

The Nature Trust is working to acquire critical properties along the historic Fraser River between Mission and Hope in 2006. We are actively fundraising to reach our goal of \$1.3 million to conserve vital river front land.

The Fraser River is considered the most endangered river in BC by the Outdoor Recreation Council. Among the concerns are a loss of riparian habitat, excessive gravel extraction, missing sockeye salmon, low summer flow, sewage introduced to the river and the impact of agriculture.

Gravel Reach of the Fraser River. Photo by Chris Armstrong

Habitat loss and alteration in the lower Fraser River continues at an alarming rate. The biological and ecological integrity of the river is at imminent risk.

The section of the river from Mission to Hope, known as the Gravel Reach, "may well be the most productive stretch of river in the world," according to World Rivers Day Founder Mark Angelo. And yet the Gravel Reach is under the greatest pressure.

The Fraser River needs your help. To donate online visit www.naturetrust.bc.ca or call 604-924-9771.



Douglas fir trees in MacMillan Park

\$500,000 MacMillan Project Completed

T hanks to our very generous donors and the BC Trust for Public Lands, the final portion of funding for the MacMillan Provincial Park expansion is completed.

The BC Trust for Public Land is a partnership of Environment Canada– Canadian Wildlife Service, Ministry of Environment, Ministry of Agriculture and Lands, Habitat Conservation Trust Fund, Union of BC Municipalities, Nature Conservancy of Canada, The Land Conservancy of BC, Pacific Salmon Foundation, Ducks Unlimited Canada and The Nature Trust of BC.

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Bringing Sturgeons into Classrooms

The HSBC Fraser River Sturgeon Education Program has been received with enthusiasm by many of the teachers in the pilot project group in Greater Vancouver and the Fraser Valley. Teachers and students have been using the program throughout the fall and providing valuable feedback.

"I liked the integrated approach which included the history and science of not just the white sturgeon but how it is connected to the Fraser River habitat and how it is connected to larger issues of our environment."

"Students were fascinated to discover the age and size of a sturgeon and that they may be swimming over them as they went through the tunnel to Richmond. When the students lay on the floor to the length of 6.5 metres and realized that even at that size they had never seen a sturgeon in the Fraser River they were amazed."

"We created a life size enlargement of the sturgeon and he has been living on the front wall of the class all term."





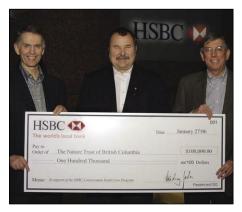
"As long as we sustain nature, nature will sustain us!"

The Honourable Iona V. Campagnolo, PC, CM, OBC, Lieutenant Governor of BC, speaking at 2005 Brant Wildlife Festival. (Photo by Lenore Leitch) The Nature Trust is delighted to participate in a number of wildlife festivals across the province including:

Brant Wildlife Festival March 31-April 2 Parksville/Qualicum Beach

Wings Over the Rockies Bird Festival May 1-7 Invermere, East Kootenay

Meadowlark Festival May 18-22 South Okanagan



From left to right, Lindsay Gordon, President and Chief Executive Officer of HSBC Bank Canada, presents a donation cheque to Doug Walker, Executive Director, and Peter Speer, Chair of The Nature Trust.

HSBC Bank Canada Sponsors Youth Crews

We are delighted to announce that HSBC Bank Canada has provided \$100,000 over two years for our Conservation Youth Crews, now known as HSBC Conservation Youth Crews initiated by The Nature Trust of BC. Lindsay Gordon, President and Chief Executive Officer of HSBC Bank Canada, said, "HSBC Bank Canada is very pleased to support the HSBC Conservation Youth Crew Program of The Nature Trust because it aligns so well with the HSBC Group's worldwide philanthropic focus on education and the environment."

The crews tackle much of the annual on-the-ground habitat restoration work on our properties across the province from May to August with some extending into the fall. Crews will be operating on Vancouver Island, South Okanagan, East Kootenay, Peace River, Chilcotin Plateau and a new crew in the Lower Mainland. Thank you to HSBC Bank Canada for the generous support.

Eco Tour

Join local birding specialist Guy Monty, Nature Trust Conservation Land Manager Tim Clermont and hosts Jim and Mary Borrowman of Stubbs Island Whale Watching for a unique Birds in the Broughton tour on May 8. Cost per person is \$125 plus GST and the target is 40 passengers. For more information, visit our website at www.naturetrust.bc.ca

Fire Restoration Provides Information

Lisa Scott, RPBio and Eco-Matters Consulting, and Carl MacNaughton, South Okanagan Land Manager

Tt's been two and half years since a wildfire swept across 3,000 hectares (7,410 acres) of grassland and forested habitats in the Vaseux Lake area in the Okanagan Valley. This wildfire affected conservation lands owned by The Nature Trust of BC as well as a provincial park and protected area, the Vaseux-Bighorn National Wildlife Area, private holdings and a large section of Crown land. While at first glance the situation at Vaseux seemed devastating to the conservation lands, stakeholders soon realized that it presented an opportunity to gather information on post-fire restoration and invasive plants after a wildfire. Consequently, several activities have taken place since the summer of 2003. Key highlights of these activities are outlined below.

Weed Task Team

Since invasive plants were a major concern, a Weed Task Team has met regularly during the last two years to determine the most suitable approach to invasive plant management. Efforts have focused on sulphur cinquefoil (Potentilla recta). This European plant has rapidly invaded the South Okanagan's fragile grassland and shrub-steppe landscapes where it out competes many indigenous grasses and wildflowers to the detriment of wildlife using these habitats. Since the wildfire, all of the areas considered vulnerable to sulphur cinquefoil have been inventoried and mapped, and an integrated approach to control this invader has been used.

Aerial Seeding

As the wildfire burned most intensely on steep slopes and in gullies, these areas were identified as significantly vulnerable to invasion by non-native species and also at high risk of erosion. One gully in particular on The Nature Trust's Emery property was earmarked for aerial seeding within two months of the fire. An agronomic seed mix was aerial seeded over a 6-hectare (15-acre) site. As a means of comparing the natural post-fire recovery to the response of seeding, six control plots were established within the gully. After two years of assessments, it appears that the aerial seeding was very successful.

Hand Seeding

Similar successful results of post-fire seeding were observed in the antelopebrush plant community. Individual antelope-brush shrubs or pockets of antelope-brush and ponderosa pine trees surrounded by a thick duff (matted, partly decomposed organic surface layer of forested soils) layer burned with severe intensity during the wildfire, resulting in additional areas of exposed mineral soils. These "hot spots" were identified as highly vulnerable to invasion by nonnative species. A modified agronomic seed mix was applied by hand and lightly raked into hot spots in the spring and fall of 2004 by The Nature Trust's Conservation Youth Crews. The seed mix provided 38% ground cover in 2004 and 47% in 2005.

Restoration Demonstration Project

Another research initiative is the Vaseux Fire Restoration Demonstration Project, which has been ongoing since the spring of 2004. The objectives of this project are 1) to implement and evaluate restoration options in areas of various burn severity and 2) to raise community awareness of the importance of fire in natural ecosystems. During this project, a monitoring program and experimental restoration plan were implemented in select zones, with vegetation monitoring transects and experimental plots. The plots were seeded with five different seed mixes and two seeding rates. This experiment is being monitored closely over time, and results will be used to gain a better understanding of what seed mixes and rate will be most appropriate in the event of future wildfires.

Conclusion

Although the 2003 Vaseux Lake wildfire has had an enormous impact on the area, it has provided opportunities for research and habitat restoration. It has allowed youth crews, community members, researchers and conservation land managers to work together to better understand the role of fire in natural ecosystems and activities that are the most effective.

Thank you to Weyerhaeuser for generously providing \$40,000 for fire restoration activities in the Vaseux Lake area.



The Nature Trust's South Okanagan Land Manager, Carl MacNaughton (in centre), discusses the best approach to invasive plant management with other members of the Vaseux Fire Weed Task Team.



Peter Speer Chair's Message

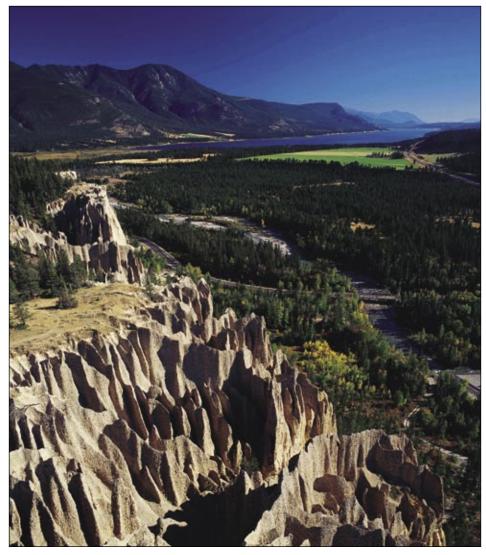
Year in Review

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Late last spring, I had one of those picture perfect experiences. Hiking up to the top of the Hoodoos in the East Kootenay, I was rewarded with the most breathtaking view of the Columbia Valley. How fortunate we are to live in such a spectacular province!

2005 was another year of progress for The Nature Trust of BC. We continued to acquire properties of ecological value in British Columbia including endangered Antelope-brush in the South Okanagan and old-growth Douglas fir on Vancouver Island. Our land management efforts were stepped up by increasing the number of Conservation Youth Crews, expanding fire restoration work near Vaseux Lake and invasive weed removal, and posting interpretive signs on over 30 of our properties. In addition to our continued role on regional conservation programs, we are investing our time and resources, along with other similarminded conservation organizations, in the development of a provincial biodiversity strategy through the BC Trust for Public Lands. Our commitment to education reached out through two new initiatives: Robert Bateman Gettoknow program and the HSBC Fraser River Sturgeon Education Program.

All organizations must focus on defining their strategic direction and ultimately their sustainability. Our



Hoodoos, East Kootenay. Photo by Graham Osborne.

Board and staff have begun the process of developing a new strategic plan. We are committed to keeping our organization "fit" to meet our objectives and grow as a leading organization in the conservation of BC.

Our success depends on our capacity to raise funds. We are extremely grateful for the many individuals and partners who value and support the important work of The Nature Trust as noted on our donor page. You give us wonderful encouragement to continue conserving this biodiversity rich province. You can be assured that we are committed to acquiring at-risk land while providing crucial land management. Land management costs are significant and are the most challenging dollars to raise. I would like to give special recognition to the Habitat Conservation Trust Fund for a \$1.8 million contribution to the acquisition of the spectacular 10,000-acre Hoodoos Property in the East Kootenay. This completed our \$3.5 million financial commitment.

No surprise that with vibrant growth, habitat in BC is under increasing pressure in key development areas. In 2006, our sights are on critical properties extending from the mighty Fraser River and endangered Antelope-brush to wildlife migration corridors in the Rocky Mountain Trench.

As your Chair, I am honoured to serve this organization with its long history of conservation leadership in BC. We are very fortunate to have a team of dedicated and knowledgeable individuals who are continuing in this tradition. I would like to thank Dennis Perry, who served on the Board from 2002 to 2005. I look forward to celebrating The Nature Trust's 35th anniversary with you in 2006.

Conservation at Work!

Youth Crews and land managers installed over 60 signs on 36 properties to ensure that people know they are in an area conserved by The Nature Trust and our partners. Send us photos of Nature Trust signs you see (prints via mail or digital images via e-mail) along with a note on the location and we will publish the best ones in upcoming newsletters and send you a Nature Trust cap and a pen.



Jason Northcott and Jim Arner at McGillivray Slough in the Fraser Valley

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Visit our website at www.naturetrust.bc.ca for a list of our corporate, business, foundation, and community group donors in 2005.

Putting the Conservation Puzzle Together

By Jason Northcott, Conservation Specialist

Technological advances in computer-assisted mapping provide powerful tools to facilitate the management of our natural capital. This is true for every type of organization from conservation groups to forestry companies. Gone are the days of leaning over large topographical maps. In their place are geographic information systems (GIS) where maps are digitized and geo-referenced. These maps can be stored on CDs, and easily manipulated to produce results from a wide variety of queries. Because of these advancements, we are able to manage our natural capital on larger scales, at higher speeds, and produce more accurate results.

With generous support of the Vancouver Foundation and Real Estate Foundation, The Nature Trust hired an in-house Geographic Information Systems Analyst in 2003 to promote the development of the BC Conservation Mapping Project initiative. Since that time, digital information has been compiled on Nature Trust conservation properties which had previously only existed in paper format. In addition, The Nature Trust has taken a leadership role in the mapping initiative.

This initiative is attempting to map all the conservation areas within BC. This groundbreaking project involves partnerships with non-governmental organizations and various levels of government. The final product will consist of a conservation layer built into a GIS database containing precise maps of all conservation holdings including parks, covenants and green spaces. It will include attribute information providing descriptions and cadastral related details (legal descriptions) for each holding, and have the flexibility to manipulate maps under various parameters.

So what does the conservation layer look like? It looks like puzzle pieces floating in space. Figure 1 shows the conservation areas as polygons, representing properties without any reference points. The second map shows the same polygons when TRIM (Terrain Resource Information Mapping) layers are added. The difference is obvious; a digitized map. TRIM layers are the provincial digitized map layer consisting of contours, roads, and boundaries.

The most powerful feature of the conservation layer is its dynamic nature. It gives you the ability to create an infinite number of mapping products. GIS modeling consists of using one or more layers to extract a particular piece of information. The modeling process is a bit like using a base map and adding overlays. The base map is comprised of the properties and each overlay represents a different layer, such as rivers or ecosystem types. These overlays can be placed on top of the base map and then a query can be defined. For example, which properties lie within a kilometer of a major river and consist of the Biogeoclimatic zone Interior Douglas Fir. A new map will be produced resulting from this query.

The BC Conservation Mapping Project will be a key asset in managing ecologically significant areas and directing future acquisitions. The development of the conservation layer will also play an important role in Biodiversity Strategies. Key species indicators and critical habitats can be modeled to determine if significant portions of protected areas are in place for successful management. The Nature Trust of BC has taken on the lead coordination for this project and we are aiming to have a working GIS database by the summer of 2006.

Thank you to our funding partners—the Vancouver Foundation and the Real Estate Foundation of British Columbia—and our conservation partners on the BC Conservation Mapping Project: Canadian Wildlife Service, Ducks Unlimited Canada, Nature Conservancy of Canada, and The Land Conservancy of BC.

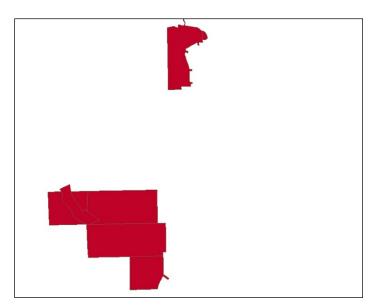


Figure 1. Two maps showing two Nature Trust properties in the Nanaimo area, one without TRIM and the second with TRIM layers added. The properties shown are Buttertubs Marsh (top) and Morrell Wildlife Sanctuary.

THE NATURE TRUST staff news



New Finance Manager The Nature Trust is pleased to announce

the appointment of Laurie Desrosiers as our new Finance Manager as of December 2005. Growing up in Saskatchewan, Laurie attended the Saskatchewan Institute of Applied Science and Technology in Regina, and obtained her designation as Certified Management Accountant in 2001. Her career started in the Insurance industry. After this, she spent the next 10 years with Ducks Unlimited Canada, the last 4 of which she held the position of Assistant Controller for the Pacific Region.



Accolades for the Adairs

Congratulations to Marian Adair and her husband Don for winning first in Amateur Adult Gold Standard and Amateur Senior I Gold Standard at the SnowBall Classic International DanceSport Competition in February. (Photo by Andrew Leung, Picture This)

Research in Action

In honour of distinguished scientists and past members of the Board, The Nature Trust supports scientific research through three award programs: the Bert Hoffmeister Scholarship, the Dr. Ian McTaggart-Cowan Scholarship and the Brink/McLean Grassland Conservation Fund.



I would like to express my gratitude for the generous award from the Bert Hoffmeister Scholarship for my doctoral research in the Faculty of Forestry at the University of BC. This money will help to support my research on community structure in cavity nesting birds and mammals in aspen groves and continuous forests associated with the Becher's Prairie area of the Chilcotin grasslands of interior BC. My field work involves locating and monitoring nests and roosts of cavity-nesting birds

and mammals, such as Northern Flickers, Mountain Chickadees, Red-breasted Nuthatches, Mountain Bluebirds, Red Squirrels and Northern Flying Squirrels. I hope my research will contribute to knowledge of biodiversity patterns.

–Kate Aitken



Thanks so much for funding and sponsoring the Dr. Ian McTaggart-Cowan Scholarship in Environmental Studies. I have and will put this award to good use. Some of it has been spent on books, tuition and research costs—and the rest of it has helped the financial strain of living in Victoria as a grad student with a pregnant wife and a two year old. My study is in Buddhism and Ecological Restoration. I just recently completed the Restoration of Natural Systems diploma at the University of Victoria

and wanted to take it to the next level. I am trying to raise awareness about the interconnectedness and interdependence between humans and the natural world. —Jeff Ralph

Dr. Judith H. Myers and Caroline Jackson, University of British Columbia Department of Zoology, received the 2006 Brink/McLean Grassland Conservation Fund. This fund promotes applied research, habitat restoration and other stewardship activities that will assist in the management of the land, plants and animals of BC's native grasslands. Their research is entitled "Evaluation of the biological control of diffuse knapweed in the South Okanagan Valley and at the Vaseux Lake burn site."

Boundary Bay Clean Up

Would you like to volunteer to clean up Boundary Bay in Delta? With the severe winter storms, a large amount of debris has accumulated along the foreshore and dike of Boundary Bay. The Nature Trust will be hosting a clean up day on Saturday, June 10, followed by a bird watching information session. If you would like to participate, please contact us at info@naturetrust.bc.ca or 604-924-9771.



The Honourable IONA V. CAMPAGNOLO, PC, CM, OBC Lieutenant Governor of BC *Honourary Patron*

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Tribute to Former Directors

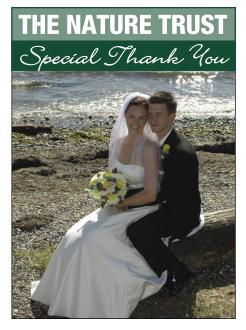
The Nature Trust has been honoured to have dedicated and knowledgeable Directors since it was founded in 1971. We would like to pay tribute to two former Directors who died in 2005.

Edward D.H. "Ted" Wilkinson passed away in December 2005. Ted served as the official secretary of The Nature Trust from 1972, and a member of the Board from 1985 until 1996. Ted was born in Port Alberni on January 15, 1915. He was a graduate of the University of British Columbia in 1937 with a Bachelor of Commerce. He served in the Second World War in Northwest Europe and rose to the rank of Major. He practiced law at Russell & DuMoulin from his discharge until his retirement in 1985. He enjoyed golf and fishing.

William Thomas "Tom" Brown passed away on November 2nd at the age of 93. Tom worked at Odlum Brown Investments, a firm founded by his father A.M. Brown. He believed strongly in sharing his business acumen for the benefit of the community and province. He was instrumental in developing the Vancouver Foundation into one of Canada's largest philanthropic institutions. He was a founding Director of The Nature Trust.



Tour of Burnaby's Fraser River foreshore on January 12 with (left to right) Cougar Creek Streamkeepers Ib Nielsen and Deborah Jones, Rudy North of North Growth Management, Patrick Oswald of The Nature Trust, Larry Morgan of Canada Lands Company Ltd., and from the City of Burnaby: Mayor Derek Corrigan, Dipak Dattani of the Engineering Department and Lou Pelletier of the Planning Department. Photo by Sarah Howie.



Cameron Prentice and Jennifer Wilson decided to do something different when they got married. Rather than buying wedding favours, they decided to donate to The Nature Trust because they are both enthusiastic supporters of environment conservation.



Rachel Shephard (on right) with her friend Kate Brown

"We have a responsibility to ensure the health and sustainability of the ecosystems in which we live. Something has to be done by people who care before it is too late. By acquiring ecologically significant lands through purchase or donation The Nature Trust ensures their protection in perpetuity. I like that The Nature Trust works in a collaborative manner with government, private land owners, and other nonprofit organizations to leverage their impact. By donating to The Nature Trust I can, in a small way, add to these collaborative efforts."

-Rachel Shephard