

Restoring Wilderness

Messing up a tree farm in the name of the warty jumping-slug

By BRIONY PENN

Last month I received a large gift: an opportunity to go into the field with 11 students to work on ecological restoration projects. "In the field" is the academic phrase for going outside and learning. It is an educational methodology that went out of style for strange and inexplicable reasons, but will hopefully make a comeback one day.

Conversely, ecological restoration is a relatively new concept to British Columbia. Until very recently most of us believed there were forests, wetlands and wildlife stretching into infinity. Why would you want to restore ecosystems when there are so many places to left to dismantle first? Whereas in parts of Ontario or Europe, where there is nothing left of the original ecosystems, restoration seems a more obvious pursuit since it is the only way anyone can find their way back to the natural world.

As a practice, it is a bit like restoring old furniture. You discover the remnants of a beautiful old piece lying in a dusty place and then you apply all your love and talents to discovering its original form and nurturing it back to its former glory. Ecosystems, of course, are far more complex than old desks. Ecological restoration requires the full gamut of talents from hard-on-yang-bulldozers-rearranging-mine-tailings-back-into-a-mountain to the delicate yin dance of community volunteers tenderly coaxing a subdivision ditch back into a healthy creek for coho. It is an art and science that recognizes there is a time for both strength and gentleness. Strength to rearrange what had been undone in the first place, like stripping off centuries of paint, followed by gentleness to heal the wounds and restore a loving veneer. Ultimately it is an act of yin and yang, humour and faith, love and paradox.

Nowhere demonstrates this principle more aptly than District Lot 63, the auspicious name of a 60-hectare lot originally acquired by Macmillan Bloedel 50 years ago. The lot, on Galiano Island, is the first tree plantation in B.C. to have efforts made to restore it back to a forest. It is not a forest yet, but members of the Galiano Conservancy are doing their best.

Tree plantations are an agricultural concept where you level the earth, plow the soil and plant a single crop of trees. It was an idea, a bad one it turns out, that came from Europe as a way to grow trees that were easy to manage and harvest. What the Europeans hadn't realized about trying to grow long-lived trees, as opposed to annual crops, is that trees need forests and other forest creatures to survive. Trees don't grow well in monocultures—they are vulnerable to disease and lack the fungal associations and natural predators to help combat the pathogens that attack trees.

The DL 63, renamed the Pebble Creek Forest Reserve when it was purchased by the Galiano Conservancy and partners in 1998, had been logged for the third time in the late '70s. The first two passes, i.e., the turn of the century logging and the early '60s logging, were high grading—half-hearted messy clearcuts—things that a forest can sort of recover from because the soil isn't damaged too badly. But after the late '70s clearcut, the bulldozers came in and tried to level the site, in what restorationist Odin Scholz calls the Disco Sweep. They pulled out all the stumps, pushed all the debris into ridges, scraped off all the topsoil, flattened the site and planted Douglas fir every two metres, whether it was a site suited to fir or not. The result—a tree plantation 20 years later—was a thick sterile stand of sickly sticks with some pretty crummy wood and hardly a creature to be found.

The restoration efforts, started three years ago with funding from Mountain Equipment Co-op and the Tides Foundation, were led by students from UVic and University of British Columbia restoration programs: Odin

Scholz, Nathan Gaylor, and Keith Erickson under the guidance of Ken Millard, a retired physicist. It has become a unique research project that will have repercussions, not only in the field of restoration but in forestry itself. Their mantra is "Proceed with Love and Care."

The great thing about restoration is that generally by the time restorationists move in, the original conflict between humans, about what was a good or bad experiment, is over. The Mac Blo foresters who designed the plantations are hopefully safely contained on a retirement cruise ship, drinking mojitos. The wise folk on Galiano, like Ken Millard, who originally objected to the Disco Sweeps are over their heartache of seeing the mistakes being made and are now left in peace, holding the land with an interesting problem to solve. Enter students, who have no history of the conflict, but bring with them diverse perspectives and expressions of humour, paradox and ingenuity.

Today DL 63 is a demonstration forest for the public. Scholz and the others will take you on a journey to discover the roots of the problem. First, you spend time in an adjacent Crown parcel observing a mature functioning forest with all its lumps and bumps, shrubs, snags, big trees, little trees, swamps, highlands and wildlife. Students see how wind throws trees down on to the ground, where they rot into nurse logs; and tosses up root balls leaving vernal pools in the depression. They find fire scars and see open pools of light in the forest that indicates past fires opening up places for salmonberries to grow. They find beaver swamps and observe which trees die and which survive there. They look at woodpecker excavations and the health of a forest where woodpeckers abound. They look at the distance between trees in a forest, which is never regular and rarely two metres.

Once the lessons of the forest are learned, students go into the plantation and act like the wind, fire, water, beaver, woodpecker or a tree shaking off its cones. As one of the students remarked, restoration work is the equivalent of being told to go mess up your room—and even more fun. To become a wind, Millard figured out all you need are a cable hoist, chains and a pulley. In an hour, you can blow a tree down with infinite love and care. To redistribute the wood piled from the Mac Blo ridges, they hoist the logs on the cable system and gently lower them on the damaged forest floor to create a network of rotting wood, fungi and shelter for newts, slugs and seedlings. To encourage songbirds, owls and woodpeckers, they erect old large logs with more pulleys and hoists. Culverts are pulled up, beavers invited back in. All day there is good restorative work to be done, doing what a forest might take 300 years to achieve.

Protecting the real thing, of course, is the most important lesson any student learns after doing restoration. In fact, that is restoration's greatest gift: the humility to realize no human can replicate complex forest processes and diversity.

Meanwhile, on the other side of Vancouver Island, Timber West is preparing plans to log old growth forest on the lower half of Muir Creek and the Muir Creek Protection Society are trying to save it. The creek is known even in Ottawa as one of the few locales where the warty jumping-slug is seen. Anyone who has any doubts about the value of protecting original ecosystems, go to DL 63. There are no warty jumping-slugs in DL 63. The disco sweep got them, and no amount of love and care will bring them back. M

The next hike through the Muir Creek area is Saturday, March 4, starting at 10 am. Meet at the parking lot at Muir Creek. Contact kwoods@pacificcoast.net for more instructions. Hike is about 90 minutes long, with some steep sections and usually lots of mud. Galiano Conservancy Association has lots of information on DL 63 on their website www.galianoconservancy.ca.

