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• FOOTHILLS FOREST •

Issue 2, July 1993

Research Activities in Progress

The 1993 field season is underway for researchers at Foothills Forest. Two key projects related to the development of a wildlife habitat component for the computer model have been initiated. Two of the species chosen as indicator species for the forest are elk and pileated woodpecker.

Elk is considered to be a species of importance within the Foothills Forest area and has locally been the subject of wildlife management efforts by the Fish and Wildlife Division of Alberta Environmental Protection. The pileated woodpecker has been selected as a management indicator species for some forests in the United States and for Weldwood's Forest Management Agreement Area due to its use of large trees and dead wood, both of which are likely to be less common in managed forests.

Elk Study

Over the next 2 months, Foothills Forest biologists will be capturing 20 elk and fitting them with radio collars to track their movements. The biologists will then be able to determine the type of habitat and forest cover selected by the local population and use this information



The Pileated Woodpecker is the largest North American species of woodpecker and an indicator species for Foothills Forest.

to test and modify a habitat model for the Decision Support System (DSS). Changes in use patterns will be monitored after harvesting takes place within the study area. The response of the animals to road building, vehicular traffic and the physical human presence associated with logging and silvicultural practices will be examined. The assumption is that

management for elk will manage for other species with similar ecological requirements.

Pileated Woodpecker Study

This project is being conducted to obtain ecological data to test a preliminary Habitat Suitability Index model. The model describes the year - round habitat of the pileated woodpecker and must be tested with field research information. It is expected that habitat supporting pileated woodpeckers will also support 45 other associated species. There is a total of 284 species of wildlife in Foothills Forest.

As many as 20 pileated woodpeckers will be captured and fitted with radio transmitters.

These birds will be located throughout the year and will be more closely monitored when young are in the nests and during mid-winter. The end results will include a revised habitat model, guidelines for habitat management, and a better understanding of pileated woodpecker ecology in Foothills Forest. This study will also form the basis for a long-term monitoring and adaptive management program. By determining the types of forest required by



these birds and the impact of forest harvesting, resource managers will be able to plan cutting operations to ensure that sufficient areas of habitat are maintained to sustain the population.

The Foothills Forest DSS

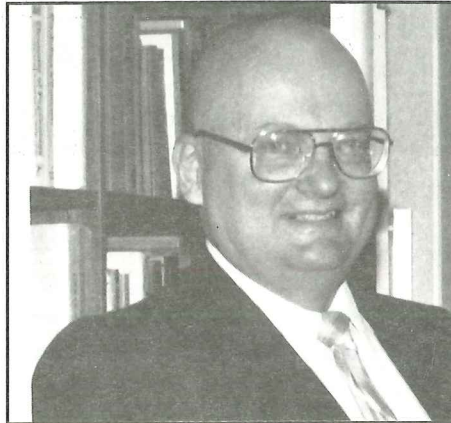
The decision support system (DSS) is a set of computer programs being designed to combine spatial information (e.g. the location of roads in relation to creeks or cutblocks in relation to riverside habitat) with non-spatial information (tree heights and densities or wildlife habitat ratings) to predict the amount and location of resource based values such as timber and wildlife over time.

The DSS will allow the user to look at the forest at different points in the future based on predetermined criteria and estimate the effect of various management strategies. The computer-based system will not replace the resource managers' own experience and intuition but it will allow him to easily test the effect of different harvest rates, regeneration techniques and stand tending practices on integrated resource management goals over a 160 year planning horizon. For example, if a proposed harvest sequence results in a predicted shortage of elk winter range in 50 years time, the sequence can be changed and re-tested until the desired amount of elk winter range is achieved.

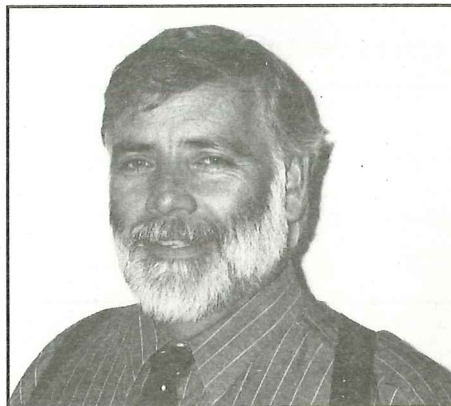
As the DSS evolves, other data needs will be identified and additional models and indices will be developed and added where practical.



Meet the Foothills Forest Board of Directors



Jim Beck is a Professor of Forest Management at the University of Alberta. As a representative of the Partners Advisory Committee, he feels that the results of the Model Forest Program will demonstrate how to integrate the management of forests on a spatial or landscape basis.



Colin Edey represents the Canadian Energy Pipeline Association and the Partners Advisory Committee on the Board of Directors. He works as Senior Environmental Planner for Nova Corporation of Alberta, a company which maintains 18,000 kilometres of natural gas pipelines. Colin believes that Foothills Forest will enhance the ability of the petroleum and forest industries to establish integrated resource values in a working forest

and to identify common goals and objectives.



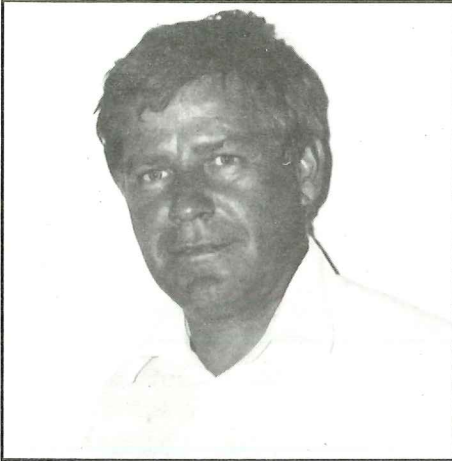
Frank Cardinal lives in Rocky Mountain House where he is the Director of the East Slopes Region for the Fish and Wildlife Services Division of Alberta Environmental Protection. Frank expects Foothills Forest to contribute to an ecosystem management approach to timber harvesting activities and looks forward to more realistic and practical integration of wildlife and fisheries values with future timber harvesting practices.



Bill Fairless is a Registered Professional Forester and Superintendent of Edson Forest. Bill sees Foothills Forest as an economic benefit to the area through the employment which will be generated directly and indirectly by the



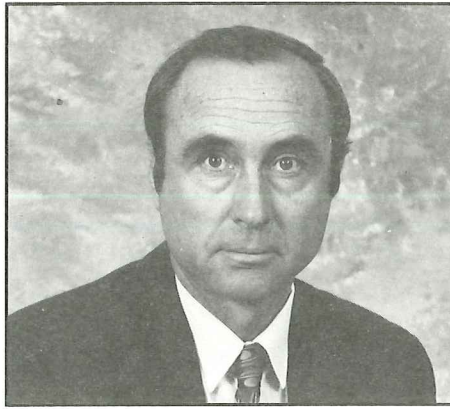
activities being carried out. He expects the Model Forest Program to increase the level of knowledge regarding forestry practices for the public and for resource managers.



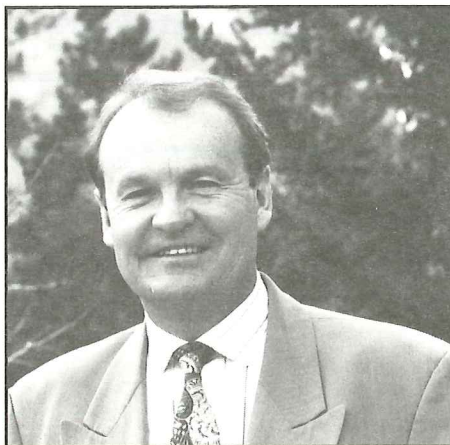
Gaby Fortin, Superintendent of Jasper National Park lived and worked in both Waterton and Banff before moving to Jasper in 1989. Gaby sees the National Parks contributing to Foothills Forest goals by providing an ecosystem management point of view and by providing opportunities for the collection of data from an area where resource extraction activities do not take place.



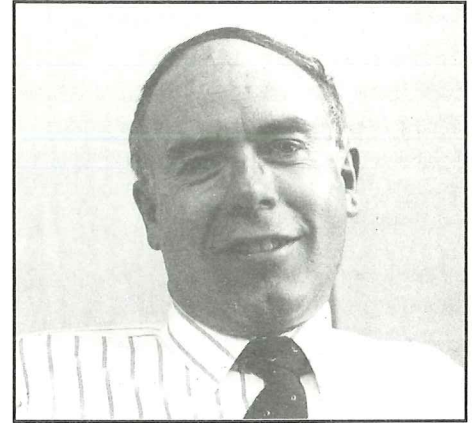
Don Laishley is Chairman of the Board for Foothills Forest and Forest Resource Manager for Weldwood. Don is confident that Foothills Forest will show Canada and the world that sustainable development and integrated forest management are compatible and achievable goals.



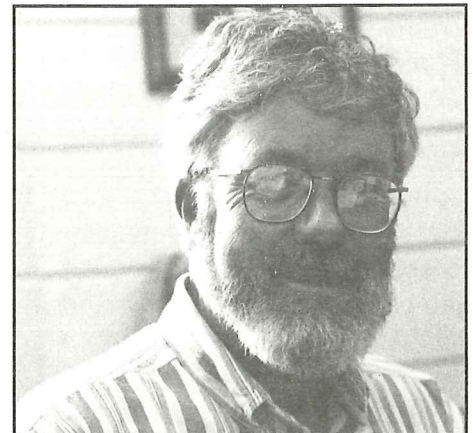
Dennis Quintilio sees the Model Forest Program as "an invitation to think differently". It is an opportunity to look at current operating methods and see if they can be enhanced through consultation and cooperation with other partners. As Director of the Forest Technology School in Hinton, he expects Foothills Forest to provide information regarding improved resource management practices to the forestry community as well as to local residents and international visitors.



Ross Risvold is an instructor at the Forest Technology School currently working as General Manager of the Banff Centre for Management. A former Mayor of Hinton, Ross believes that Foothills Forest can be an excellent example of the potential for collaboration by strategic partners as well as a true model of effective integrated resource management.



Ron Staple is the Vice President, Pulp Operations for Weldwood of Canada Limited (Hinton Division). He believes Foothills Forest has an unprecedented opportunity to undertake research specific to this region so that our forests can be even better managed and can offer the public and industry opportunities to see improvements in a commercial forest operation.



Bob Udell, President of Foothills Forest, is Weldwood's Forest Planning Manager and has been active on a number of panels and committees including the Expert Panel on Forest Management in Alberta. Bob is heavily involved in the day to day management of Foothills Forest and is looking forward to the day when new knowledge gained through the Model Forest program is built into forest management plans and practises.



Chairman of Canadian Council of Forest Ministers Visits Foothills Forest

by Bob Udell

On June 2 and 3, the Honourable Titus Alloo, Minister of Natural Resources for the Northwest Territories, and Mr. Joe Handley, Deputy Minister, paid a visit to Foothills Forest. They were accompanied by Dave Kiil, Director General of the Northwest Region of Forestry Canada, and Bob Newstead, Model Forest Coordinator for the Northwest Region.

In addition to his portfolio as Natural Resources Minister, Mr. Alloo is also Chairman of the Canadian Council of Forest Ministers. Having travelled from Pond Inlet at the northern tip of Baffin Island, he was very interested in new initiatives in integrated resource management on the lands within our Model Forest.

Bob Udell, Weldwood's Forest Planning Manager and President of Foothills Forest, took the guests on a helicopter tour of the forest. They saw reforestation, caribou management, recreational rivers, trapping, a wildlife reserve for a canyon dwelling mountain goat herd, wilderness, experimental harvesting, stand tending, coal mining, and road building. That evening, people from Weldwood, Foothills Forest, the Forest Technology School and the Land and Forest Services Division of Alberta Environmental Protection met at the Athabasca Lookout Nordic Centre for a barbeque and an opportunity to meet Mr. Alloo and Mr. Handley.

The following day, Dennis Quintilio, Director of the Forest Technology School, conducted a tour of the

school facilities and the Foothills Forest Geographic Information Systems laboratory. A meeting with Don Laishley, Weldwood's Forest Resource Department Manager and a guided tour of the Hi-Atha Sawmill conducted by Operations Manager Dennis Hawkesworth rounded out the visit.

Mr. Alloo recently visited Europe where, on behalf of the Government of Canada and the Canadian Council of Forest Ministers, he spoke to European legislators about Canadian forest practices. His tour of Foothills Forest gave him first-hand exposure to one of Canada's Model Forests and background information which allowed him to begin to correct the image of Canadian forestry as it is being portrayed by some environmental groups in Europe.

Ecological Reserve Study to be Completed within Foothills Forest

by Rick Blackwood

Foothills Forest has been successful in obtaining funding for the possible creation of an Ecological Reserve. This activity is consistent with one of the goals of the Forest which is to "Conserve forest biodiversity, including genetic, species, ecosystem, spatial and temporal aspects." Four objectives associated with the goal involve identification of undisturbed ecosystems and incorporation of undisturbed/protected ecosystem objectives, including an old-growth strategy, into the integrated resource management strategy. The study complements the Alberta: Special Places 2000 draft being circulated by Alberta's Department of Environmental Protection.

The location for such a reserve will be determined after a comprehensive environmentally significant areas (ESA) inventory is completed over all of Foothills Forest. This process will evaluate areas on the basis of their unique features and current status compared to representative protected areas in the province.

All "protected areas" in Alberta, regardless of classification, must be reviewed and approved through recognized channels in order to be legislatively protected as an Ecological Reserve, Natural Area or Wilderness/Wildland. The identification of candidate sites for consideration by the approval bodies is the first step in the process.

Work for this year will focus on gathering public input on potential candidate sites, developing the terms of reference for the ESA inventory; and carrying out the inventory itself. Inventory results will, hopefully, be presented to the public in March 1994 so that work may commence on establishing a short list of candidate sites for more intensive evaluation.

We would be interested in hearing from any groups or individuals who may be interested in getting involved in this project or perhaps helping to co-sponsor additional work in future years. If you would like to participate or have any questions, please call Rick Blackwood at 865-8332.