



Forest Service News

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News

Pilots look to boost forest productivity

Two large tracts of land have been designated pilot areas under a project to improve forest productivity.

Under the enhanced forest management pilot project, a 180,000-hectare tract in the southeast Invermere forest district and a 200,000-hectare portion of MacMillan Bloedel's TFL 39 near Campbell River will be the focus of a comprehensive study designed to find ways to improve forest productivity.

The pilot project marks the first step towards the development of a provincial forest management strategy which incorporates enhanced forest management.

Rick Brand, a planning forester with the corporate policy and planning branch, and forest sector initiatives Manager Jim Maxwell form a secretariat which supports the project. Underlying the initiative is one overriding question, Brand explained. "How can we raise the long-term timber supply by doing the right things now?"

That broad mandate encapsulates several sub-themes. Among them is the need to translate land-use planning into forest management operations on suitably zoned forest land, and to empower

forest managers to develop strategies at the local level.

The projects are divided into three phases. The first step is to compile an inventory of resource information to provide baseline data.

"The first task is to get to a point where we can say 'under the current management regime, this is a baseline'," said Brand. "Then we can identify ways to improve on it."

In pursuit of that goal, local working groups will use enhanced timber supply models to evaluate various scenarios to improve yield. All aspects of modern forestry — from forest genetics and silviculture systems to timber utilization and waste reduction — will be examined as part of their inquiry.

Brand noted that all options will be consistent with the Forest Practices Code and higher level plans.

Following analysis of the scenarios, a local forest

— Continued on page 2



More than 100 golfers took to the links for the Forest Service headquarters tournament. The June 15 event featured a number of prizes for outstanding golf and just for the heck of it. Among the winners were Penny McDougall (I), of policy and planning, and Joyce Sambrooke, retired from the correspondence services section. The lucky duo had a problem trying to decide who should take home the hatchet. For full results, see page 5.

Forest productivity, continued from page 1

management strategy will be proposed for each pilot area. The proposed strategies will be reviewed by regulatory agencies and local stakeholders, then incorporated into operational plans beginning next spring.

Brand anticipates many of the recommended management practices will not be entirely new. "A lot of innovative work is being done in pockets around the province," he explained. "These pilot projects will attempt to focus this expertise on one area to enhance productivity."

Brand said any new productivity projections resulting from the project will be considered by Chief Forester Larry Pedersen during future timber supply reviews. "If we can prove increased yield, the allowable annual cut may be altered."

Depending on the success of the pilot projects, new pilots will begin in other areas, which will form the basis for regional forest management strategies.

Ultimately, the regional strategies will be incorporated into a comprehensive provincial strategy.

A system of working groups and support committees has been established to manage the project. Local working groups of government and industry representatives have been appointed to lead activities in each pilot area. Public input will be funnelled through an advisory group of local stakeholders appointed for each pilot area.

Two additional committees will provide centralized support. A

technical advisory committee will help the working groups with data gathering and resource analysis. And a steering committee, which includes some of B.C.'s leading experts from government, industry and academe, will oversee the project.

Among Forest Service representatives on the steering committee are ADM Operations **Janna Kumi** and Deputy Chief Forester **Bronwen Beedle**. Although instrumental in initiating the pilot projects, former ADM Policy and

Planning **Don Wright** has taken on new responsibilities with his appointment as deputy minister of the Ministry of Education, Skills and Training.

The enhanced forest management pilot project is in response to the key recommendation contained in *A Forest Management Strategy and Action Plan for British Columbia*, a 1995 report produced by an ad-hoc task group comprising senior representatives of industry, labor and government. The recommendation was endorsed by the Forest Service, which agreed to undertake the pilot projects.

Workstations under scrutiny

The human resources branch marked Canadian Occupational Safety and Health (COSH) Week with a new workplace safety initiative by the accident prevention section.

Under the office ergonomics program, a one-day workstation assessment course will be delivered to staff at regional, district and branch offices over the next two years. Those completing the course will be qualified to check workstations to minimize the risk of injury due to poor ergonomics.

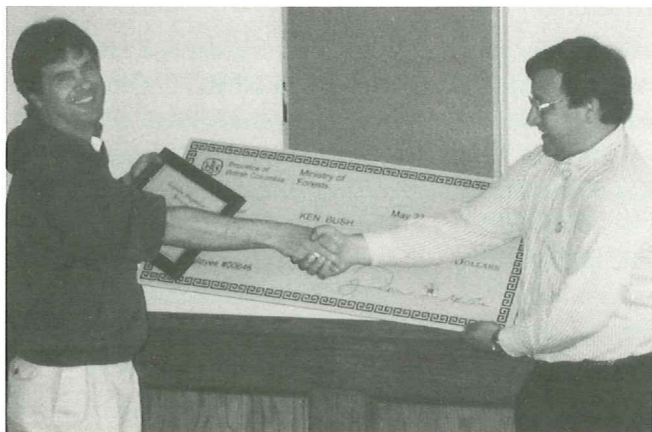
"The focus will be on workstation risks that can be eliminated with existing furniture and equipment," said Joe Paul of the accident prevention section. Based on the results of 40 assessments performed as part of COSH Week activities, there is ample room for improvement.

"We found a lot of factors that put people at increased risk of injury," Paul noted. Common flaws included improperly positioned monitors and keyboards, poorly adjusted chairs and unnecessary glare on computer screens from lights and windows.

Other COSH Week activities included a draw for an "ergo chair." The winner, Pam Shatzko, administrative assistant with the financial management branch, received her prize from Management Services ADM Harry Powell.

The theme of this year's COSH Week, held June 3 to 9, was "safety, comfort and productivity — peak performance at your workstation." For more information on the office ergonomics program, contact Joe Paul at 387-8766.

Software innovation earns hard cash



A \$6,000-handshake: Prince Rupert forest region Regional Manager Jim Snetsinger (r) congratulates Ken Bush.

A new piece of GIS automation has earned Prince Rupert forest region GIS Analyst **Ken Bush** \$6,000 under the employee suggestion program.

Bush's innovation is called ShellBatch, "a shell program" that works in conjunction with PAMAP, a GIS and mapping application, to automate GIS tasks. The program enables users to create their own programs to perform one or more GIS functions on several files at once.

It works by "remembering" all the manual steps a user performs on a file. After that, the same steps can be repeated on other files simply by entering a single command.

The idea for Bush's automation came from work by **Peter Berst**, a GIS analyst in the resource planning branch, said Bush. "That's what lit the lightbulb. I just saw another approach."

He began work on the system, with the assistance of GIS Analysts

Loretta Kent and **Margo Santry** (who has since left the ministry), last May. By November he had developed a prototype, and the system was being picked up by districts around the province.

An evaluation by Business

Application Analyst **Richard Mark**, of the business design branch, approved the technology the same month. Business design branch agreed to provide user support and hire a contractor to develop manuals.

A survey of regional, district and branch staff by ministry recognition Administrator **Susan MacLean** revealed the program will save the Forest Service over \$200,000 a year in improved productivity.

Bush's suggestion award came as good news for his whole family. He intends to use the money to upgrade his home computer.



Barbara Walker also received an award for developing a new mark-holders scaling agreement form. The form enables users to designate place of scaling and

Get involved in Science and Tech. Week

Science and Technology Week is coming again.

The official goal of Science and Technology Week is to celebrate B.C.'s innovative achievements and potential in science and technology, and to demonstrate to youth and the general public the link between science and technology and careers.

And since the Forest Service is responsible for some of B.C.'s most important pure and applied science, it makes sense to get involved.

The theme of this year's event, scheduled for October 18 to 27, is "Discover the World Around You." For more information, contact Serena Wou at the Ministry of Employment and Investment, 387-1628.

approve marking exemptions, and has been adopted in several districts.

Her suggestion, which earned her \$100, was evaluated by **Nick Krischanowsky**, manager of scaling and planning for revenue branch. Walker was district scaling supervisor in Morice forest district when she submitted her suggestion. She has since left the ministry.



Judi Lake (l), Kalamalka Forestry Centre “logging superintendent” directs a hybrid poplar harvest at the Interior research facility. Assisting are “production forester” Vicky Berger (r) and “chief faller” George Franssen. In their real jobs, the three are better known as a secretary, a scientific technical officer and a research technician at the centre.

Ten years of field trials involving hybrid cottonwoods have produced volume growth rates as much as six times higher than natural regeneration with native cottonwoods.

“It’s phenomenal compared to anything in nature,” says Dr. Michael Carlson of the research branch’s forest biology section at Kalamalka Forestry Centre in Vernon.

During the field trials, inter-specific hybrid cottonwoods were planted in valley bottoms in coastal and interior environments and competing vegetation was

Fiber-farming trees in a hurry

controlled for the first few seasons. Yields per hectare after 10 to 15 years is estimated to be 200 to 400 cubic metres of solid wood and fibre.

The results offer considerable promise for B.C.’s forest products industry, which is looking for alternatives to traditional fibre sources.

Hybrid cottonwood genetics and silviculture have been practiced in Europe and Asia for nearly a century, and in eastern North

America for about 60 years. But only in the last 20 years have fast-growing hybrids been bred for climates and soils in the Pacific Northwest (Oregon, Washington and B.C.).

While studying the reproductive biology of certain species of cottonwoods and poplars in the 1970s, Washington state researchers, Drs. Reinhard Stettler and Paul Heilman accidentally discovered that certain crosses of western black cottonwood and eastern cottonwood sometimes produce offspring that grow much faster than either parent.

Since then, Stettler and Heilman have produced and distributed over 300 hybrid clones, and today 24,000 hectares of hybrid cottonwoods are growing on alluvial floodplain and irrigated upland farmland on both sides of the Cascade Mountains. Most of the yield is directed to pulp mills in the Columbia River basin.

In B.C., Scott Paper and MacMillan Bloedel have been planting growth and yield trials for the past eight to 10 years to screen clones for use in the lower Fraser Valley and on Vancouver Island. Estimated yields from intensively managed plantations in coastal areas range from 20 to 40 cubic metres per hectare per year.

But only a few interior locations are suited for this kind of silviculture because of short growing seasons and early fall frosts. Carlson cites four important conditions for successful hybrid cottonwood factors: a long frost-free growing season, sandy or silty loam soils with good moisture and nutrient content, early control of competing vegetation and the right hybrid clones.

He has identified four interior locales suitable for this kind of silviculture: the North Thompson and Kootenay River valleys and portions of the lower Nass and lower Skeena River drainages.

Carlson explains that most of the productive hybrid clones available today have paternal parents from the southeast U.S. Part of their



growth advantage comes from extended fall growth: they are still green and growing when local cottonwoods are getting ready for winter. That makes the hybrids vulnerable to early fall frosts.

Experiments underway at Kalamalka Forestry Centre are screening local black cottonwood and balsam poplar clones for eventual crossing with eastern cottonwood and other populus species to create hybrids with growth timing appropriate for interior B.C. climates.

The project could lead to alternative supplies for manufacturers of both pulp and paper and solid wood products.

As AACs are reduced in some areas, the pulp and paper industry is expected to increase its reliance on hardwood chips. While B.C.'s vast aspen resource can supply mills east of the Rockies, southern interior and coastal pulp mills rely on cottonwood trees for part of their chip mix for pulping. However, the trees grow primarily in riparian environments — areas difficult to manage for all resource values.

Farming hybrid cottonwoods on marginal farm lands and alluvial floodplains can relieve some of the pressure on ecologically sensitive wild lands and still supply the industry with needed fibre, says Carlson.

In addition to the Scott Paper and MacMillan Bloedel trials underway on the coast, a Lumby sawmill is testing wood from hybrid cottonwoods for its suitability for a range of products, such as panelling, mouldings and siding.

Putt-off decides tourney winners

A “putt-off” to decide the winner of the Forest Service headquarters golf tournament turned into a putt-off for two of three golf teams that ended regular play tied for first.

The June 15 event saw the Swing Kings (Rick Clevette, Brian Murphy, Jan Cameron and Gary Munro) tied with

Foreplay (Fred Miller, Dave Forget, Brad Armitage and Charles Goodmanson) and the Big Hitters (Keith Brubacher, Doug Kelk, Bob Ellis and Duncan Hopp). With each team at a four-under-par 66, it took a putt-off to decide the winner.

When it was over, the Swing Kings captured top honors, followed by Foreplay and the Big Hitters. The players were among 100 golfers who signed up for the tournament and enjoyed a sunny day on the links.

The most honest foursome award went to Jim Taylor, Ann Taylor, Gayle Baird and Grant McDonald.

Jan Cameron won the women's KP hole, while Dan Evans won the men's. The winner in the men's and women's division was Dave Forget.

The longest drive prize went to Eva Roberts in the women's contest and to Todd Gleinzer in the men's. The Putt Heads won the longest putt award.

A putting contest (drive for show, putt for dough) was won by Jeff Giradet.



And the winners are . . . The Swing Kings — (l to r) Gary Munro, Jan Cameron, Rick Clevette and Brian Murphy.

Fort St. James gets new manager

A 25-year veteran of the Forest Service has been appointed manager of the Fort St. James forest district. George Davis took over his new responsibilities June 5.

Davis's career with the ministry includes six years as operations manager; resource officer, silviculture; and assistant ranger.

The Fort St. James district occupies over three million hectares, about the size of Vancouver Island. With a total allowable annual cut of over three million cubic metres, the district generates between \$90 and \$100 million in stumpage every year.

B.C. cracks down on crime in the forest

This is the second installment of a two-part series on theft and fraud in B.C.'s forests.

Even before the Forest Practices Code took effect in 1995, the provincial government began to step up its efforts to control criminal activity in the forest that has cost tens of millions of dollars every year in lost revenue.

For years unscrupulous individuals have made log theft and timber mark fraud a big business in B.C. Inadequate or ineffective policing, monitoring and detection measures provided only a small chance an offender would be caught. If caught, the constraints of existing legislation often resulted in penalties that were less than the illicit profit.

But a coordinated counter-offensive by the Forest Service, the RCMP and the Attorney General's ministry is taking effect.

Corporal Clay Brown heads a four-person special investigation unit of the RCMP. The unit has been active for decades, primarily to patrol log salvage operations on the coast and Fraser River. But in the late 1980s, the unit began devoting more time to log theft and timber mark fraud.

"The biggest percentage of our cases now deal with frauds and theft of Crown timber," says Brown. At any one time, he says, each member of the unit has five or six active files.

Shortly afterwards, in the wake of an Auditor General's report highlighting the cost of forest crime, the Forest Service created the forest revenue inspector program. The program placed revenue inspectors in every

forest region dedicated to reducing revenue loss.

Around the same time, the Attorney General's ministry assigned several prosecutors to specialize in environmental crime. **Norm Yates**, a Kelowna-based lawyer and professional forester, is one of nine such Crown counsel in B.C.

More than half of his workload is forestry-related. "That ratio has been increasing over the last four or five years since the Forest Service stepped up enforcement and with the recent successes of combined efforts of the Forest Service and the RCMP," Yates says.

The result has been several successful prosecutions under the Criminal Code, with sentences of up to a \$75,000 fine and six months in jail.

Such cases and the media profile they receive are changing the attitude among forestry operators.

"Things have really gotten better," says **Peter Berukoff**, a forest revenue inspector in Nelson forest region. "Forest companies, truckers and logging contractors are more careful. They know that enforcement is here to stay. The consequences and the chances of getting caught are too high."

Yates agrees. "I see the players in the forest industry becoming more aware and more careful," he says.

But the biggest change has come within the Forest Service itself, the result of a renewed emphasis on forest crime and the introduction of the Forest Practices Code.

Prior to the introduction of the code, authorities had three available courses of action to penalize an alleged

offender: proceed judicially under the *Forest Act* or the Criminal Code of Canada, or levy an administrative penalty under the *Forest Act*. An administrative penalty could also be imposed in addition to court proceedings.

All options had their shortfalls: the maximum fine for unauthorized harvest under the *Forest Act* was \$2,000; rules of evidence made prosecutions under the Criminal Code difficult; and administrative penalties frequently failed to eliminate the illicit profit. The result was that many offenders received a disproportionately small penalty.



But the code changed that. "With the Forest Practices Code, it's no longer

just a wet noodle or a sledge hammer," says Harry deVries, forest revenue officer with the revenue branch. "Now we have a range of enforcement options available."

The code raised the maximum fine for unauthorized harvest to \$1 million. Unlike the Criminal Code, a conviction under the Forest Practices Code does not require proof of intent.

"With the Forest Practices Code, we'll receive some larger fines more in line with the crime," says Corp. Brown.

The code also increased the maximum administrative penalty that can be assessed by the Forest Service. Rather than the *Forest Act's* ceiling of triple the stumpage, the code permits a penalty of twice the market value of the timber, plus costs of restoration.

Those new provisions have made administrative penalties the preferred option, says **John Mallett**, of compliance and enforcement branch.

"The majority of cases of unauthorized harvest are dealt with through administrative penalties," he notes.

The Forest Service has adopted guidelines to determine whether to prosecute. Before recommending charges, Forest Service staff must determine that the particulars of the case meet one or more of the following criteria:

- other methods of enforcement have proven ineffective,
- the party is a repeat offender,
- the action was willful or significantly negligent,
- the alleged offence substantially damaged the environment, the activity endangered lives of safety,
- or such action is in the public interest.

Ninety per cent of cases of unauthorized harvest do not meet those criteria, Mallett says.

While the code fulfills the need for tougher penalties, detection is still a critical part of the fight against forest crime. The code will put more people in the woods, deVries points out, which in itself will lead to the discovery of more offenses.

But relying on chance discoveries is inadequate. What is needed is a systematic approach to detecting forest crime.

"All Forest Service field staff have a part in making sure the Crown gets its revenue," says deVries.

Policies and procedures are now being implemented throughout the province, motivated in part by the work of a three-man task force in the north.

In 1994 Prince Rupert forest region forest revenue inspector Whitney Numan led a task force to investigate allegations against several individuals

in the Prince George, Prince Rupert and Cariboo forest regions.



Their work identified 18 cases of major trespass, which are now

being investigated. Several charges are anticipated. It also generated recommendations to improve the Forest Service's ability to detect and prosecute forest crimes.

The recommendations, which were quickly accepted by operations division, include "risk assessment," or provisions to identify circumstances that create significant potential for log theft or timber mark fraud.

Such circumstances — based on the folk wisdom that opportunity creates temptation — include a logging operation on private land adjacent to Crown land, or a high-stumpage licence area near to a low-stumpage area, or where trees are being cut close to a sawmill, explains Mallett.

The task force also recommended:

- a corporate registry to record high-risk operators, who could then be more closely monitored;
- using satellite imagery and forest cover maps to help identify trespasses; and
- improving the compatibility of Forest Service information systems to speed up data retrieval and risk assessment.

"Risk management, through communications and technology, should be able to reduce fraud and theft," says Numan.

In today's environment of increasing competition for B.C.'s forests, winning the battle against timber theft is more critical than ever. Over and above the need to uphold the law, the illegal harvest of a significant portion of the province's total annual cut offsets measures to sustain the forests and protect the environment.

As the stewards for the resource, the Forest Service is obliged to ensure the fight is won.

Veteran Campbell River staff move on

Two scalers at the Campbell River forest district have retired, 35 years after joining the ministry within six months of each other.

George Super signed up as a scaler in Vancouver in 1961. In 1968 he moved to Campbell River, where he remained during his entire career except for an 18-month stint with the regional office.

Super left the Forest Service in February with plans to launch a second career teaching waste and residue and scaling courses.

Jim Sweet will work his last day on July 31, and begin devoting more time to fishing, guiding, boating and hunting. Sweet joined the ministry in 1961 as a deckhand on a Forest Service boat. After five years as assistant engineer and assistant ranger, he joined Vancouver regional scaling staff. In 1968 he moved to Campbell River, where he worked as resident scaler, then checkscaler.

World's forestry experts meet in Victoria

Some of the world's leading experts on forest and land-use management will converge in Victoria this fall for a six-day international conference.

"Sustaining Ecosystems and People in Temperate and Boreal Forests: An International Conference on Integrating Conservation of Biological Diversity with Social and Economic Goals" is designed to promote better understanding of ways to sustain diversity in boreal forests. The conference will be held September 8 to 13.

Among a full slate of top calibre speakers from academe, industry and government are Tony Norton, of the Australian National University, Margaret Shannon, Centre of Environmental Policy and Administration at Syracuse University, and Fred Bunnell, of UBC's Centre for Applied Conservation Biology.

A packed schedule of lectures and discussions will be supplemented by field trips and multi-day tours before, during and after the conference. Tour destinations include the B.C. interior,

the Olympic peninsula, the Carmanah and the Queen Charlotte Islands.

Research branch's Brian Nyberg, who together with Mike Fenger of BC Environment is coordinating the conference, said B.C. was chosen over Sweden to host the '96 event.

"The many progressive initiatives being developed here, as well as the preponderance of natural, rather than intensively managed, forests swayed things in our favor," he explained. The conference presents a good opportunity to highlight the

changing forest practices in B.C. at an international venue.

"It will help people realize the situation here is much more complex than is often portrayed," Nyberg said.

The conference is the third in a series that began in Portland, Oregon in 1992, moved to Canberra, Australia in '94, Victoria in '96, and will continue in Sweden next spring.

A nomination process is underway in the Forest Service to fill 60 positions reserved for staff. For more information, contact Connections Victoria Limited, the conference facilitators, at 382-0332 or e-mail connvic@octonet.com or the Internet <http://www/octonet.com/connvic/ecomain.html>.

PECSF organizer back to school

Auburn Cowman, known to many people as the Forest Service's Public Employees Community Services Fund (PECSF) coordinator, has left the ministry.

Cowman joined the human resources branch in 1978 and held a variety of positions during her career. Under her leadership, Forest Service contributions to the PECSF reached record levels in both 1994 and 1995.

She is now devoting her time to completing her degree in psychology and economics and to travel.

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Mailing Address:

Suite 300, 1675 Douglas Street
Victoria, British Columbia V8W 3E7
Phone: 387-5255 Fax: 387-8485

Contributions are welcome. Please send your comments, suggestions and contributions to: Paul Lackhoff, editor, (phone 953-3142, OV PTLACKHO) at public affairs branch or Ken Kolba (360-2213, fax 382-7631 or Internet kolbacom@islandnet.com).

