



2004 Annual Report

New Developments

Loon Lake Research & Education Centre

2004 marked the beginning of redevelopment of Loon Lake buildings. The first annual Camp Goodtimes was held for five weeks beginning in July. This came after Loon Lake was chosen as the permanent home for the event in 2003. Over 250 children with a history of cancer participated in a five day camp.

Work began on the \$1.1 million "Loon Lake Student Center" in August. This facility will combine the former "Yacht Club" into a 48 bed dormitory and gymnasium complex which will house a computer lab, lounge and adjacent playing field. The Student Center is being sponsored by funding from the Canadian Cancer Society and the Cadillac Fairview –

Trevor Linden Celebrity Golf Tournament. It will be opened in time for 2005 Camp Goodtimes.

In addition to hosting a record 14,600 visitor days in 2004, Loon Lake was the site of the second edition of a partnership with the UBC School of Architecture. Students from the school designed and built an amphitheatre adjacent to Loon Lake on the site of the former basketball court.

Infrastructure and guest service improvements also continued to be the focus of redevelopment efforts at Loon Lake, and 2004 will see a total expenditure on redevelopment of over \$2 million at the facility. A high pressure fire-fighting water system was completed which will enable all new and current buildings to be sprinklered for fire protection. Pinnacle Pursuits continued development of recreational facilities at Loon Lake, with the completion of a low ropes course.

2005 plans are to begin construction of the Loon Lake Lodge and of the new cabins. Completion of new construction is expected by the end of 2007.



Architect's rendering of the Loon Lake Student Center



.....and at year end

Operations

2004 harvesting at MKRF is summarised below:

Silviculture system	Area (ha)	Volume harvested (m ³)
Clear-cut	15.8	12,086
Shelterwood	-	-
Patch cut	2.9	2,305
Group Selection	0.5	684
Salvage	-	652
Commercial thinning	41.4	9,497
Roads/utilities	2.3	1,190
Total	62.9	26,414

Commercial thinning has now become a major source of timber for MKRF and continues to surpass logging in terms of area treated. In spite of depressed markets, this program continues to be successful.

Harvest methods employed in 2004 included ground based, multispan skyline, and helicopter.

A total of 4 research cutblocks were harvested in 2004. Three blocks were partial cut replicates of the riparian management experiment and one block was the site of Phase I of the High Density Silviculture Trial.

New road construction in 2004 totalled 630 meters. In addition, 8300 meters of existing road was reactivated or upgraded.

In order to increase value from timber harvested, MKRF began redevelopment of sawmill operations in 2004. The result will be a full time mill producing beams components for timber frame construction. The new mill is expected to open early in 2005 and will cut 500MBM per year.

Five forest fires that have occurred at MKRF in the past two years have caused the forest to review and upgrade fire preparedness resources and readiness. Four of those fires were human caused. Access, water sources, patrols and equipment have all been upgraded in order to meet increased risk levels. The District of Maple Ridge has installed of a water storage facility adjacent to the forest which will add significantly to suppression capability.

Silviculture

Once again in 2004, our silviculture program focussed on basic silviculture. As part of a Density Management initiative to improve wood quality on high sites, our average stocking density has increased to over 2000 trees/hectare. Four native conifer species and two deciduous species were planted. A summary of 2004 silviculture program achievements follows:

Silviculture activity	Hectares	Trees
Planting	16.6	39,830
Brushing	19.6	-
Juvenile spacing	-	-
Surveys	74.1	-
Total	110.3	39,830



The Loon Lake Amphitheatre under construction

For more information, please contact Cheryl Power or Michael Main.

Education and Extension

This was a busy year for education on the Forest. MKRF staff participated in the delivery of the BSF Year III Integrated Fall Term Curriculum. Twenty-eight UBC students attended the annual Spring Field School at Loon Lake in April. Conservation Field School was also held at the forest in October.

High school programs and recruitment activities continued to expand in 2004. In total, over 425 K-12 students participated in forestry and conservation curriculum and recruitment activities at MKRF during the year.

2004 also saw the second annual Summer Forestry Camp for First Nations Youth held at both UBC campus and Loon Lake in August. This year, the program was a joint effort with BCIT and once again a great success.

In May, UBC and MKRF hosted the IUFRO Mountain Logging Conference Field Tour in partnership with FERIC. Over 50 people from around the world attended this event.

Research

Fourteen new research projects were initiated in 2004, bringing the total number of active projects to 103. In total, 811 projects have been initiated since the forest was dedicated in 1949.

Highlights of the program were:

- Expansion of the riparian buffer study to a replicate of partial cutting in three watersheds
- Installation of a high density multi-species stand management trial
- Study of the movement of sediment in streams

An historical retrospective of MKRF Research, entitled: *“Innovation and Discovery – The Legacy of 50 years at the UBC Malcolm Knapp Research Forest”* was published in 2004. It summarizes the key findings of

research conducted at MKRF, traces the products and knowledge that have resulted, and profiles some of the major researchers.

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