identified and are in need of protection. All of the identified areas have been mapped and included in the FMF management planning exercise. In order to implement the management plan, a hands-on conservation stewardship project was developed. Implementing a stewardship project requires cooperation between private landowners, community groups, conservation agencies and interested persons.

The primary goal of this project is to secure ecologically significant Gap Analysis sites within the Fundy Model Forest through a combination of private stewardship agreements and/or conservation easements; and the implementation of an educational program directed at providing landowners with the information needed to help them more efficiently identify and manage ecologically significant sites. The project's intent is to also provide SNB technicians with appropriate information for continuing the work in the southern New Brunswick, after this project is completed.

PROJECT OBJECTIVES

The goal of the Conservation Stewardship Project is to secure ecologically significant sites within the FMF, which were identified by the Gap Analysis Project. In order to meet this goal, fifteen objectives were developed.

Objective 1

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To secure ecologically significant sites previously identified by the FMF Gap Analysis Project through a combination of stewardship agreements, land acquisitions, and public education. The project has focussed on securing properties within 21 priority sites over a period of three years. Year One focussed on securing seven priority sites, which included 40 landowners, and covered more than 1,500 hectares. Year Two focussed on securing seven additional priority sites which included 52 landowners and over 750 hectares. The Department of Natural Resources and Energy has made a positive contribution towards the securement of the FMF Gap Analysis sites. The Forest Extensions Branch (Region 4 office) has incorporated the Gap sites into their forest management plans, thus ensuring securement of those sites incorporating crown land.

Objective 2

To develop an educational component which fosters public interest in the understanding of the importance of ecologically sensitive areas.

Objective 3

To provide interested landowners with land management options which permit certain existing land use activities, but also conserve existing significant ecological values.

Objective 4

To develop a landowner recognition program for participating landowners, which will help reinforce the value of their involvement in the Conservation Stewardship Project.

Objective 5

To develop and print the one page coloured pamphlet entitled "What's In Your Woodlot?". The brochure is included in the landowner education package, and distributed to appropriate parties.

Objective 6

To generate and distribute a newsletter outlining project updates, up & coming DNRE, CFS, FMF and SNB events. The newsletter was distributed to participating landowners and is made available at SNB, FMF and DNRE extension offices.

Objective 7

To develop and print the conservation management manual entitled Conservation Guidelines For Ecologically Sensitive Forested Sites On Private Woodlots Within The Fundy Model Forest. The manual is intended for use by SNB technicians in developing management plans for ecologically sensitive areas.

Objective 8

To conduct a conservation easement conference intended to provide NGO's, provincial and federal government representatives and other interested parties, with current material regarding Conservation Easement Legislation, legalities, and acquisition procedures in the Province of New Brunswick.

Objective 9

To organize and conduct a series of workshops for SNB technicians in order to help them identify ecologically sensitive sites, and incorporate the management of these sites into their Private Woodlot Management Plans. Also, conduct a series of wild life identification field sessions to existing priority sites.

Objective 10

To develop a stewardship follow-up procedure which involves recontacting landowners who could not be reached during Year one and two, updating landowners on the status of the project, answering any questions or concerns, monitoring land uses on sites which are secured through a conservation agreement, and obtaining additional conservation agreements.

Objective 11

To provide for continuation of the work after project completion by providing the Southern New Brunswick Wood Cooperative (SNB) technicians with appropriate background information and materials. The information will be directed towards helping the technicians work within the twenty one Gap priority sites.

Objective 12

To foster a cooperative relationship with the Department of Natural Resources and Energy (Parks and Natural Areas Branch, and Region 4 extensions office), and JD Irving Ltd. (Unique Areas Program). This relationship is required in order to monitor land uses on FMF Gap sites owned or leased by the mentioned parties.

Objective 13

To create a botanical database that compiles all information on the FMF gap sites and landowner information collected for the 1997-2000 Conservation Stewardship Project's priority sites. This d-base helps identify the true uniqueness of each site. It has been sent to Atlantic Canada Conservation Data Centre who collect information on the distribution of vascular plants and wild life in New Brunswick.

Objective 14

To put the Conservation Guidelines Manual into practise. This involves developing and implementing management plans for sensitive sites (particularly Gap sites) which incorporate the guidelines outlined in the manual, and ensure that the sites ecologically significant features are conserved. Developing management plans for sensitive areas require a great deal of professional input from those parties having related experience, and an added interest in the stewardship program.

PROJECT METHODOLOGY

The following is an outline of the methodology used for the landowner contact portion of the Conservation Stewardship Project.

a. A letter is sent to all landowners having property parcels that fall within the boundaries of the FMF sites. The letter consists of a general description of the FMF and Gap Analysis Program, the objectives of Conservation Stewardship Project, and a brief description of the ecologically sensitive site. Note, several letters were returned due to incomplete or change in address.

b. Contact landowners by telephone, and if receptive set up a meeting at the owner's convenience.

c. The objective of the meeting is to further explain the objectives of the Conservation Stewardship Project, determine the owner's level of interest, and discuss the options outlined in the options brochure. Landowners are also informed of the conservation easement opportunities available through provincial easement legislation. In some cases, multiple visits are necessary in order to solidify securement agreements, and conduct vegetation surveys upon request by the landowner.

d. Letters are periodically forwarded to landowners updating them on the status of the project.

e. Educational information on ecologically significant sites are distributed among landowners as part of a landowner education package. Additional educational material orientated towards school children is also available to interested parties i.e. Boy Scouts of Canada.

f. Alternative management options, taken from the conservation management manual, are distributed to interested landowners.

PROJECT EVALUATIONS - Monitoring Evaluation Plans

<u>Year One</u>

By March 31, 1998 an attempt was made to secure as many of the property parcels within the seven priority sites; as well as respond to owners within the remaining sites who have shown an interest in protecting their property.

By August 31, 1997

-attempt to contact 25% of landowners and work with 30% of the landowners contacted in order to secure the ecological values of the seven priority sites.

By November 30, 1997

-attempt to contact 50% of landowners and work with 30% of the landowners contacted in order to secure the ecological values of the seven priority sites.

By February 28, 1998

-attempt to contact 75% of landowners and work with 30% of the landowners contacted in order to secure the ecological values of the properties within the seven priority sites.

<u>Year Two</u>

By March 31, 1999, an attempt was made to secure as many of the property parcels within the next seven sites, as possible.

By May 31, 1998

-attempt to contact the remaining landowners who were not contacted during Year one, and work with 30% of these landowners in order to secure the ecological values of the seven sites.

By August 31, 1998

-attempt to contact 30% of remaining landowners and work with 30% of the landowners contacted in order to secure the ecological values of the seven priority sites. Also, to conduct a Conservation Stewardship Workshop for SNB technicians.

By November 30, 1998

-attempt to contact 50% of remaining landowners and work with 30% of the landowners

contacted in order to secure the ecological values of the seven sites. By February 28, 1999

-attempt to contact 75% of landowners and work with 30% of the landowners contacted in order to secure the ecological values of the seven priority sites.

Year Three

By March 31, 2000, an attempt was made to secure as many of the property parcels within the remaining seven sites, as possible.

By May 31, 1999

-attempt to contact the remaining landowners within the seven sites who were not contacted in Year one or two, and work with 30% of the landowners contacted in order to secure the ecological values of the seven priority sites.

By August 31, 1999

-attempt to contact 30% of landowners and work with 30% of those contacted in order to secure the ecological values of the next seven sites.

- Hold a Landowner Recognition Evening for landowners that have actively participated in the project.

-to print and distribute the one page brochure What's In Your Woodlot?.

By November 30, 1999

- attempt to contact 50% of the remaining landowners and work with 30% of those successfully contacted in order to secure the ecological values of the next seven sites. -to conduct the third SNB Conservation Stewardship Workshop.

-to successfully recontact all landowners who participated during the first two years of the project.

- generate and distribute a newsletter to all participating landowners in the project. By March 31, 2000

-attempt to contact 75% of the remaining landowners and work with 30% of those landowners successfully contacted to secure the natural values of properties within the next seven sites.

-to complete the production of the landowner educational package which includes an educational display for presentation purposes.

-create a botanical database that includes all FMF gap site information as well as landowner information collected over the last three years.

-notify all participating landowners that the project will be changing hands as of April 1, 2000.

-continue fostering a cooperative relationship with DNRE and JDI Ltd. to ensure there is a degree of protection on the gap sites that fall within their property boundaries.

Measures of Success

Quantitative measures of success include:

- 1. the number of private landowners successfully contacted
- 2. the number of verbal agreements received by interested landowners

3. the number of property parcels secured within each site.

The project's success was outlined in a series of quarterly reports distributed to the New Brunswick Wildlife Council Trust Fund, Fundy Model Forest, SNB Wood Products Marketing Board, the Nature Conservancy of Canada, Environment Canada: Action 21 and the Environmental Trust Fund, throughout Year one, two and three of the project. The final report will also be distributed to all involved parties.

PROJECT ACHIEVEMENTS

Priority Sites 1997-2000

Of the approximate seventy ecologically significant sites identified by Gap Analysis, thirty five of these are located on private woodlots. In Year One (1997-98), seven of the thirty five sites were given higher priority with respect to site securement. This selection was largely based on environmental sensitivity, and immediate threat to the site. The seven priority sites were rated in the following order. 1) Parlee Brook Valley, 2) North River Wet Cedar Forest, 3) Upper Salt Springs Hardwoods, 4) Havelock Butternut Ridge, 5)Quiddy River, 6) Mount Zachy Jonah and 7) Waterford Escarpment.

Seven sites, intended for securement in Year Two (1998-99), were also given priority status. Criteria for selecting the sites included ecological significance/sensitivity, and immediate threat to the site. The seven priority sites in order of significance include: 1) Morgan Hill Tolerant Hardwood, 2) Parleeville Hardwood Stand, 3) Big Pine Bluff/Rockville Escarpment, 4) Gibson Creek, and Pollett River Gorge, 5) Chamber's Settlement Escarpment, 6) Big Cove, and 7) Hatfield Point Bald Eagle's Nest.

Year Three (1999-2000) sites were chosen using the same criteria as Year One and Two. These sites are 1) Urney Ledges, 2) Walton Lake, 3) Jenkins Cove, 4) Picadilly Mountain, 5) Waterford Ice Cave, 6) Vinegar Hill, and 7) Cedar Camp/Bear Cave.

Site Status and Descriptions

Year 1 Priority Sites

As previously noted, the main objective for Year One was to secure the seven priority sites previously identified by the Fundy Model Forest Gap Analysis Project. It is important to note that it is often the case that landowners cannot be located, or landowners are contacted and given information but have not yet responded. Therefore, it's unrealistic to assume that one will be able to protect every property parcel for every site. The following is a brief description of what has been accomplished on a per site basis.

North River Wet Cedar Site

An extensive stand of eastern white cedar and black spruce located along the edges of a large still water pond, off the North River. The cedar understory of the cedar stand contains numerous rare or otherwise significant ground flora species. Due to the high price and

subsequent heavy demand for cedar in New Brunswick, this site can be considered highly threatened.

All six landowners have been contacted and site visits have been conducted. Five of the six have verbally agreed to protect the ecological integrity of the site. This includes seven of the eight properties on site.

Havelock Tolerant Hardwood Forest Site

A rich, tolerant hardwood site on a ridge of pure limestone. The town of Havelock was once known as Butternut Ridge. However, very few butternut trees remain except for some ornamentals. This is likely due to land clearance and use of this species as a cabinet wood. This site represents the last known stand of butternut in the area, and is the most easterly stand of upland butternut in North America. The site also contains the easternmost record of blue cohosh in the province. The recommended management strategy for the site would be full protection, possibly with some active management to encourage butternut establishment and reintroduce ground flora species associated with this habitat type.

All five landowners have been contacted and site visits have been conducted. Four of the landowners have verbally agreed to protect the ecologically significant features on their land. The fifth landowner has not yet decided whether he will participate in the project.

Parlee Brook

The site represents a wide variety of habitat types and vegetation formations. Large portions of the identified core areas are owned by J.D.Irving Ltd and the Oxley family.

The Conservation Stewardship is currently involved with a landowner who owns two significant property parcels. A verbal agreement has been received, and plans to manage the property using the Conservation Stewardship Manual.

The Nature Conservancy of Canada is presently coordinating a land transaction between DNRE and J.D. Irving Ltd. This will ensure that the ecological integrity of a large portion of this site is secured. Information packages have been distributed to the remaining landowners. Two properties have been secured through verbal agreements.

Mount Zachy Jonah

An extensive north and east facing talus slope forest, with associated cliffs and ledges. Several uncommon, rare and very rare understory ground flora species are found on the talus slope and rock faces. The relative size of the identified site, and the number of uncommon and rare species makes this site very significant. Full protection of the site is recommended. The unstable slope substrate would be seriously altered by harvesting; and many of the understory ground flora may be disturbed if the shaded habitat provided by the forest canopy is modified.

At this site three of five landowners have verbally agreed to protect the ecological integrity of the site. All five landowners have been contacted, and are awaiting a response from the two remaining landowners.

Upper Salt Springs Hardwoods

A ridge-top stand of mature tolerant hardwood with a ground flora understory that hosts

the rare plant, wild leek (Allium tricoccum). This site is considered both significant and threatened.

Information has been sent out to all landowners regarding the significance of their properties. Two of the landowners were successfully contacted and have given a verbal commitment to protect the site. This protects two of the eight properties on site.

Waterford Escarpment

A site representing a variety of habitat types and associated vegetative formations including: a) an extensive series of cliffs, ledges, and exposed escarpment b) an extensive finegrained talus slope covered almost exclusively with ironwood and occurring at the base of the cliffs, and c) tolerant hardwood forest along the ridge top. The site is significant because it represents an old growth tolerant hardwood stand which runs along the ridge top. It also supports an extensive stand of ironwood, highly unusual for New Brunswick; and it hosts several uncommon plant species in association with the cliffs, ledges, and escarpments.

Three of six landowners have agreed to participate in the project. Two of the remaining three have been contacted but have not decided if they would like to participate. A large proportion of the ironwood stand located at the base of the cliffs, as well as the tolerant hardwood stand on the ridge top have been protected. This protects four of the eight properties on the site. A fourth landowner was contacted in 1999/2000 as has agreed to participate in the project. This secures two more parcels of land for this site.

Quiddy River

A twenty- km. long river system that contains a series of waterfalls and high steep cliff faces. Many of the cliffs receive steady seepage from the plateau above and thus host a rich plant assemblage. The wet seepy cliff faces support unusual assemblages of plant species, including the rare *Lycopodium selago* and very rare *Scirpus caespitosus* variety *delicatulus*. The mature red spruce forests, cliff face floral assemblages, and potential salmon habitat make this site very significant.

The site is owned by J.D.Irving. Sections are under management and other parcels are inoperaable. Those under management will be reverted to community types that resemble presettlement conditions.

Cedar Camp (Bear Cave) Cliffs and Hardwood Forest

The site includes a series of cliffs with a small cave and a moderately sized waterfall, which runs in the spring following heavy rain. Patches of tolerant hardwood are located at the base and sides of the cliffs. Some cliffs are sheltered and moistened by continual groundwater seepage. All the cliffs possess an assemblage of mosses, liverwort and lichens. Species abundance, diversity and species composition on the rock face is dependent on moisture availability. Three plant species found on the north facing side of the slope are considered either rare or very rare in New Brunswick. The tolerant hardwood forest is dominated by sugar maple, beech, and white ash. It hosts a diverse, but common, ground flora assemblage, including spring ephemerals such as red trillium, and spring beauty. The provincially uncommon Braun's Holly fern occurs in the tolerant hardwood forest at the base of the cliffs.

The site has three landowners and is made up of three properties. One of these landowners has secured his property by donating it to The Nature Conservancy of Canada.

Year 2 Priority Sites

As previously noted, the main objective for Year Two was to secure the next seven priority sites. The following is a brief description of what has been accomplished on a per site basis.

Gibson Creek and Pollett River Gorge

A high, narrow valley that contains a variety of forest assemblages. Stands of mature hemlock occur along the Elgin River gorge and the lower reaches of Gibson Creek. Large numbers of white pine are found along the ridge top of the south-facing slope, with spruce and fir on the valley side below. The upper reaches of the valley bottom, and sections of the south facing slopes, contain tolerant hardwood. The tolerant hardwood understory has a diverse ground flora. Stream-side rock ledges are inhabited by numerous fern, moss and liverwort species.

Selective harvesting, on a small and large scale has occurred throughout the site. In some circumstances, removal of mature stands has resulted in slope erosion, and possess a high risk to the Gibson Creek ecosystem. Of the twelve landowners, nine have been contacted, and four have entered into verbal agreements. These agreements secure six of the twelve property parcels.

Morgan Hill Tolerant Hardwood

A tolerant hardwood forest of sugar maple, beech, ironwood and ash occurring along the sides and top of Morgan Hill and Pleasant Ridge. In some areas, large patches of ironwood are found. Ground flora is typical of upland hardwood forest and includes Christmas fern, Solomon's seal, red baneberry, and red trillium.

Selective harvesting throughout the site is largely restricted to removing lumber for firewood. Of the sixteen landowners, twelve have been contacted. Nine of the twelve have verbally agreed to protect the ecological integrity of the site. In total, ten property parcels have been secured.

Big Cove

A forested shoreline and hillside area on the southwest corner of Big Cove. Hosts a wide diversity of tree species: eastern white pine, white cedar, red oak, white ash, ironwood, sugar maple, yellow birch, red maple, silver maple, jack pine, black ash and hemlock. The checkered rattlesnake plantain (*Goodyera tesselata*), an uncommon NB orchid, was recorded on the hillside forest of this site.

Human disturbance is relatively high. Cottage development along the northwest shore of Big Cove is prominent, and continually expanding. Harvesting has occurred throughout the southern portions of the site. All three landowners have been contacted. One of the landowners has entered into a verbal agreement, which secures two property parcels.

Parleeville Hardwood

Mature tolerant hardwood stand at the base of an extensive series of cliffs and very steep

wooded slopes. Many large emergent white ash and sugar maple trees, as well as ironwood, beech, and yellow birch. Understory flora represents a diverse species assemblage consisting of bloodroot, nodding trillium and Christmas fern. Cliffs are mostly shaded and fern covered, hosting large populations of bulblet-bladder fern, fragile fern, rock polyplody, and several *Dryopteris* species. *Osmorhiza longistylis* was observed on the shady moss-covered ledges. Numerous caves show evidence of occupation by black bear and porcupine

Human disturbance is very minimal, and is restricted to the removal of small amounts of firewood. The original site boundaries were incorrect. Thus, there is only one landowner involved who has entered into a verbal agreement, which secures two very significant property parcels.

Chamber's Settlement Cliffs and Escapement

A small escarpment with associated cliffs and underlying talus slope. The escarpment and cliffs are sparsely covered with a variety of lichen and vascular plant species tolerant of the dry rock face conditions. The talus slope is composed mostly of ironwood. The presence of the drummond's rock-cress, the spikemoss (*Selaginella rupestris*), and ironwood make this site significant.

The cliff and associated talus forest do not show obvious signs of disturbance. The escarpment is accessible to cattle and has been grazed for some time.

There is only one landowner involved who has entered a verbal agreement, thus protecting the most significant property parcel.

Hatfield Point Bald Eagle Nest and Hardwood Forest

Avery steep north-facing ridge covered in mature tolerant hardwood forest. Many small fern-covered rock outcrops are scattered throughout the forest understory. Grant Brook runs at the base of this ridge. On the opposite side of the steam is a very large solitary white pine that hosted an active bald eagle nest in 1994.

The tolerant hardwood slope may not have been significantly disturbed in the past, though a recent clearcut of the hardwoods occurred along the top of the ridge. The nesting tree is the only remaining large tree on the north side of the brook; the remaining area was clearcut within the last two decades.

The nest is located on the property parcel owned by JD Irving Ltd. Irving has added the site to their own Unique Areas Program, thus ensuring securement of the active nest. The remaining two landowners are not interested.

Big Pine Bluff/Rockville Escarpment

A rock outcrop that contains a variety of habitat types ranging from oak to oak-pine mixes to pure white pine. Mature red pine, hemlock and jack pine are scattered throughout the pine stand. Common ground vegetation includes bearberry and three-toothed cinquefoil. These plant species are specific to exposed rock outcrops. Other habitats include a) very steep, treeless bluffs that contain uncommon plant species; b) an extensive talus at the slope at the base of the bluff, along Trout Brook containing large mature white ash, sugar maple, ironwood, butternut trees. An extensive population of wild leek, and bloodroot is also scattered along the alluvial

bottomland.

Several areas on the ridge top have been clear-cut while another portion of the white pine has been partially cut. Selective harvesting has occurred throughout the remaining portions of the site. Several large ironwood trees have recently been removed from the area along Trout Brook.

Seven verbal agreements have secured nine properties. The project has an ongoing relationship with the local Boy Scouts chapter which involves presenting educational information to local children.

Year 3 Priority Sites

One of the main objectives for Year Three was to secure the remaining seven of the twenty one priority sites.

Urney Red Oak Ridge

An exposed south-facing ridge forested almost completely in red oak (*Quercus rubra*). Numerous small rock ledges occur along the edges of the ridge and are covered by lichens and vascular plants tolerant of the dry, predominantly soil-less conditions. This includes large numbers of berry-producing plants which attract both bear and coyote in the late summer and fall. Fine-grained talus slope exists below ridge cliffs, and is covered in red oak, ironwood and beech. Human disturbance has included selective harvesting along the lower and mid slope.

All six landowners have been contacted. Two landowners have given verbal agreements, securing three parcels, and are awaiting response from one other.

Walton Lake

A small lake with a naturally occurring population of artic char, which represents one of only two populations of landlocked arctic char in New Brunswick. The other population is at Upsalquitch Lake. The rarity of the landlocked artic char in northeastern North America makes the site very significant. The site is considered threatened due to clearcutting and road construction in adjacent areas.

The site consists of thirteen property parcels. Of which, ten represent crown-land, and one is owned by JDI. Two of the most significant parcels are leased to the Adair's Wilderness Lodge by the Department of Natural Resources and Energy. A verbal agreement has been received from the Adairs, thus protecting two significant property parcels. The parcel owned by JDI has been deemed as 'inoperable', thus it has been removed from their forest management plans.

Jenkins Cove

A small but rich forested site that includes both streamside and shoreline habitat. The streamside area is dominated by eastern cedar. The shoreline area is dominated by black ash and cedar. The very rare mountain mint (*Pycnanthemum virginianum*) has been found at this site in moist crevices of rocky outcrops. It is the only known site for this plant in New Brunswick.

All three landowners of this site have been contacted. A verbal agreement has been received from one landowner who owns 94% of the site.

Picadilly Mountain

A large ridgetop forest dominated by tolerant hardwoods (sugar maple and beech), with white pine growing on some dry south-facing ridge crests. DNRE owns a large parcel of this upland tolerant hardwood forest. It has been recognized as a potential ecological reserve since the early 1970's.

The site consists of nine landowners, of which one parcel is DNRE, another JDI and the rest is privately owned. All nine have been contacted. DNRE is currently investigating the site's potential protection status, and JDI has removed their parcel from their forest management plans. Three private landowners have given verbal agreements, protecting four more parcels. In total, six parcels have protection. Still awaiting response from two landowners for the potential to protect four more parcels. Another was interested in receiving information on the project.

Waterford Ice Cave

A cave composed of limestone which potentially houses many different species of bats. The plants and tree species that inhabit around the caves could be interesting due to the limestone leaching into the soil, creating very rich conditions for many indicator species to thrive.

The sole landowner has been contacted and has verbally agreed to protect the site.

Cedar Camp (Bear Cave) Cliffs and Hardwood Forest

The site includes a series of cliffs with a small cave and a moderately sized waterfall, which runs in the spring following heavy rain. Patches of tolerant hardwood are located at the base and sides of the cliffs. Some cliffs are sheltered and moistened by continual groundwater seepage. All the cliffs possess an assemblage of mosses, liverwort and lichens. Species abundance, diversity and species composition on the rock face is dependent on moisture availability. Three plant species found on the north facing side of the slope are considered either rare or very rare in New Brunswick. The tolerant hardwood forest is dominated by sugar maple, beech, and white ash. It hosts a diverse, but common, ground flora assemblage, including spring ephemerals such as red trillium, and spring beauty. The provincially uncommon Braun's Holly fern occurs in the tolerant hardwood forest at the base of the cliffs.

The site has three landowners and is made up of three properties. One of these landowners has secured his property by donating it to The Nature Conservancy of Canada and a second landowner has been contacted and received additional information on conservation easements.

Vinegar Hill Tolerant Hardwoods

A tolerant hardwood forest of sugar maple, beech, ash and ironwood occurring along the sides and the ridgetop of Vinegar Hill. Ground flora is typical of upland forests. This site is considered threatened due to past harvesting régimes and the scarcity of this ecotype within the Anagance Ridge Ecodistrict.

Six of the eleven landowners have been contacted. Four have verbally agreed still awaiting response from two other landowners.

Quarterly Goals

Note, that the quarterly goals are a measure of success, which meet the success criteria outlined in Action 21's Community Funding Recipient's handbook.

Year 1

Γ

Quarter 1

Our focus in quarter one was to attempt to contact 25% (10) of the landowners of the seven priority sites, and work with 30% (3) of those contacted in order to secure the sites. We were able to contact 14 landowners (35%) of which all entered into verbal agreements. Thus, we were able to obtain 11 more agreements than initially anticipated.

Quarter 2

Our goal for quarter two was to contact 50% (20) of the landowners of the seven priority sites, and work with 30% (6) of those contacted in order to secure the sites. We were able to contact 21 landowners (51%) of which all entered into verbal agreements. Thus, we were able to obtain 15 more agreements than originally anticipated.

Quarter 3

Our goal for quarter 3 was to attempt to contact 75% (30) of the landowners; and work with 30% (9) of those contacted in order to obtain conservation agreements. We were able to reach 31 landowners (78%) of which 29 entered into a verbal agreement. Thus, we were able to obtain 20 more agreements than initially forecasted.

Year 2

<u>Ouarter 1</u>

The goal for quarter one was to begin the second phase of the project and successfully contact landowners associated with seven additional priority sites. Our objective was to contact 15% (8) of the landowners; and work with 30% (2) of those contacted in order to secure the ecologically significant sites.

Ouarter 2

The goal for quarter two was to contact 30% (16) of the landowners, and work with 30% (5) of those individuals in order to secure the site through conservation agreements. We were able to contact 30 (57%) of the landowners. Thus, we were able to obtain 12 more agreements than originally anticipated.

Ouarter 3

The goal for quarter three was to contact 50% (26) of the landowners, and work with 30% (9) of those contacted in order to secure the sites through conservation agreements. During quarter two we were able to contact 30 (57%) of the landowners and were successful at protecting the sites with 17 (32%) of them. Therefore, we decided to spend the time in quarter

three recontacting landowners to determine their interests in entering into conservation easements, and submitting fund raising proposals for the 1999-2000 fiscal year. As well as organizing a Conservation Easement Workshop, which was held on December 8th, at the Sir John Flemming Forestry Complex in Fredericton. We still obtained eight more agreements than what was anticipated for this quarter.

Quarter 4

The goal for quarter four was to have contacted 75%(39) landowners and work with 30%(11) of those contacted in order to secure the sites through conservation agreements. It is assumed since the total number of landowners to be contacted in Year Two is 52, then 39 landowners represents the criteria to be met for the entire period of Year Two. It must also be noted that contacts in quarter four were also made to those landowners who could not be reached during Year One. Three were contacted, and have entered into a verbal agreement to secure ecologically significant features. In total, twenty seven verbal agreements were obtained during Year Two. This number surpasses the goals slated for each quarter.

Year 3

Ouarter 1

The goal for quarter one was to begin the third, and final phase of the project by successfully contacting landowners of the last seven priority sites. The objective was to contact 30% (12) of the landowners and work with 30% (3) of those contacted in order to secure the ecologically significant sites*. We were able to contact 12 and 5 have entered into a verbal contract.

Quarter 2

The goal for quarter two was to contact 50% (21) and work with 30% (7) of the landowners contacted in order to protect priority GAP sites^{*}. We were able to successfully contact 23 and work with 12.

Ouarter 3

The goal for quarter three was to contact 75% (32) and work with 30% (9) landowners contacted in order to secure land within the GAP sites^{*}. 33 were actually contacted and 21 have verbally agreed to secure their parcels within the priority sites slated for 1999/2000. One landowner from Year One priority sites had also been contacted in Year Three and has verbally agreed to secure two parcels of land at Waterford Escarpment. Thus, in total, 23 parcels of land have been secure in Year Three.

*Please note that in the quarterly reports, the number of LANDOWNERS that had been contacted or had agreed to secure property were tallied. In this paper, the number of PARCELS secured were tallied.

Site Status

Year 1: 1997/98 Priority Sites					
Priority Site	# of Hectares Secured	# of Conservation Agreements*			
North River Cedar Stand	347.3	7			
Havelock Butternut Ridge	355	6			
Mount Zachy Jonah	149	б			
Upper Salt Springs	44	2			
Pariee Brook	139.4	2			
Waterford Escarpment	141	4			
Quiddy River	N/A	N/A			
Cedar Camp	79	1(donation)			
Total:	1254.7 hectares	28 verbal agreements			

Year 2: 1998/99 Priority Sites					
Priority Sites	# of Hectares	# of Conservation Agreements *			
Gibson Creek/Pollett River	80	5			
Morgan Hill	442	10			
Big Cove	63	2			
Parleeville Hardwoods	52	2			
Chamber's Settlement	70	1			
Hatfield Point	N/A	N/A			
Big Pine Bluff/Rockville	120	7			
Total	827 hectares	27 verbal agreements			

Year 3: 1999/2000 Priority Sites				
Priority Sites	# of Hectares	# of Conservation Agreements		
Urney Ledges	128	3		
Walton Lake	86	3		
Jenkins Cove	100	1		
Picadilly Mountain	417	7		
Waterford Ice Cave	42	1		
Cedar Camp	145	2*		
Vinegar Hill	151	4		
Total:	1069	21		

*These parcels are being protected by other means. One parcel has been donated to the Nature Conservancy of Canada.

Note: The number of conservation agreements listed represent multiple property parcels owned by one landowner.

See Appendix B for a complete record of property owners and associated conservation agreements for each priority site.

Educational Achievements

The long term protection of the FMF Gap Analysis sites heavily relies on the collaboration between various interested organizations and agencies. Of these groups, the Southern New Brunswick Wood Cooperatives Ltd. plays a vital role in securing ecologically significant sites within southern New Brunswick. The Conservation Stewardship Project's intent is to provide SNB technicians with the appropriate information and materials, essential for ensuring that SNB continues the program in southern New Brunswick, once the project is completed.

The educational needs of the SNB technicians were met by conducting a series of workshops, which focussed on providing the technicians with the tools to identify ecologically sensitive sites; as well as, encouraging them to incorporate the management techniques, specific to sensitive sites, into their Private Woodlot Management Plans.

Other tools used to ensure SNB's success in securing Gap sites include the development of a Conservation Management Manual for ecologically sensitive sites on private woodlots, and the brochure *What's In Your Woodlot?* The purpose of the manual is to outline management guidelines required to protect biodiversity in ecologically sensitive sites on private woodlots, within the Fundy Model Forest. The manual will be made available for use by appropriate organizations, agencies and interested persons. This manual will be used by technicians working with the SNB in order to identify and manage ecologically sensitive sites. The coloured brochure *What's In Your Woodlot?* is aimed at helping landowner's more effectively identify ecologically significant sites, understand their importance, and become more aware of the conservation options available for protecting these sites. The brochure is essential for delivering a general education program directed at private landowners.

The Conservation Stewardship Project, in conjunction with SNB, have made a commitment to develop a landowner recognition program, which recognizes the landowner's pledge to protect the ecological integrity of the Gap sites. A certificate entitled *Landowner Stewardship Certificate* has been awarded to those landowners recognizing their verbal commitment to secure the site. An awards evening was held on June 29th, 1999 where all participating landowners were recognized for their contribution to the project. Only those landowners that wanted to be publically recognized attended.

An educational display used for presentation purposes has been created that outlines the objectives of the Southern New Brunswick conservation Stewardship Project, and helps the viewer determine whether their land may be potentially ecologically significant. The *What's in Your Woodlot brochure*, along with the Conservation Options brochure are made available for those interested in further investigating the project. The brochures have contact names and numbers that may be able to aid the viewer in receiving more information/education on the project and how they can become involved.

A newsletter titled "Southern Forest Habitat News" has been issued and distributed to participating landowners. This newsletter is an important tool in notifying what the Conservation Stewardship Project has been working on. It keeps the landowners informed and gives them a sense of partnership in the project. They are encouraged to contact us with questions, comments and any concerns.

"The Fundy Model Forest Demonstration Woodlot Project" brochure was created and sent to landowners. This brochure describes an initiative that began in the third year of the Conservation Stewardship Project. The objective of the project was to find a willing landowner participating in the Conservation Stewardship Project to incorporate the management options outlined in "Conservation Management Manual for Forested Ecologically Sensitive Sites on Private Woodlots within the Fundy Model Forest". This brochure describes the steps taken to create a conservation management plan.

The Nova Forest Alliance, our sister Model Forest in Nova Scotia are interested in establishing a landowner contact program. A representative from the Conservation Stewardship Project gave a presentation on our successes in landowner contact and the types of responses we have received thus far. This meeting took place on February 29th, 2000.

Environmental Benefits

The securement of these sites offers a long-term solution by protecting several endangered, rare or uncommon wild life species. Securement is ensured through conservation easement, stewardship agreements, land acquisitions and land donations. For example, the spikemoss (Selaginella rupestris) a very rare plant species in New Brunswick, is currently under protection through a verbal agreement. Thus, these agreements greatly increase the probability of these species and associated habitats being protected. The implementation of the project has also heightened public awareness on the importance of protecting these ecologically significant areas. For example, the Conservation Stewardship Project is currently working in conjunction with the Boy Scout's of Canada (Sussex Chapter) to give hands-on presentations outlining the local ecosystems.

The identification of wild life species presence and distribution within the Fundy Model Forest, through the Conservation Stewardship Project, has contributed to the enrichment of the Environmentally Significant Areas (ESA) d-base, and the University of New Brunswick's Connell Herbarium d-base. A botanical database was creating using Microsoft Access. It entails site descriptions and plant lists for the FMF gap sites, as well as landowner information for the 21 priority sites. This will greatly aide botanists, ecologists, naturalists and the like, in studying different environmental issues. This data has been made available to the Atlantic Canada Conservation Data Centre. Due to our policy to protect participating landowners in our project, this information was omitted.

In-kind Achievements

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It must be stated that the Nature Conservancy of Canada (NCC) has shown a great deal of interest in the Conservation Stewardship Project, and have actively worked towards securing several of the 21 priority sites. Of particular importance, is the land donation made by Mr. Doug, Shippee to the NCC. The 79 hectare property represents a portion of the Cedar Camp/Bear Cave Cliffs site. A public ceremony was held on May 13th, 1999 in Saint John to acknowledge the land donation made by Mr. Shippee to the NCC. The Nature Conservancy is also currently working on a conservation easement with the Sussex Boy Scouts Group and Trinity Anglican Church at the Big Pine Bluff/Rockville Escarpment site.

Part of the Conservancy's current mandate is to meet the terms of the Legacy 2000 Program by securing ecologically significant areas in New Brunswick by means of the new Conservation Easement Legislation. The Conservancy is currently involved in contacting landowners within the FMF who have expressed an interest in protecting their property(s) through such easements.

Sentier NB Trail is currently constructing the Fundy Trail Parkway within the boundaries of the Fundy Escarpment, which presently extends from St. Martins to the Big Salmon River. Plans to extend the trail to the western boundaries of Fundy National Park are in the works. Trail construction may threaten the ecological integrity of the Gap sites along the Fundy Coast. In order to reduce possible large-scale disturbance of the sites, an agreement has been made with Sentier NB Trails regarding protection of the sites' significant ecological features

The Department of Natural Resources and Energy has made a positive contribution towards the securement of the FMF Gap Analysis sites. The Forest Extensions Branch (Region 4 office) has incorporated the Gap sites into their forest management plans, thus ensuring securement of those sites incorporating crown land. Γ

The Fundy Escarpment proposal, put forth by the Parks and Natural Areas Branch, indirectly secures priority sites along the Fundy Coast. The proposal entails a study area comprising of a two kilometre wide corridor (one kilometre strip of land and one kilometre of water) along the northeastern coast of the Bay of Fundy, between Fownes Beach in St. Martins and the western boundary of Fundy National Park. If accepted, the proposal will ensure partial protection of Gap sites along the Fundy Coast.

The Crown Lands Branch of the Department of Natural Resources and Energy have recently been given a list of gap sites that fall within their property boundaries. The set of criteria used by DNRE to determine the significance of the site was used when presenting them with the Gap Site list. Work is currently underway to determine whether these sites will be included in DNRE's "Conservation Area" or "Ecological Reserve" programs.

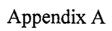
JD Irving Ltd. has also contributed to the securement of the FMF Gap Analysis sites by incorporating the sites into their Unique Areas Program. Location and ecological descriptions of the sites have recently been updated for the Unique Areas Program. Site information has also been given to JDI's Region 4 office to ensure that the Gap sites are managed to protect their significant ecological features. Currently, ecologically sensitive management standards are being developed by JDI, and will be used for managing their Unique Areas sites.

Project Continuation

The project will be continued by the Southern New Brunswick Wood Products Marketing Board in Sussex, beginning April 1st, 2000. The overall project will focus on working towards recognizing and assisting woodlot owners for the purpose of protecting the ecologically significant features within the SNB area. This will be carried out by working with private woodlot owners. Promotion of identifying and woodlot owner interest will be carried out by interacting with landowners, community groups, conservation agencies and interested person through a combination of land stewardship, education and technical advice.

Other activities will include implementing and delivering a Conservation Management Program at private landowners. It will be aimed at helping individuals more effectively identify ecologically significant sites, understand their importance, and to become more aware of the conservation options available for protecting these sites.¹

¹ This description of SNB's Conservation Management Program was taken from their Environment Trust Fund proposal.



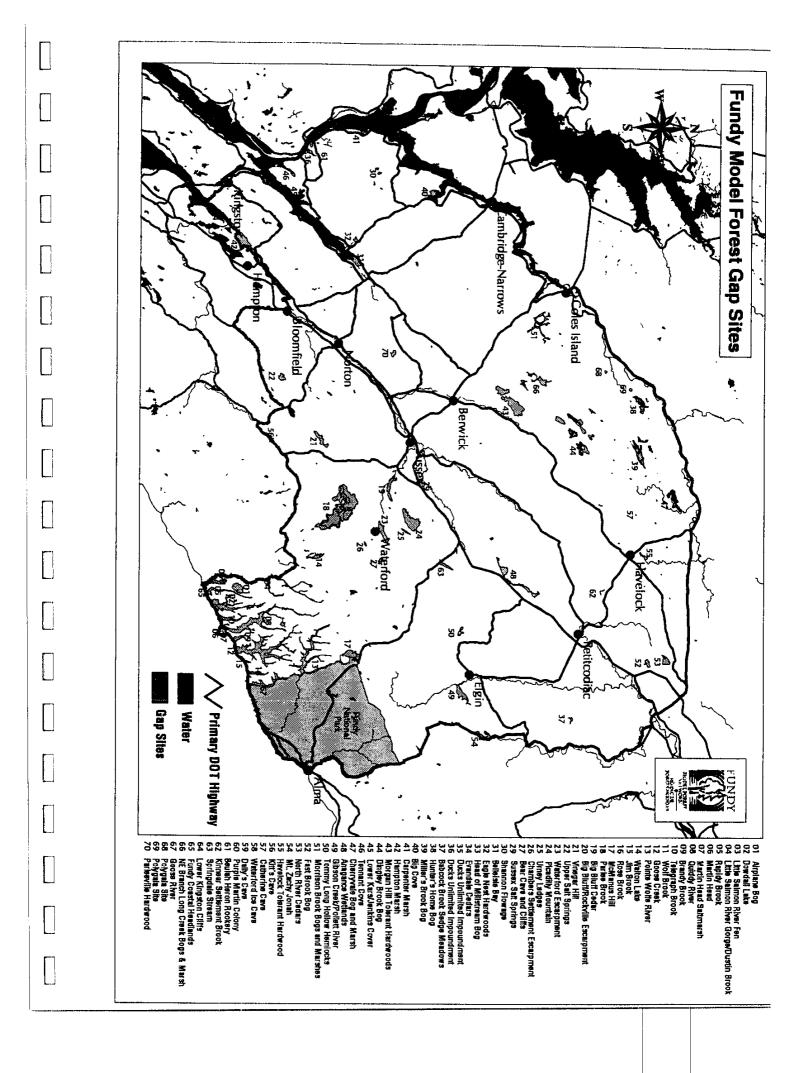
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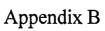
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1997-1998

North River Cedar Site

Property	Owner	PID	Area(ha)	Protection Status
А	Steven Cochran	959783	109	verbal
В	Stewart Killam	959866	33.6	(awaiting response)
С	Harold Sleeper (Leased)	70206347	16.7	verbal
D	Leonard McCully	957225	33.6	verbal
Е	Merle Killam	963207	21	verbal
F	Harold Sleeper	70138847		verbal
G	Jacob Weselius	957290	125	verbal
H	Harold Sleeper (Leased)	70139084	42	verbal

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Havelock Tolerant Hardwood Forest

Property	Owner	PID	Area(ha)	Protection Status
A	Canada Cement Company	172932	81	verbal
В	Canada Cement Company	30069595	54	verbal
С	Peter Bunnett	30069579	52	verbal
D	Gold Corp Inc.	172346	27	verbal
Ε	Gerald Alward	60665	28	
F	Wiebe Dykstra	167304	42	verbal
F	Wiebe Dykstra	171322	99	verbal

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Quiddy River

This 589.37 hectares river ravine is owned by Rothesay Paper Holdings Ltd. (JD Irving Ltd.), all except three properties which are owned by the Department of Natural Resources and Energy. JD Irving Ltd. Will be contacted with respect to securing this site as soon as the Parlee Brook land swap is finalized between the pronvince and JD Irving Ltd.

Mount Zachy-Jonah

Property	Owner	PID	Area(ha)	Protection Status
А	Lester Higgins	5000872	54	verbal
В	Sanford Phillips	5007414	40	
С	Delbert Bannister	750059	44	verbal
D	Lester Higgins	602854	4	verbal
E	Derrell Doucet	601500	71	
F	Delbert Bannister	606558	40	verbal
G	Delbert Bannister	600726	4	verbal
Н	Delbert Bannister	5030150	3	verbal

6.

Upper Salt Spring Hardwoods

Property	Owner	PID	Area(ha)	Protection Status
А	John Cummings	146514	69	Contacted
В	Gordon Cummings	146423	21	Contacted
С	Heinz Boyd	440859	19	
D	John Cummings	90704	21	Contacted
E	John Cummings	90696	81	Contacted
F	Carmen Teakles	146456	21	verbal
G	Charles Mercer	146472	23	verbal
Н	Russell Dempster	30105258	27	

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Parlee Brook Valley

Property	Owner	PID	Area(ha)	Protection Status
А	JD Irving Ltd.	30055214		
В	JD Irving Ltd.	30055230		
С	JD Irving Ltd.	30055248		
D	Paul Orser	150631	39.4	verbal
Е	David Orser	150698		
F	JD Irving Ltd.	84202		
G	JD Irving Ltd.	84202		
Н	JD Irving Ltd.	84194		
Ι	JD Irving Ltd.	84178		
J	JD Irving Ltd.	84145		٨
K	JD Irving Ltd.	84137		
L	JD Irving Ltd.	84129		
М	Doris MacAfee	150821		
N	JD Irving Ltd.	84186		
0	Elmer Wilkins	150433		
Р	JD Irving Ltd.	84145		
Q	JD Irving Ltd.	84137		
R	JD Irving Ltd.	84129		
S	Doris MacAfee	150821		
Т	JD Irving Ltd.	84152		
U	JD Irving Ltd.	84434		

	v	Stella Arnold	200022		
	W	George Arnold	207258		
	х	Paul Orser	206482	100	verbal
	Y	Douglas Arnold	200063		
	Z	Stella Arnold	200071		
	AA	JD Irving Ltd.	205989		
	BB	JD Irving Ltd.	224501		
	CC	Duncan Grant	20048		
	DD	JD Irving Ltd.	30055206		
	EE	JD Irving Ltd.	150714		
	FF	Chris Fitz	30011175		
	GG	John cushnie	150615		verbal
•	HH	David Oxley	30047542		
	Π	David Oxley	151365		
	11	Paul Orser	150631	39.40	verbal
	KK	JD Irving Ltd.	30055214		
	LL	Judith Anderson	15077		
	MM	Edgar Anderson	150755		
	NN	JD Irving Ltd.	30055180		
	00	John Cushnie	30038962		verbal

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Waterford Escarpment

Property	Owner	PID	Area(ha)	Protection Status
А	Earl Cunningham	30025779	69	verbal-written
В	(Bob)Kenneth Shann	on 151357	59	Contacted
С	Bartholomew Yerxa	150235	36	verbal
D	(Bob)Kenneth Shann	on 30125280	62	Contacted
E	Kenneth DeForest	149955	42	
F	Everett Hamilton	485235	20	(awaiting response)
G	Kate Ward	30127997	17	verbal
Н	Earl Cunningham	30159479	19	verbal

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1998-1999

Site#49: Gibson Creek and Pollett River Gorge

Site	Ownership	PID	Area(ha)	Status
Α	John Ayer	600296	40	verbal
С	Shirley Stiles	605934	50	Not Interested
D	Patricia Bamford	600478	16	verbal
Е	Patricia Bannister	5054929	4	awaiting response
G	Charles Gordon	605444	1	verbal
Η	Charles Gordon	11026231	1	verbal
I	J. Wilson	602813	17	absent landowner
L	Euphemia Goggin	611178	8000m2	sold
Ν	Barb Brown	604967	68	not interested
Q	Barb Pollock	602466	28	awaiting response
R	Bridges Brothers	757773	10	contacted
S	Bridges Brothers	5009923	10	contacted
U	Manning Powers	601682	20	not interested
Т	Arden Clarke	606400	20	verbal

Site#43 Morgan Hill

Site	Ownership	PID	Area(ha)	Status
А	Everett Folkins	95109	44	verbal
В	Ralph Folkins	30155790	24	verbal
С	Ralph Folkins	30155782	45	verbal
D	Ronald Darling	123497	66	verbal
E	Vernon Belding	122978	23	not interested
F	Douglas Allaby	30032742		not interested
G	William Folkins	122044	42	verbal
Η	Grant Folkins	122077	48	contacted
Ι	Gordon Hayes	122069	42	verbal
J	Lloyd Webb	123968	21	verbal
K	Lloyd Webb	123984	20	verbal
L	GE Northrup Ltd.	122713	30	
Μ	David Gaunce	122085	10	verbal
0	Ralph Kierstead	123588	86	verbal
Р	David Flewelling	30119903	33	estate
Q	Purdy McMillan	112895	3	
R	Purdy McMillan	98152	4	
W	Reynolds Middleton	125641	96	contacted
Y	Wayne Sears	126250	33	contacted
AA	Hardwood Ridge Far	m126474	91	absent landowner

Site #40: Big Cove

Site	Ownership	PID	Area	Status
Α	Margaret Appleby	45065133	282	not interested
В	McCrea Farms	45163748	28	verbal
С	Layton Henderson	45107661	29	contacted
D	McCrea Farms	45103066	35	verbal

Site #70: Parleeville Hardwood

Site	Ownership	PID	Area	Status
В	Rutke DeGooyer	232538	10	verbal
С	Rutke DeGooyer	118166	41	verbal

Site #26: Chambers Settlement and Escarpment

Site	Ownership	PID	Area	Status
А	Thomas Dalling	30048896	70	verbal
В	George Dalling	150441	N/A	not interested

Site #32: Hatfield Point Bald Eagle Nest and Hardwood Forest

Site	Ownership	PID	Area	Status
В	Grace Reiker	178285	20	not interested
C,	Gladys Eggiman	30092415	3	absent landowner

Site #19/20: Big Bluff Pine/Cedar

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Site	Ownership	PID	Area	Status
А	Sussex Golf & Curling Club	201541	12	verbal
В	Bluff Haven Farm Ltd.	203968	12	verbal
С	Bluff Haven Farm Ltd.	203737	15	verbal
D	Alton Adair	149716	25	verbal
E	Wayne Brown	201509	37	verbal
F	Boy Scouts Canada	205283	3	verbal
G	Mr. Vail	206060	141	clearcut
H	Castle Realty	208850	123	clearcut
I	Village of Sussex Corner	30106942	1	clearcut
J	Sussex Boy Scouts	30036384	16	verbal

1999-2000

Site #25: Urney Red Oak Ridge

Site	Ownership	PID	Area	Status
А	Audrey Watson	132308	76 hec.	Not Interested
В	Brian Murray	132225	43 hec.	Verbal
С	Ivy Carter	151274	62 hec.	Not Interested
D	Manfred Kunze	30068939	40 hec.	Verbal-Written
Е	Manfred Kunze	151233	45 hec.	Verbal-Written
F	Robert Livingstone	133462	59 hec.	Contacted

Site #45: Lower Kars or Jenkin's Cove

Site	Ownership	PID	Area	Status
А	Ken Hardie	143669	100 hec.	Verbal-written
В	Charles Fowler	143537	2 hec.	Not Interested
С	Katheline Peach	61358	1 hec.	Contacted

Site #14: Walton Lake

Site	Ównership	PID	Area	Status
А	Adair's Wilderness Lodge	00152835	20	Written
М	Adair's Wilderness Lodge	30181309	64	Written

Note: Walton Lake is a significant. Property parcel information is confusing given that the Adair's lease the land from DNRE. DNRE owns 10 of 13 significant parcels. JD Irving owns 1. Are significant because they include the lake (Arctic Char population) and surrounding bogs and wet softwood stands.

Site#27: Cedar Camp/Bear Cave

Site	Ownership	PID	Area	Status
В	Stuart&Pearl Taylor	00151167	156	
С	Emerson Fanjoy	00151142	66.3	Contacted

Site#24: Picadilly Mountain

Site	Ownership	PID	Area	Status
А	Harley Murray	30113336	45.7ha	Written
В	Guy Colpitts	00132159	40.8ha	Verbal
С	Rothesay Paper Holdings	00133066	38.9ha	*Contacted
D	Guy Colpitts	00132191	43.1ha	Verbal
Ε	Robert Livingstone	30123988	40.7ha	Contacted
F	Robert Livingstone	00133462	59.8ha	Contacted
G	Robert Livingstone	30123970	19.3ha	Contacted
Н	Jean Levesque	00132258	48.5ha	Contacted
I	DNRE	00061994	139ha	**Contacted
J	Ralph Cunningham	30087530	108ha	Verbal
K	Merle MacKenzie	00132217	96.6ha	Contacted
L	Audrey Watson	00132308	76.2ha	Not Interested

* JDI has added this parcel of land to their Unique Areas Program
 ** DNRE parcel has been added to the Crown Lands & Protected Area Program

Site# 59 Dally's Cave

Site	Ownership Murray Hawkes	PID 149963	Area 119	Status Not Interested
Site# 21	Vinegar Hill			
Site A B C D F G H I	Ownership Ella McLaughlin Ella McLaughlin A. Wayne Lockhart A. Wayne Lockhart Donald Robinson Bonita Whitters Bonita Whitters David Irvine	PID 203992 106062 204420 204453 205146 200105 199869 203059	Area 41.30 9.07 5.93 15.9 81.8 112 38.5 34.2	Status Verbal Not Interested Not Interested
J L M N O P Other:	Elsie Robinson David & Colleen Robinson John & Valeric Mercer Walkerville Farms Ltd. Walkerville Farms Ltd. John Mercer Myles Sherwood	203039 201905 481564 204834 30143754 206292 30143739 30085849	34.2 34.70 43.5 7.5 16.4 10.5 28.67	Written Contacted Contacted Contacted

Site #58: Waterford Ice Cave

Site	Ownership	PID	Area	Status
	Lorna Crothers	485193	42.3	Contacted

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Appendix C

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Natural Resources Canada

Canada Service canadien

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Ressources naturelles

P.O. Box 4000 Fredericton, N.B.

Canadian Forest

Service

E3B 5P7

C.P. 4000 Fredericton, N.-B. E3B 5P7

July 28, 1997

Mr. Marc Sheeran Environment Canada Action 21 5th Floor, Queen Square 45 Alderney Drive Dartmouth, Nova Scotia B2Y 2N6

Dear Mr. Lohmes,

I am writing in support of the funding application for the project "Fundy Model Forest Conservation Stewardship" submitted by John Foley. This is a follow-up project to the "FMF Gap Analysis" project which I initiated. I have a strong interest in seeing the stewardship work completed, and particularly, in seeing protection afforded some of the most ecologically valuable sites which were identified by the Gap Analysis. We are not in a position to fund the project directly, but will provide whatever in-kind support is required to make the project work. We are prepared to provide office space and supplies, computer access, transportation, telephone, fax, and several hours per week of my time.

I believe that this is an important project. With increasing pressure on the forest resource in this province, few opportunities remain for protecting the array of the province's natural community types on crown land. Private land stewardship is an increasingly important option for conservation and support and education are vital components in beginning a stewardship program. I believe that this project will significantly increase the probability of successful stewardship for important sites in the Fundy Model Forest.

Sincerely,

Judy Loo Research Scientist

Your file Votre référence Our file Notre référence



John Foley Samantha Hines Canadian Forest Service Hugh John Flemming Forestry Complex Frederiction, New Dranswick

March 26, 1999

Dear John and Samantha,

Please find below a summary of my in-kind contribution to the woodlot conservation program.

Item	In-kind S
Presentation on the ecosystems and forest types of NB	900
at the Conservation Mgmt. Course at SNB	
Review of the Conservation Stewardship Manual	300
and conservation management plans	
Teaching about soils/site/trees on the conservation	600
management field course	

Total \$1800.00

Congratulations for doing a great job with introducing conservation management to the woodlot staff. I look forward to working with again this year.

Sincerely me

Bruce Matson, R.P.F. Extension Forester Forest Extension Service New Brunswick Dept. of Natural Resources and Energy Box 150, Hampton NB, E0G 1Z0 506-832-6171; fax 506-832-6029 Email: bematson@gov.nb.ca http://www.gov.nb.ca/dure/fex/index.htm

** TOTAL PAGE.02 **

Natural Resources and Energy

Ressources naturelles et Énergie



September 12, 1996

Wildlife Habitat Canada 7 Hinton Avenue North Suite 200 Ottawa, ON K1Y 4P1

Attention: Jamie Fortune, Program Manager

Dear Mr. Fortune,

I understand that John Foley will be submitting a proposal to you in relation to the Fundy Model Forest Conservation Stewardship Project. This letter is sent to confirm that the New Brunswick Department of Natural Resources and Energy supports this project and is prepared to provide Mr. Foley with access to resource inventory information pertaining to the project.

Sincerely yours,

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David MacFarlane Acting Deputy Minister

jld/fortune.let

P.O. Box 6000 Fredericton New Brunswick Canada E3B 5H1 Case postale 6000 Fredericton Nouveau-Brunswick Canada E3B 5H1





April 30, 1999

Ms Samantha Hines Coordinator Fundy Model Forest Conservation Stewardship Project c/o Hugh John Flemming Forestry Complex

Hand Delivered

Dear Ms Hines:

This letter confirms that The Nature Conservancy of Canada provided in-kind support, in excess of four thousand five hundred dollars (\$4500) to the Fundy Model Forest Conservation Stewardship Project during the fiscal years 1997-98 and 1998-99. Support provided was in the areas of administration and fieldwork.

On behalf of The Conservancy, I wish to congratulate you on the success of this undertaking and the resulting protection of ecologically significant lands. All the best to you in the future.

Yours truly,

Linda M. Stephenson Director, Atlantic Region

> The Nature Conservancy of Canada 26 Contland Avenue, New Maryland, New Brunswick E3C 1B5 Tel: 506-450-6010 • Fax: 506-450-6013

La Société canadienne pour la conservation de la nature 26, avenue Cortland, New Maryland (Nouveau-Brunswick) E3C 1B5 Tél : 506-450-6010 • Téléc : 506-450-6013



S.N.B. WOOD CO-OPERATIVE LTD.

13 DRURYS COVE ROAD P.O. BOX 4473 SUSSEX, N.B. E4E 5L6 PHONE (506) 433-9860 FAX (506) 433-3623 EMAIL: snb@nbnei.nb.ca

Wood Producers Working Together to Heip Themselves at Woodlot Management & Marketing Forest Products

April 16, 1999

Samantha Hines Canadian Forest Service Atlantic Forestry Centre Natural Resources Canada P.O. Box 6000 Fredericton, N.B. E3B 5F7

Dear Samantha:

I wish to confirm that the S.N.B. Wood Co-operative Ltd. has provided 'an in-kind contribution to the 1997-98-99 S.N.B. Woodlot Owners Conservation Stewardship Project of \$3,600, in the form of technical staff time in the field.

Thank-you for the opportunity for our staff to be a part of this project.

Yours truly,

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Brian Belyea Sustainable Forest Management Department Manager

BB/cm

FMF Fund Accounting of Expenditures*

Job Type	No. of Employees	Total	
Professional	1	\$950.00	
Technical	2	\$1750.00	
Educational Materials	N/A	\$450.00	
	Total:	3150.00	

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*This does not include the 10% holdback. It will not be needed.

ACTION 21

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Project #: NB04002Type of Report Q1() Q2() Q3(*)Project Title: Fundy Model Forest Conservation Stewardship Project

2. Using performance indicators, describe progress this quarter in terms of the expected results for this project.

F	RESULTS ACHIEVED TO DATE	PERFORMANCE INDICATORS
	1. Our focus by end of Quarter Three was to attempt to contact 75% (23) of the landowners of the seven priority sites and to work successfully with 30% (7) of these in order to obtain some type of conservation agreement.	24 landowners (83%) were successfully contacted, and 12 (40%) of these entered into a verbal agreement to protect the special ecological features on their properties, securing 21 parcels of land. One landowner from year 1 (1997) was contacted and verbally agreed to protect the integrity of their woodlot. See Appendix A for more information
	2. The final stages in implementing a management prescription on a demonstration woodlot that follows <i>"The Conservation for Ecologically Sensitive Forested Sites on Private Woodlots Within the FMF"</i> manual has been completed.	See Appendix B for more information and a copy of the Demonstration Woodlot pamphlet.
	3. Create a botanical database that compiles all information for the FMF gap sites and landowner information for 1997-2000 Conservation Stewardship Project's priority sites.	The database was created using Microsoft Access 7.0. It includes FMF gap site descriptions and plant lists, Conservation Stewardship priority site descriptions and landowner plant lists. A copy of the database is found on the floppy distributed with this report. A 'read me' file describes how to view the information.
	4. Continue fostering a cooperative relationship with DNRE and JD Irving Ltd. in ensuring that Gap sites that fall within their boundaries are under some sort of protection or special management.	DNRE is currently looking into the potential protection status (ecological reserve or conservation area) of these areas. JDI has removed the gap site boundaries from their management plans and/or have been added to their Unique Areas Program. See Appendix C for JDI management prescriptions.
	5. Produce an educational display for presentation purposes that will aid in generating public awareness for the Southern New Brunswick Conservation Stewardship Project.	Those that attended the Forest Certification Workshop February 8 & 9 th , 2000 had a chance to view the display, ask questions and pick up some information on the project. See Appendix D for photos of the display.
	6. Contact all participating landowners in the project thus far, and notify them that SNB Wood Cooperative will be taking over the project.	See Appendix E for a copy of the final letter sent to participating landowners.

3. Describe the specific activities that have contributed to the achievement of these results (including communications activities):

See Appendices

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4. Identify Final Goals:

Successfully turn the project over to SNB*

* This will have been completed by March 31st, 2000.

Recipient:	FOR EC USE ONLY
Phone:	Reviewed by:
Date:	Date:
Signature:	Signature:

Appendix A

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Site #14: Walton Lake

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Site	Ownership	PID	Area	Status
А	Adair's Wilderness Lodge	00152835	20	Verbal
М	Adair's Wilderness Lodge	30181309	64	Verbal

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Note: Walton Lake is a significant. Property parcel information is confusing given that the Adair's lease the land from DNRE. DNRE owns 10 of 13 significant parcels. JD Irving owns 1. Are significant because they include the lake (Arctic Char population) and surrounding bogs and wet softwood stands.

Site# 21 Vinegar Hill

Site	Ownership	PID	Area	Status
А	Ella McLaughlin	203992	41.30	
В	Ella McLaughlin	106062	9.07	
С	A. Wayne Lockhart	204420	5.93	
D	A. Wayne Lockhart	204453	15.9	
F	Donald Robinson	205146	81.8	Verbal
G	Bonita Whitters	200105	112	Not Interested
Н	Bonita Whitters	199869	38.5	Not Interested
Ι	David Irvine	203059	34.2	Verbal
J	Elsie Robinson	201905	34.70	Contacted
L	David & Colleen Robinson	481564	43.5	Contacted
М	John & Valeric Mercer	204834		
N	Walkerville Farms Ltd.	30143754	7.5	
0	Walkerville Farms Ltd.	206292	16.4	
Р	John Mercer	30143739	10.5	
Other:	Myles Sherwood	30085849	28.67	Contacted

Site#24: Picadilly Mountain

Site	Ownership	PID	Area	Status
Α	Harley Murray	30113336	45.7ha	Verbal
В	Guy Colpitts	00132159	40.8ha	Verbal
С	Rothesay Paper Holdings	00133066	38.9ha	Verbal*
D	Guy Colpitts	00132191	43.1ha	Verbal
E	Robert Livingstone	30123988	40.7ha	Contacted
F	Robert Livingstone	00133462	59.8ha	Contacted
G	Robert Livingstone	30123970	19.3ha	Contacted
Н	Jean Levesque	00132258	48.5ha	Contacted (awaiting response)
I	DNRE	•00061994	139ha	Verbal*
J	Ralph Cunningham	30087530	108ha	Verbal
K	Merle MacKenzie	00132217	96.6ha	Contacted (awaiting response)
L	Audrey Watson	00132308	76.2ha	Not Interested

* JDI has no access to this parcel of land and have included it with the other Gap Sites.

** DNRE parcel has been added to the Crown Lands & Protected Area Program

Site #25: Urney Red Oak Ridge

Site	Ownership	PID	Area	Status
A	Audrey Watson	132308	76 hec.	Not Interested
В	Brian Murray	132225	43 hec.	Verbal
С	Ivy Carter	151274	62 hec.	Not Interested
D	Manfred Kunze	30068939	40 hec.	Verbal
E	Manfred Kunze	151233	45 hec.	Verbal
F	Robert Livingstone	133462	59 hec.	Contacted

Site#27: Cedar Camp/Bear Cave

Site	Ownership	PID	Area	Status
В	Stuart&Pearl Taylor	00151167	156	
С	Emerson Fanjoy	00151142	66.3	Contacted*

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* The Fundy foot path goes through his woodlot.

Site #45: Lower Kars or Jenkin's Cove

Site	Ownership	PID	Area	Status
А	Ken Hardie	143669	100 hec.	Verbal
В	Charles Fowler	143537	2 hec.	Not Interested
С	Katheline Peach	61358	1 hec.	Contacted

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Site #58: Waterford Ice Cave

Site	Ownership	PID	Area	Status
	Lorna Crothers	485193	42.3	Verbal

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Site# 59 Dally's Cave

Site	Own

Ownership	PID	Area
Murray Hawkes	149963	119

Not Interested

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Status

Appendix B

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"A Demonstration Woodlot"

One objective of the SNB Conservation Stewardship Program for the 1999-2000 fiscal year is to develop and implement a management plan that incorporates conservation objectives within a FMF gap site. This management plan would follow the "Conservation Guidelines for Ecologically Sensitive Forested Sites on Private Woodlots Within the Fundy Model Forest" manual. Four of the six objectives have been met as of November 30, 1999. These objectives are:

1. Selection of a private woodlot owner

- A private woodlot owner, whose property falls within a gap analysis site has agreed to incorporate the conservation guidelines and will allow his property to be used as a 'demonstration woodlot'.

- Completed a visit with the landowner to explore the community types present and the general landscape.

2. Botanical Survey

- A botanical survey was conducted by B&B Botanical.

- This survey helped pinpoint the ecologically significant features of the property.

3. Documentation of Botanical Findings

- B&B Botanical compiled a document on the findings and the ecologically significant community types.

4. A Management Planning Team

- On August 25th, the management planning team met to review the document (see attached agenda)

- On October 25th, the team visited Parlee Brook to view the findings described in B&B's document.

- Various management options were discussed about each of the community types based on the conservation manual and the landowner's objectives.

5. A Management Plan

- A management plan agreeable to all those involved, encompassing conservation measures as well as the landowners' objectives was finalized on January 31st, 2000.

- The final management plan will be distributed with the final report of this fiscal year.

6. Implementation

- Implementation of the management plan will begin this spring. Those involved with implementation are SNB technicians and some technical support from the management planning team.

Appendix C

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JDI Prescriptions for FMF Gap Sites Falling on their Land

Gap Site Status:

Wolf Brook - Inoperable due to steepness of the slopes

Telegraph Brook - Inoperable on one side of brook Jack Pine plantations found along the other side. Will be reverted back to red spruce.

Hatfield Point - Inoperable

Mannhurst Road - Select cut of cedar will occur in the future *

Morgan Hill Tolerant Hardwood Forest - HW improvement already took place *

Little Salmon River Gorge - Inoperable due to steepness of slope

Parlee Brook - Numerous management regimes to occur * Unblocked where the rare Saxifrage is found

Rose Brook - Inoperable

Brandy Brook - 90% inoperable Two stands have management prescriptions. Two - pass cuts *

Goose Creek Gorge - 90% inoperable Two CC are forecasted for period 1 and 5. May be too steep.

Picadilly Mountain - No access, thus inoperable.

Quiddy River - Some inoperable Clearcuts can be found right up to the edge of the gap site boundaries HW improvement treatments are planned for period 2

Anagance Marsh - Part of the Unique Areas Program The part falling within the Gap Site boundary is inoperable.

Northeast Branch Brook and Bogs - Has been cut around the borders of the Gap Site. The majority of the gap site is not blocked for managment prescriptions A select harvest will occur in one area along the gap site boundaries

* Harvest and silviculture treatments proposed for the 1997 Fundy License managment plan (taken from JDI's 1997 Crown Land Management Plan - License 7 document)

Cedar selection: Remove 20% of merchantable cedar and 80% of merchantable tress of all other species $(18m^2/ha residual basal area remains)$. Re-enter every 25 years, remove 80% of merchantable tress of all other species; remove a volume of cedar while maintaining a resiual basal area $\ge 24 m^2/ha$.

HW Improvement: Remove 30% of volume in first pass. Return every 20 years and remove 20% of standing merchantable volume. Intent is to provide long term highgrade hardwood products. At lease 18m²/ha of basal area and 50% crown closure will be maintained within the residual stand.

Clearcut: Remove all merchantable stems of all species

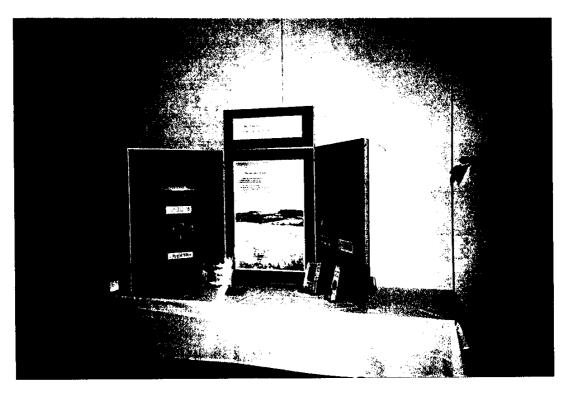
Two-Pass Cut: Remove 40% of standing volume of all merchantable stems. A basal area of 18m² will be maintained in the residual stand. Remaining volume to be removed after 10 years.

Appendix D

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Southern New Brunswick Conservation Stewardship Project Display Presentation, at the Forest Certification Workshop, Sheratin Inn February 8 & 9, 2000





Appendix E

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The Southern New Brunswick Woodlot Owners Conservation Stewardship Project

^{c/o} Canadian Forest Service, P.O. Box 4000, Fredericton, NB, E3B 5P7 phone: 506-452-3735; fax: 506-452-3735

March 31st, 2000

Dear

As of April 1st 2000, the Southern New Brunswick Woodlot Owners Conservation Stewardship Project will be changing hands. SNB Wood Cooperative, a local wood products marketing board in Sussex will continue to enhance the conservation stewardship project's conservation and sustainable management mandate.

We would like to take the opportunity to extend our thanks and appreciation for your participation in the conservation stewardship project. Your support has enabled our group to successfully meet our project's primary objectives of educating landowners on ecologically significant areas, and providing them with options for conservation.

We have thoroughly enjoyed working with you and have enjoyed learning the history of the area in which you live. We hope that you will continue to play a vital role in the conservation stewardship project.

Enclosed is the *Demonstration Woodlot Project* brochure, which is the latest initiative we have pursued this year. Included in the brochure is the necessary information on how you can participate in a program which allows you to manage your land in a conservation-oriented manner. For more information on this project, contact the Fundy Model Forest office or the SNB Wood Co-op office. Also attached are the required contact names, addresses and numbers for those individuals requiring further information on the conservation stewardship project, or landowners interesting in pursuing long-term conservation options.

Sincerely,

John Foley

Samantha Hines-Clark

Beth Fletcher

Appendix F

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Southern New Brunswick Wood Co-operative Objectives for the Continuation of The Conservation Stewardship project

"Conservation Management Program"

The objectives for the SNB "Conservation Management Program" are as follows:*

Objective 1: To promote public interest in the importance of ecologically sensitive areas.

- Objective 2: To promote the conservation management practices on ecologically significant sites to private woodlot owners in the S.N.B area and to work with and assist those landowners, who are interested in managing or conserving these sites.
- Objective 3: To provide interested landowners with land management options that provide for some exiting land use activities while maintaining existing ecological values.
- Objective 4: To provide the Southern New Brunswick Wood Co-operatives (SNB) technicians withe the background and materials required to help them more efficiently identify and incorporate these important ecological features in their private woodlot management plan.
- Objective 5: To re-contact those landowners were contacted during previous years of the project to update them on the project, as well as to answer any questions or concerns they might have.

Objective 6: To implement the SNB Conservation Management Program for participating landowners which will help reinforce the value of their participation in the land conservation program.

* These objectives were taken from SNB's Environmental Trust Fund proposal.