THE UNIVERSITY OF BRITISH COLUMBIA

MALCOLM KNAPP RESEARCH FOREST

2011 Annual Report

New Developments

Student Internships and Volunteers

Since major staff reductions at the Research Forests in 2010, student internships have become a mainstay of staffing at the Knapp Forest. Funded by a grant from a private foundation, a total of 2 undergraduate and 2 graduate interns were appointed in 2010. In addition, two international interns from Italy came to the Forest for four months each. In total 24 months of internships were filled at the Forest in 2010.

One of our graduate interns, Teresa dela Fuente Diez, undertook a project entitled "Creating a renewed vision for the community interface of the Malcolm Knapp Research Forest". Teresa interviewed and surveyed over 300 visitors to the Forest, and tabulated their impressions, opinions and ideas into a document which will steer the management of much of the recreational use and development surrounding the main entrance of the forest for many years to come.

MKRF intern Jeremy Watkins with Cheryl Power learning how to use GPS and a metal detector to find legal survey pins.

The second graduate intern appointed in 2011 was Douglas Bolton. He is a PhD student working under Dr. Nicholas Coops, and will be completing an analysis of LiDAR data for both the Malcolm Knapp and Alex Fraser Research Forests. His work will be completed in early 2012.

The Forest was also supported in its efforts in 2011 by a growing number of student and community volunteers. Projects such as trail maintenance, research project cleanup, fire patrolling, tour guiding and surveys were completed.

Operations

2011 harvesting at MKRF (Woodlot W0037 had no harvest in 2011) is summarised below:

Silviculture system	Area (ha)	Volume harvested (m^3)
Clearcut	14.3	10,751
Clearcut with reserves	20.1	13,178
Patch cut	2.8	1,154
Salvage	0	0
Commercial thinning	20.8	5,561
Roads/utilities	4.6	2000
Total	**62.6**	**32,695**

Improved log market conditions, particularly for hemlock led to an invigorated harvesting program in 2011. Total volume harvested was increased by 61% over 2010. Our main strategy was to concentrate on producing value added products. Cedar poles, hemlock sawlogs, and fir peelers were major target products, as well as sawlogs for the MKRF sawmill. Markets for house logs were flat throughout the year.

MKRF graduate intern Teresa dela Fuente Diez.

Our commercial thinning program was once again expanded in 2011 on the strength of improved market conditions. Commercial thinning is an essential activity in our overall silvicultural strategy of producing high value products at longer than conventional rotations.

Harvest methods employed were both ground based and cable. Sawmill production totalled over 360,000 board feet in 2010. New road construction in 2011 totalled 2,556 meters.

Silviculture

Our 2011silviculture program focussed on stand establishment, including deer protection and brushing. Douglas-fir, western redcedar and white pine were planted. A summary of silviculture achievements is as follows:

Silviculture activity	Hectares	Trees
Planting	9.5	14,540
Brushing	43.9	-
Deer protection	3.7	-
Juvenile spacing	-	-
Surveys	174.9	-
Total	*232.0*	*14,540*

For more information, please contact Cheryl Power

Education and Extension

2011 was another busy year for education on the Forest. Twenty-six UBC students attended the annual Spring Field School at Loon Lake in April. Conservation Field School was also held at the forest in October and was attended by 35 students.

Students at Spring Field School learn how to fight forest fire

School programs and recruitment activities continued in 2011. In total, over 6,000 K-12 students stayed at Loon Lake or participated in forestry and conservation curriculum and recruitment activities at MKRF during the year. MKRF hosted professional training events for the Chinese State Government and the Indian Forest Service, as well as classes from BCIT, SFU, Kwantlen Polytechnic, University of the Fraser Valley and College of New Caledonia.The Maple Ridge Environmental School also began holding classes at MKRF in November 2011.

MKRF also hosted the 21st annual Western Research Forest Manager's meeting at MKRF in October, which was attended this year by Research Forest staff from BC, Washington, Oregon and California.

Loon Lake Research and Education Centre

Loon Lake hosted its eighth Camp Goodtimes in conjunction with the Canadian Cancer Society and recorded over 17,571 visitor-days in 2010 – a drop of 9% since 2010. Overall economic activity and a K-12 teacher's job action were the cause of the decrease in Loon Lake visitations.

Guests at Loon Lake this year included Langara College, University of Washington, Canada Department of Fisheries and Oceans, the BC Ministry of Agriculture, the Koerner Foundation and the UBC Presidents Office, as well as many other educational and corporate groups.

Research

8 research projects were initiated in 2011 bringing the total number of active projects to 101. In total, 912 projects have been initiated since the forest was dedicated in 1949. Highlights of the program were:
- Possible impacts of artificial light at night on freshwater ecosystems
- Chemical signaling in the Polistes wasps, and interactions between them and their Strepsipteran parasites.
- Test of potential novel attractants for mosquitoes and flies.

We continued to maintain and improve access and signage for several major projects on the Forest, ensured updating, security and accessibility of research projects data through the Research Projects Database (www.rpd.forestry.ubc.ca)

For more information, please contact Ionut Aron.

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Malcolm Knapp
Research Forest