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InForM

The Newsletter for Foothills Forest Partners

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Issue 6

Foothills Forest is one of 10 Model Forest sites approved for establishment under the *Partners in Sustainable Development of Forests* program. This newsletter is being produced to provide information to interested partners and groups regarding the progress of activities being carried on within Foothills Forest.

Mexican Delegation Visits Foothills Forest

On August 19, 1993, representatives from the two Mexican Model Forest proponent sites visited Foothills Forest. The day began with welcomes and introductory remarks by Bob Udell, President of Foothills Forest and Dennis Quintilio, Director of the Forest Technology School and Foothills Forest Board Member. Presentations were made on the Foothills Forest program and Canada's Green Plan as well as our technology transfer activities. Demonstrations of the Forest Technology School's fire simulator and our G.I.S. lab facility rounded out the morning. The group then spent the afternoon visiting field sites including the McLeod River campsite, the Gregg River burn and a variety of harvest and silviculture treatment areas. Topics of interest during the afternoon included provincial forest management policy, boreal forest ecology and silvicultural practises and prescriptions. The day provided us with an excellent opportunity to exchange information and to prepare our own staff for their upcoming visit to Mexico.

Foothills Participates in International Model Forest Program

Carol Doering and Pat Golec were part of a Canadian delegation which travelled to Mexico from August 24th to September 2nd to assist in the development of two Model Forest Proposals. Two sites were selected following a competition which was held earlier this year. One site is in the tropical rainforest and includes the Calakmul Biosphere Reserve in Campeche State on the Yucatan Peninsula. The other site is in a temperate pine forests in Chihuahau State in the northern part of the country. If all goes well, work should start in both areas in April 1994.

Model Forest Network Meeting and Workshop

Bob Udell and Rick Blackwood travelled to Cornerbrook, Newfoundland during the week of October 18th to attend the Model Forest Network Committee meeting. Prior to the meeting, a two-day workshop was held to discuss Indicators of Sustainable Development and Economic Measures of Non-Timber Values.

Group Effectiveness Course

For 4 days in late September, Rick Blackwood, Melissa Todd, Carol Doering, Cliff Mathies and Pat Golec took part in a Group Effectiveness Course. Sponsored by Weldwood of Canada Limited, the course helps participants to learn mechanisms for leading and participating in group discussions and decisions as well as recognizing obstacles to a consensus-building process. One of the exercises had group membership change during the course of completing a particular project and taught some strategies for dealing with this real-life situation.

Activity Updates

GIS Analyst - Carol Doering

GIS Lab

A total of 900 questionnaires were sent out requesting input on the future use of our training lab. Groups targetted included; forest companies, AFPA members, Alberta Land Surveyors, provincial government agencies, municipal governments, oil & gas companies, etc. To date there have been about 105 responses and they will be used to help plan courses in the future. We have just completed two week-long training courses in the Arc/Info GIS software and the lab performed well. There were a total of 19 participants, 16 from the Alberta government and 3 from the forest industry. The lab will soon be turned over to the Forest Technology School for course development and administration. The Foothills Forest GIS Analyst will continue to provide hardware and software maintenance as needed.

Data Model

Work is continuing on the logistical data model with a new target completion date of October 26 (the overall data model development has been delayed due to Mexican Model Forest meetings, holidays, etc.) We are also currently evaluating the ArcForest software. A meeting with ESRI staff was held on October 28 to discuss how ArcForest can be integrated with our data model. The final detailed data model will then be developed with expected completion by Christmas.

Extend & Upgrade Digital Inventory

We have received the first few townships of digital Phase 3 Forest Inventory data from Stewart Weir Land Data. Most of the bugs have been ironed out and we should have a basic forest inventory for the entire model forest area by the end of November.

Seconded Forester - Rick Blackwood

Project Steering Committee Coordination

The Foothills Forest Project Steering Committee met on September 9, 10 and 14 in an effort to re-evaluate the 5 year work plan and to identify potential information gaps that may exist in our current program. The group prioritized these gaps and prepared a list for use in discussions with our Partners Advisory Committee on October 7 and 8. As a result of these discussions, the Project Steering Committee is again reviewing the 5 year plan and budget allocations for each particular subject area. The final product will be used in our Annual Work Plan submission to the Canadian Forest Service in February of 1994.

Biologist - Melissa Todd

Response of Elk to Various Timber Management Strategies in a Boreal Mixedwood Ecosystem

This summer, a trapping methodology was developed and perfected for use on a dispersed elk population in dense cover boreal mixedwood. Four modified Clover traps were placed and baited in August and resulted in 3 cows being successfully collared and tagged. The 3 successful captures combine with the 2 animals collared in March for a total of 5 collared elk cows. These collared animals are currently monitored on a regular basis and have yet to move from the summer range where they were captured. Trapping effort has been suspended for hunting season and will resume in November. An additional 4 modified Clover traps have been built for a total of 8 traps. We require another 15 collared animals, for a total of 20.

Pileated Woodpecker Ecology in the Boreal Foothills

A methodology for the capture and radiotagging of birds with teflon harnesses was developed and modified this spring/summer. Two males were successfully radiotagged but, unfortunately, one was killed

by a goshawk. The remaining bird has been intensively monitored for activity and movement and continues to be so. Plans for spring nest location and trapping are underway.

The Effect of Forestry Practices on Lichen Communities in the Foothills of West Central Alberta

Ken Kranrod, a M.Sc. student from the U of A has begun project planning and preliminary field work for this study. A test run of proposed field methodologies was conducted in the spring with resulting modifications to protocol. Ken has since conducted preliminary fall field sampling in Berland 1, and will continue with planning and course work at university in preparation for a full field season this spring.

Woodland Caribou Distribution and Habitat Selection in Disturbed (Cut Over) and Undisturbed Winter Range

This research is taking place within the boundaries of the Weyerhaeuser Forest Management Agreement Area (FMA), outside of the Foothills Forest, in the Redrock/Chicken/Prairie Creeks winter range area. Due to the inherent unpredictability of caribou in the Berland Working Circle (NW corner of Foothills Forest) where the study was first proposed, and the current caribou distribution information available for the Weyerhaeuser FMA study area, a cooperative effort between Foothills Forest and Weyerhaeuser was thought to be the optimum solution. Twenty caribou were successfully netgunned in the study area from a specially-equipped helicopter by Alberta Fish & Wildlife Services staff. Radiocollars are in place on 19 cows and 1 bull. NOVA Corporation provided another helicopter for 3 days and Weyerhaeuser provided one for 2 days. The caribou will be monitored by Fish & Wildlife and Foothills Forest staff for the next 2 months to determine movements during this period of range migration.

Mammal Inventories in Foothills Forest

The Habitat Suitability Index models for mammal species have been cleaned up and habitat variables required by each model have been identified. Sample site locations for track transects are currently being established and staff retained for the field inventory starting in December.

Wildlife Responses to Partial Cutting of White Spruce in Riparian Areas

The study area has been visited twice over the past six months as part of a coordinated effort with other projects proposed for the McLeod Demonstration Area. A McLeod Demonstration Area Working Group has been formed to allow for the coordination of all projects within the area. The Foothills Forest Biologist and Weldwood's silviculture staff are currently planning the project areas relative to harvest/silvicultural strategies and to wildlife monitoring and requirements. This project will involve the development of community-level Habitat Suitability Index models and is currently seeking funding. There are no Foothills Forest dollars allocated to this project.

Spatial Habitat Analysis

The 30 HSI draft models developed for the terrestrial wildlife habitat assessment model of the Decision Support System have been re-evaluated and modified for publication in draft form this December. These models are currently in the hands of the consultant retained to develop spatial GIS versions and use these in a validation test of the spatial habitat supply analysis which forms the habitat assessment model for the DSS. Work has just begun.

Habitat Yield Curves

A part-time consultant has been retained to access existing data-bases and develop yield curves for the habitat variables identified for use in the 30 HSI models developed for terrestrial wildlife. These yield curves are required for the spatial habitat supply analysis. Work has just commenced.

Watershed Assessment Model Development

A Watershed Working Group was organized and a planning meeting held in April in order to clarify the needs of the Foothills Forest in terms of a watershed assessment model for the DSS and evaluate the appropriateness of the proposal, submitted by a consultant, to develop an aquatic DSS. The consultant's proposal was rejected. A watershed workshop to develop a detailed workplan for the development of a watershed assessment model, based on the framework established at the April meeting, is currently

planned for November. Consultants have been contacted to act as hydrology and biology facilitators for the workshop, and a final date and a list of attendants will be decided soon.

Bull Trout Study

Funding from Foothills Forest was granted to Trout Unlimited Canada (TUC) to complete an ongoing survey of bull trout spawning and rearing habitat in tributaries of the McLeod, Berland and Wildhay rivers in the Foothills Forest area. Field work was begun in August under TUC sponsorship by Trutta Consultants, and completed with the aid of Foothills Forest funding in September and October. Redd surveys and habitat mapping were conducted in addition to electrofishing to establish population distributions. With field work completed, the consultant is now in the process of data analysis and report preparation.

Effects of Forest Management on Genetic Diversity of Lodgepole Pine

The Work Plan for this project was prepared by Ellen Macdonald and Ross Hodgetts of the University of Alberta and has been approved by the Board of Directors for 1993/94. A U of A M.Sc. student is already involved in the project, and they are in the process of recruiting a Ph.D. student. Field work has commenced for the collection of pine foliar material from the Foothills Forest area.

Operations Forester - Roger Hayward

Silvicultural Impacts of Chipper Residue Disposal

Research blocks have been established and the pre-harvest assessment and baseline soil sampling have been completed. Heavy precipitation has delayed the project and altered the original scheduling. Harvesting will not occur until freeze-up with scarification in spring 1994 followed by planting and fertilizing shortly afterwards.

Aspen Regrowth and Competition after Release of Conifers

Trial A - First -year assessments are now complete.

Trial B - Sites have been selected, blocks established and baseline data collection is complete. Two summer treatment cuts were carried out at peak height growth and termination of height growth.

Trial C - The site has not yet been selected, but we are still scheduled to do a pre-harvest assessment this autumn.

Pre-harvest Treatments of Aspen for Reducing Brushing Expenditures

Plots have been laid out in the original girdled (1990) stands and the aspen regeneration has been assessed. New treatment areas have been tentatively selected, dependent upon requested changes to Weldwood's Annual Operating Plan.

Validation of Basal Diameter Ratio Competition Index for Pine-Aspen

Cutblocks have been selected and pre-release baseline data collected. Following the removal of aspen competition at desired levels, the post-release baseline data were also collected.

Enhancing and Protecting Natural White Spruce Regeneration in Mixedwood

Research blocks have been established and a pre-harvest assessment has been done on the understory protection section in accordance with Foothills Forest protocol. In addition, more detailed vegetation assessments have also been carried out.

Technology Transfer Officer - Pat Golec

Development of an Ecotourism Product for Foothills Forest

Maggie Ellen has nearly completed an inventory of Foothills Forest trails. They are being mapped and will be digitized and entered into the GIS system.

A bird checklist is being prepared for use by birders visiting the area. It will be released in the next 4 to 6 weeks.

Major Signs & Brochures

Signs have been ordered for placement at the boundaries of Foothills Forest. They are due to be delivered any day now and will hopefully arrive before freeze-up.

Speakers' Bureau

Numerous requests for presentations have been accommodated during the last 6 months. Visitors from Germany, Japan, Mexico, the United Kingdom and various parts of Alberta have all requested presentations regarding Model Forest activities.

Model Forest Network

Pat Golec is Chairman of the Model Forest Network Workshop Subcommittee for Education & Public Awareness. Planning is in progress to hold a workshop in Toronto on November 2 and 3 which will address common issues in the delivery of these programs throughout the Model Forest Network.

Harry Collinge High School

We are cooperating with the Forest Technology School in an exercise where second year forest technology students teach highschool science students about forestry. They will be presenting the Model Forest concept to the students and taking them out into the forest for a full day to learn about some of the skills used in resource management work.

Alberta Global Education Project

Pat Golec attended the Sustainable Development Education Workshop in Edmonton on October 26th. The purpose of the workshop was to identify opportunities which exist to introduce sustainable development concepts into the formal education system (kindergarten to grade 12).

Board of Directors

Bob Udell travelled to Corner Brook, Newfoundland for a meeting of the Model Forest Network Committee during the week of October 18th.

The next meeting of the Board of Directors is scheduled to start at 10:30 on November 29th at the Forest Technology School in Hinton.

Project Steering Committee

The Project Steering Committee met on September 9th, 10th and 14th at the Forest Technology School to review the Detailed Activity Workplans and to discuss preparation of the five year plan.

Partners Advisory Committee

The members of the Partners Advisory Committee met on October 7th and 8th to discuss the detailed activity workplans for 1994/95 projects and to review budget allocations proposed for the 5 year plan. Part of the meeting was held jointly with the Project Steering Committee so the members of both groups could share their concerns.

Ron's Outdoor a New Partner

Foothills Forest is pleased to welcome Ron's Outdoor Source for Sports in Edson as a Foothills Forest Partner. Store owner Ron Schlender was very accommodating in helping us to purchase a quad for the use of our field researchers. Thank you Ron!



Goals and Objectives for Protected Areas in Foothills Forest Discussed

The first public information session to provide some specific information on this Green Plan initiative to interested groups/individuals was held on Wednesday, October 13th at the Forest Technology School in Hinton. Approximately ten people attended to hear presentations on the goals and objectives for protected areas as part of the Foothills Forest proposal document. Alberta's Special Places 2000 program and its relation to this initiative was discussed, as was Weldwood's current practice

for the protection of special or unique areas that exist within the Forest Management Agreement area boundary.

The terms of reference document for the required Environmentally Significant Area (ESA) Inventory will be finished by November with a completed inventory ready for use, hopefully, by some time in March of 1994. Another public information session will be held at that time to present the inventory findings and outline work plans for the upcoming year.

In order to provide interested

individuals with an opportunity to identify areas that they feel are worthy of consideration for protected area status, we invite you to complete the attached form and mail or fax it back to our office.

The potential site must meet the nomination criteria as set out on the form in order to be considered. This requirement is necessary to ensure that sites meet the specific guidelines set out in Alberta's Special Places 2000 document.

Nominations will be accepted until the end of December, 1993.

Nomination Form for Candidate Sites



Nomination Criteria

Environmentally significant areas are important, useful and often sensitive features of the landscape. Studies to identify environmentally significant areas have been undertaken over broad regions of Alberta in order to have a consistent information base from which sound land use decisions can be made.

Foothills Forest, with the financial support of Canada's Green Plan, is embarking on a study to identify environmentally significant areas. One of the results of this study will be the identification of sites that should be designated as protected areas under Alberta's new Special Places 2000 initiative.

In order for an ESA to qualify as a candidate Special Place, it must fit specific criteria and a systematic approach as identified in the draft policy document "Special Places 2000: Alberta's Natural Heritage." The scientific basis for Special Places site selection is based on the ecological diversity of the province as described by a hierarchy of natural regions (ecoregions) and natural history themes. All of Alberta's existing protected areas have been analyzed to determine what more is needed to protect a full range of Alberta's ecological diversity within a network of Special Places.

The ESA study in the Foothills Forest will identify opportunities for new Special Places, using scientific criteria and based on other land use values and commitments.

<i>Candidate Site(s)</i>	<i>Special Features</i>
1) _____	
2) _____	
3) _____	

Name and address of person making nomination: _____

Please mail you nominations c/o Rick Blackwood, Foothills Forest, Box 6330, Hinton, Alberta T7V 1X6 or send by facsimile to (403)865-8266.