

September 2009

Ecosystem Restoration Benefits Plants, Animals & People



Bighorn sheep graze on grasslands in sight of forests that provide protective cover from predators.

The Ecosystem Restoration Program in the Rocky Mountain Forest District has operated as a successful partnership of government, industry and the public since 1998.

The long-term goal is to restore the low-elevation grasslands and dry, open Ponderosa pine/Douglas-fir forests of the Rocky Mountain Trench to their natural state.

Restoration is taking place on Crown range, within provincial and national parks, and on private conservation properties from Radium Hot Springs to the US border.

RESTORATION BENEFITS

Restoring our grasslands and open forests brings benefits to plants, animals and people.

Grasses, shrubs and other native plants flourish when moisture and sunlight can reach them. These plants provide essential forage for domestic cattle, elk, deer and bighorn sheep.

Grasslands and open forests contribute to our region's rich biodiversity by providing habitat for a wealth of additional wildlife species, many of which are at risk because habitat has been lost or degraded.

Finally, restoration improves forest health by spacing trees and reduces the potential severity of wildfires by removing forest fuels.

Ranching, forestry, hunting, guide-outfitting, tourism,

recreation and interface fire management all benefit from ecosystem restoration.

It's not hard to see that the Restoration Program is a significant factor in helping to sustain the East Kootenay's economy and way of life.

RESTORATION HOW-TO

The how-to of restoration involves removing excess trees through harvesting, thinning and prescribed burning.

Trees with commercial value are logged as part of conventional timber quotas or by special temporary licence.

Trees with marginal or no market value are slashed using machines or by hand, then piled and burned. If the economics are right, slashed trees are ground as "hog fuel" for electricity generation.

Tree regeneration is controlled with prescribed burns that mimic the low-intensity ground-based fires that once burned in our region at frequent intervals. Grasslands and open forests depend on recurring fire to remain healthy and are classified as fire-maintained ecosystems.

Following are selected highlights from the ER Program's past 12 months.



An ingrown forest site, above. A restored site, below.





A JOP crew slashing trees on the Waldo Range Unit near Jaffray.

RESTORATION & JOBS

Thanks to federal and provincial job-creation grants provided by the Job Opportunities Program and Community Adjustment Fund, much of the ER Program's recent work has focused on thinning dense stands of trees on what were once open forest sites.

The grants are paying wages to about 100 laid-off loggers, mill workers and forest technicians working in crews sponsored by Galloway Lumber, Tembec, the Trench Society, S&D Hunt Logging and Purcell Resources.

Using chainsaws and muscle power, the restoration crews have been slashing and piling small trees on Crown land, provincial parks and conservation properties from Newgate to the Columbia Valley.

They've already covered 2,000 hectares, with another 1,500 hectares scheduled for treatment over the next six months. Later this fall, given the right ground and atmospheric conditions, crews will burn piles on about 1,500 hectares in several one-day blitzes. Burning days will occur only when conditions allow smoke to vent upwards, thus reducing impacts on air quality. Fire rings will be seeded to mitigate damage caused by burning.

Slashing has helped to reduce fuel loads in the vicinity of Meadowbrook, the Cranbrook airport, Baynes Lake, Elko, Jaffray, Juniper Ridge and Wilmer. The crews have also cleared 15 trails and access roads at a number of recreation sites in the St. Mary River valley, Forster Creek, Jumbo Creek and Diana Lake areas, among others. One crew even spent a few days mopping up a wildfire in the Bull River area.

Forest technicians hired with the job grants have helped prepare site plans and prescriptions for current and future restoration projects. They've completed plans for 2,600 hectares and will work on plans for up to 10,000 additional hectares over the winter.

SPECIES AT RISK

The Ecosystem Restoration Program, Nature Conservancy of Canada, Nature Trust of BC and Thunderhill Ranch have joined forces with the Ministry of Environment to cooperatively manage 4,500 hectares of Lewis's woodpecker habitat in the Dutch-Findlay area.

This at-risk species lives in open ponderosa pine forests, especially those that have been burned. It forages for insects on the wing, and nests in cavities in big well-rotted snags. The Dutch-Findlay area near Canal Flats and Fairmont Hot Springs provides ideal habitat and is home to a significant number of active nesting sites.

The partners have agreed to a management plan that calls for thinning and prescribed burning to maintain open areas, inventory and protection of existing high-value wildlife trees, and creation of new snags for nesting and perching.

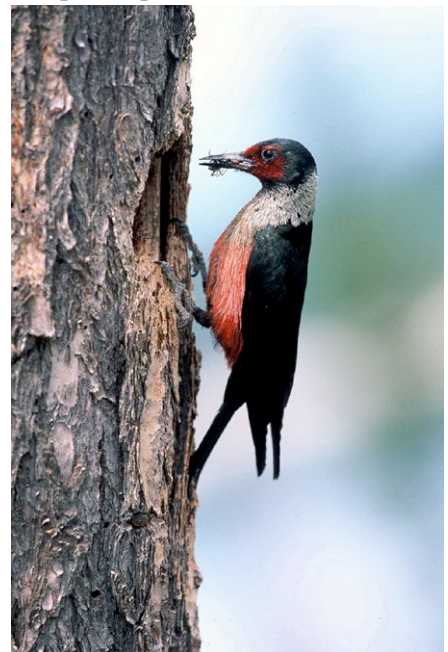
INVASIVE PLANTS

Restoration activities that disturb soil can be followed by invasive plants, thus monitoring and controlling these aliens is an increasingly important part of the Restoration Program. Invasive species establish quickly and spread aggressively, posing a serious threat to rangeland by supplanting native vegetation.

Working through the East Kootenay Invasive Plant Council, the Program has funded treatment of invasive plants on about 2,300 hectares in the past year and will fund a similar amount of work on ER projects this year.

MONITORING & RESEARCH

Measuring the results, both positive and negative, of restoration treatments is another important aspect of the ER Program. Sites are monitored for a variety of short- and long-term indicators, and the Program responds by adapting activities to actual findings on the ground. Seven sites will be monitored this year.



Lewis's woodpecker

The ER Program also relies on scientific research to contribute to long-term success. A current project will measure the impact of slash piles burning above buried stone archaeological artifacts. Others are studying the effects of prescribed burns on soil productivity, and investigating historic fire frequency and the resulting forest structure at selected sites.

In an effort to make East Kootenay monitoring and research reports more widely available, the Restoration Program will launch a website later this year that will include a comprehensive, searchable library of studies published from 1949 to the present.

PRESCRIBED BURNS

Two spring burns covering 609 hectares were completed at Clear Lake, south of Jaffray, and Lakit Lake, northeast of Fort Steele. A 535-hectare fall burn is planned on Fir Mountain west of Canal Flats if conditions allow. Prescribed burns rejuvenate native grasses and shrubs, as well as keeping tree regeneration in check.

RESTORATION LOGGING

The Southern Interior Forest Region has advertised for bids on ecosystem restoration timber quotas totalling 65,000 cubic metres. The successful bidder for this temporary licence will have two years to harvest sawlogs and pulpwood on the Cherry-TaTa and St.

Mary's Prairie Range Units located between Kimberley and Ta Ta Creek. A second such licence is in the works to remove pulpwood and sawlogs from the Skookumchuck Prairie, just south of the pulp mill.

These will be the second pair of restoration timber quotas awarded since the Chief Forester allocated part of the allowable annual cut in the Rocky Mountain Forest District for restoration purposes. Tembec won the bids on the first pair of quotas, which totalled 46,000 cubic metres. The company completed harvesting this summer and created 929 hectares of thinned open forest.

FIVE-YEAR PLAN

The ER Program's five-year operations plan is updated every year to ensure that current-year activities are responding to new opportunities, unexpected challenges and changing conditions. The plan will be updated again in October and November. Watch for announcements of open houses for stakeholders.



Flagging a future restoration site.

RESTORATION PROGRAM PARTNERS

Government: Ministry of Forests and Range, Ministry of Environment, Ministry of Agriculture and Lands, BC Parks, Parks Canada, Fish & Wildlife Compensation Program.

Industry: Tembec, Galloway Lumber, BC Timber Sales, Kootenay Livestock Association, Range Advisory Committee.

The Public: East Kootenay Wildlife Association, Rocky Mountain Trench Natural Resources Society (umbrella group representing Cranbrook Archery Club, East Kootenay Wildlife Association, Kootenay Livestock Association, Rocky Mountain Naturalists, Southern Guides & Outfitters Association, The Land Conservancy of BC, Waldo Stockbreeders Livestock Association, Wildsight, Windermere District Farmers Institute).

RESTORATION PROGRAM FUNDERS

Over the years the Ecosystem Restoration Program has raised millions of dollars from many sources. Consistent major contributors include the Fish & Wildlife Compensation Program, Ministry of Forests and Range, Forest Investment Account (previously Forest Renewal BC), Habitat Conservation Trust Fund and Rocky Mountain Elk Foundation. Current funding is also being provided by the Job Opportunities Program, Community Adjustment Fund and Columbia Basin Trust.

FOR MORE INFO

- Rocky Mountain Forest District: www.for.gov.bc.ca/drm/erp/erp.htm
- Ministry of Forests and Range: www.for.gov.bc.ca/hra/Restoration



Prescribed burn on Big Hill Pasture near Lakit Lake