

BY GEORGE: HUMOUROUS ACCOUNTS OF MR. DU'S DAYS IN THE FIELD



Ducks Unlimited Canada

# Conservator

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## Promised Land

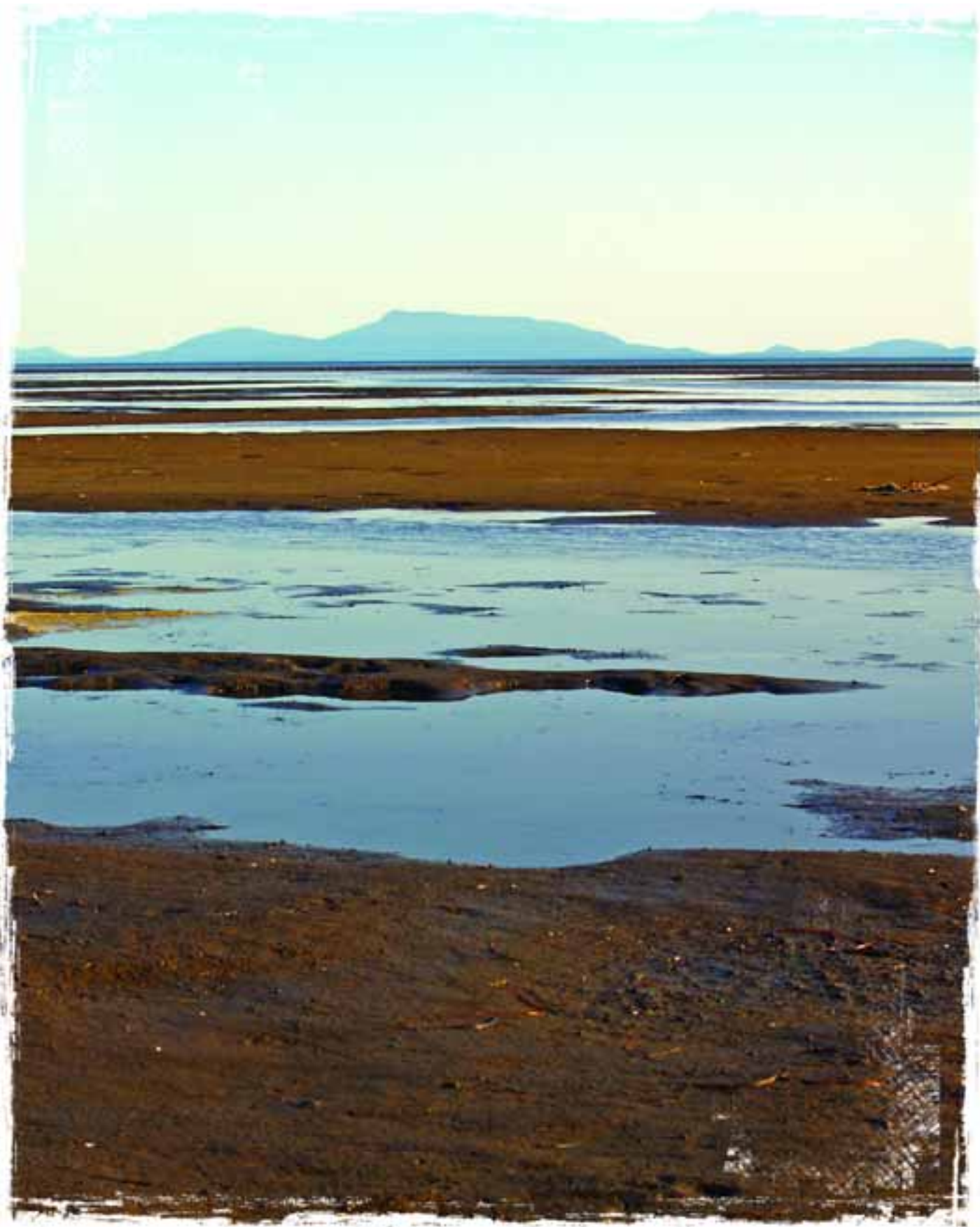
**CONSERVATION  
CHALLENGES MET  
IN B.C.'S GEORGIA  
BASIN**

**THE COLLECTORS:  
DUC MERCHANDISE SPAWNS  
A CURIOUS FOLLOWING**

**DUC ROOTS RUN  
DEEP IN ALBERTA**

**OUT IN FRONT:  
THE NORTHERN SHOVELER**





IN A PRODUCTIVE, BUT CROWDED, CORNER OF THE COUNTRY IDENTIFIED AS A CONTINENTAL CONSERVATION PRIORITY BY DUCKS UNLIMITED, MILLIONS OF WATERFOWL AND SHOREBIRDS COMPETE WITH JUST AS MANY PEOPLE FOR FOOD AND SPACE. DUC IS WORKING TO PROVE IN B.C.'S GEORGIA BASIN, ALL CAN GET ALONG.



By Rhiannon Coppin

# Promised Land

Some merchants fain would buy my land  
To build a stately pleasure dome.  
Poor fools! they cannot understand  
How pricelessly it is my home!  
So luminous with living wings,  
So musical with feathered joy ...  
Not for all pleasure fortune brings,  
Would I such ecstasy destroy.

from *Bird Sanctuary* by Robert Service  
(Lyrics Of A Lowbrow. New York: Dodd Mead, 1951)

IT IS HARDLY SURPRISING THAT ROBERT Service, poet laureate of the Yukon, would reflect fondly upon our avian companions; he lived for a time in British Columbia on what was once Chickadee Lane in North Surrey, in a small cottage that overlooked a cranberry marsh. Besides deer, wild hare, eagles, songbirds and ducks, the sandy and spongy flood plain flats across from New Westminster once housed a seasonal Kwantlen village and then the beginnings of Brownsville: a stage-coach motel, a ferry link to New Westminster and a dozen farm-style wood-frame homes lining the first section of the road to Yale and the gold fields beyond.

JUST ONE HUNDRED YEARS LATER, the same land is criss-crossed by highways and truck routes; rapid transit, rail lines and bridges; big box stores and telephone call centres; decaying used car lots; sparkling new mega-warehouses and port terminals. Remains of Service's writing quarters lie beneath new monster homes. The few remaining wild spaces left to explore 10 years ago are hard to find today.

This is B.C.'s Georgia Basin region, a richly diverse area of such major importance to the continent's waterfowl populations that Ducks Unlimited Canada (DUC) has identified as one of its foremost continental conservation priorities. Crossing the Canada-U. S. border, it is literally home to feet, fin and feather as it comprises a critical flyway for migratory birds, much-needed habitat for fish populations and one of the fastest growing urban areas of North America. This transborder ecosystem is comprised of three major basins: Puget Sound, Strait of Georgia and Strait of Juan de Fuca, extending from just north of Whistler, B.C., south past Seattle as far as Olympia, Washington. On its western boundary, the Georgia Basin runs roughly from the Courtenay area of the Vancouver Island inland to the town of Hope, including the Strait of Georgia, a 240-kilometre sea corridor that feeds the bustling port of Vancouver with ships from all over the world.

"There's so much growth here, real estate is going crazy. Everybody wants to live here, all over the Strait of Georgia," says Dr. Robert Butler, a senior research scientist with Environment Canada's Canadian Wildlife Service and adjunct professor of biological sciences at

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The reason the birds keep coming back, and in such great numbers – according to Butler – is for the grub.

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Simon Fraser University. “In terms of habitat loss, urbanization is definitely the big issue.”

“Because it’s so mild here we get large numbers of birds that remain over the winter. There’s a large population of dunlin – about 40,000 – that stay here. There’s no place in Canada that even comes close to that,” says Butler, an active birder and expert in wild-life habitat whose family settled in the Fraser Valley four generations ago.

**T**HE CLIMATE IN SOUTHWESTERN B.C. AND Vancouver Island is the mildest in Canada, and while the Fraser Valley boasts top-notch farmland, the upland areas include prime temperate rainforest. People have flocked to this little corner for its natural beauty, the climate (when it’s not raining, at least), the lure of the ocean’s waterfront and a laid-

back lifestyle. People come here for some of the same reasons that estimates of one million waterfowl and five million shorebirds do. The annual Christmas Bird Count in Greater Vancouver and Victoria easily spot 130 species of birds, and, overall, 50 of the world’s 200 species of shorebirds have been recorded here. In fact, most of the world’s western sandpiper stage in the Georgia Basin during their migration between the Yukon Delta and Panama Bay or Peru, and significant populations of trumpeter swan are observed in the Vancouver Island area and the Fraser River Delta each year. As well, several hundred thousand birds can be found resting here during any given winter, justifying the Georgia Basin’s designation as an extremely important bird area by Bird Studies Canada and the Western Hemisphere Shorebird Reserve Network.

The reason the birds keep coming back and in such

**Rows of snow geese snooze away the day on a farm field in the Fraser River Delta south of Vancouver. Discarded crops from agricultural areas like this provide a food source for wintering waterfowl in the region.**

great numbers is, according to Butler, for the grub.

“Farmland provides a lot of food from discarded crops,” Butler says, “and then there’s the intertidal, a very rich area, with the tide going in and out each day replenishing all the invertebrates in the mud. It’s a real mosaic of habitat that draws a rich variety of species.”

Some wintering birds find food among sedge, cat-tails and bulrushes; others dive for mussels or nibble the invertebrates and eelgrass in the intertidal and brackish estuary zones. A vast bulk of available energy also comes from the area’s agricultural fields of potatoes, corn, wheat, rye, seeds, and annual winter cover crops and perennial grass.

Few places come close to Boundary Bay and its foreshore (land between the water and cultivated or developed land) between Point Roberts and Blaine, Washington when it comes to avian food providence. From a bird’s-eye view, the shallow waters of the bay reflect shades of teal: eelgrasses and seaweeds. Like most other areas in the Georgia Basin, land in the region is expensive. Yet it is precious waterfowl habitat.

**D**AN BUFFETT, WHO STARTED WITH DUC AS A university summer student performing field-work – that is to say, labouring in wetlands and fields – now runs studies tracking bird movements over the region and plans for habitat acquisitions and agreements to protect their food sources.

“Often now when we buy a piece of land, six or seven agencies contribute resources toward it,” Buffett says. “Working with partnerships is probably the most effective way to conserve land.”

Buffett points to a 12-point action plan that was completed for the Cowichan Bay estuary in the mid-1990s – the last measure of which was to bury power lines that were leading to a forestry company’s shipping port – as an example of the creative partnerships within the region (the forestry company in turn gave up some of its booming rights and intertidal habitat). Upstream of the estuary, several conservation partners added another five acres to their holdings to Somenos Lake, north of Duncan. Over the past decade, the gradual consolidation of the natural landscape around the Somenos Marsh has led to noticeable changes in wildlife use. Two pairs of barn owls and 25 pairs of heron nest nearby, and the marsh will soon again be playing host to a population of one particular regal and back-from-the-brink species.

“Up to one thousand trumpeter swans winter there, where they never were before,” Buffett says.

Further north on Vancouver Island, DUC is involved in eight projects covering 200 hectares of mostly intertidal marshes in the Nanaimo Estuary between the

Duke Point and Departure Bay ferry terminals. Costs for these projects are mostly shared with the Pacific Estuary Conservation Program (PECP), a model for co-operation between government and non-government agencies that in 2005 led to the formation of the provincewide B.C. Conservation Land Forum, a provincial partnership of government and five conservation organizations – Ducks Unlimited Canada, the Pacific Salmon Foundation, the Land Conservancy of B.C., Nature Conservancy of Canada, and the Nature Trust of B.C. – to co-ordinate priority-setting, identify shared interests and opportunities, and arrange partnerships to accomplish their goals.

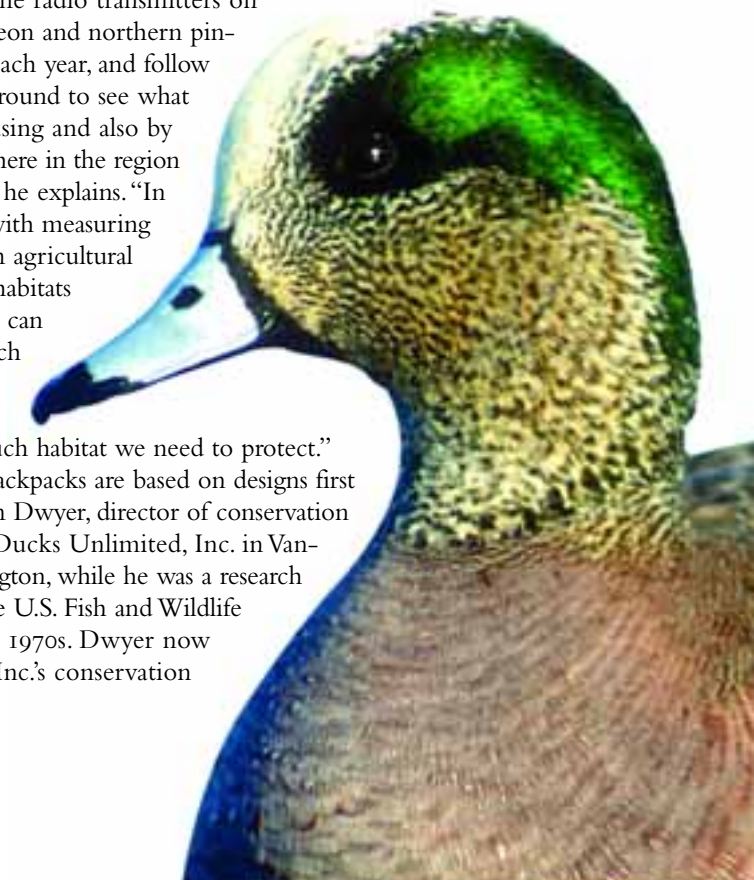
The upgrading of a dike separating private farmland and a restored saltwater marsh at Holden Creek, near Duke Point, is the most recent DUC project to benefit from the partnerships. The diking and the restoration of fish channels are being funded by PECP partners as well as the Ministry of Transportation, the B.C. Transmission Corporations, and B.C. Ferries. These agencies all shared in the purchase of the 22-hectare parcel from a private owner in 1995, on the agreement it would be used for conservation.

**P**ARTNERSHIPS ARE NEEDED FOR THE CONSERVATION of specific waterfowl species within the region as well. Back on the mainland in the Fraser River Delta is an area where, by air and on foot, Buffett has been involved in a three-year tracking program to better determine how two of the most common duck species are moving and using the habitat.

“We put some radio transmitters on American wigeon and northern pintail, about 80 each year, and follow them on the ground to see what fields they’re using and also by plane to see where in the region they’re going,” he explains. “In combination with measuring how food from agricultural and intertidal habitats changes, DUC can assess how much food is needed which determines how much habitat we need to protect.”

The radio backpacks are based on designs first created by Tom Dwyer, director of conservation programs for Ducks Unlimited, Inc. in Vancouver, Washington, while he was a research scientist for the U.S. Fish and Wildlife Service in the 1970s. Dwyer now manages DU Inc.’s conservation

**DUC conservation efforts in the region are targeting specific species. A three-year tracking program of pintails and American wigeon (below) is underway in the Lower Mainland to help better determine the species’ food and habitat requirements.**



© Tom Middleton  
wigeon: DU Canada  
snow geese: © Tom Middleton



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2



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Changing markets have resulted in a heightened demand for crops that are dependant on greenhouses, like those along B.C.'s Boundary Bay (1), an area critical to migrating and wintering bird species like the thousands of dunlin (2) that overwinter in the area's food-rich tidal flats. More trumpeter swans (3) now winter on Vancouver Island, but agricultural changes in areas like Addington Point (below) mean waterfowl are finding fewer places to rest and feed.



delivery program in the Pacific Northwest. Dwyer explains that as more data comes in and analysis is done of the habits of two representative species in the region, Ducks Unlimited will better be able to identify key habitats that are vital to the health of all duck populations. He also notes that the region on both sides of the border is experiencing an accelerated phase of urban development: steady fragmentation of habitat continues apace in the U.S. portion of the Georgia Basin as more extreme and permanent changes are occurring in B.C. At some point, without an accelerated effort to protect and restore key habitats, some species will literally have no place to go.

"You have key species like Wrangel Island snow geese that migrate all the way from Russia and winter in the area. There aren't a lot of them in the whole world, and then most of that entire population comes through this area each year," explains Dwyer, who already knows that part of the answer is preserving wildlife-compatible farming practices. "We need to know what to do to make sure that, 10 and 20 years from now, we've preserved enough habitat to sustain the birds that use this area."

**T**HOUGH MUCH OF EXISTING AGRICULTURAL land in the Canadian portion of the Georgia Basin is provincially designated to be maintained as agricultural land, changing market conditions have increased the conversion of traditional crops (e.g. vegetables, grains and grass) to more intensively farmed crops such as berries, nurseries and crops grown in greenhouses.

Never mind the cranberry craze. Budding interest in the anti-aging, antioxidant superpowers of blueberries has meant that B.C. blueberry production is booming. British Columbia now produces more than 4.5 million kilograms on 2,050 hectares, 99 per cent of which are grown in the Fraser Valley in Richmond, Pitt Meadows and Matsqui. Cheap hydro and recycled methane power have made greenhouse development competitive, and the region's farmland now supports 22 per cent of all Canadian greenhouse land. Growth in affluence and its home improvement culture means that outdoor living spaces and professionally designed landscapes are de rigueur; hence the recent proliferation of nurseries nearby.

Near Pitt Marsh and Addington Point, carefully laid out purplish shrubs tell the tale. What was even five or 10 years ago grasslands for livestock, has become profitable ground for cranberries, blueberries, greenhouses and ornamentals: great for urbanites, bad for wintering waterfowl – and food-chain repercussions are showing already. "We're seeing evidence that the birds are venturing from here to their breeding

grounds without enough energy to be as successful at breeding and survival as they were in the past," Buffett says.

Though historically DUC focused on land acquisitions and water management projects in the Lower Mainland, it is DUC's relationship with the farming community that has returned solid values for waterfowl.

"Ducks Unlimited Canada has a real knack working with the soil-based farmers here in the Delta and it is key if we're going to continue to have soil-based agriculture," explains Ken Brock, head of Habitat Conservation with the Canadian Wildlife Service's Pacific and Yukon Division.

"The Georgia Basin is a haven for wintering birds like nowhere else in Canada, and agriculture is a big part of that," Brock says.

"What's important for the birds is the mosaic of habitat runs from mudflats through foreshore marsh to extensive soil-based agricultural fields. That mosaic provides the varied habitats that large number of birds such as waterfowl, shorebirds and raptors depend on for their survival."

The food energy value of agricultural lands motivates Ducks Unlimited Canada, the Canadian Wildlife Service, and all the other partners of the Pacific Estuary Conservation Program to work with the soil-based agricultural community to keep them – and their wildlife-compatible habitat – in business. Together, the organizations support a greenfield cover crop program, where farmers can realize the soil benefits derived from planting a winter cover crop and also qualify for financial incentives for their wildlife-friendly agricultural practices.

**D**UC'S HALLMARK BREAKTHROUGH WITH farmers came in 2005 with the placement of two land-use covenants on farmland in the critical Boundary Bay and Mud Bay region. There, it's tough to negotiate land purchases – agricultural or otherwise – in one of the hottest real estate markets in Canada. DUC, within the constraints of its budget, has since been creatively maximizing its purchasing power in this increasingly complex, and expensive, world.

Mike Fitzsimmons, manager of Crown land partnerships and sales for the south coast, explains how the first farmland covenant on 56 hectares came about. Though the Province was mandated to sell the land,

the B.C. Ministry of Environment wanted assurances that the farmland would maintain wildlife value. DUC offered to buy the land, but the Ministry of Agriculture along with the lessee, a dairy farmer who was also an interested purchaser, objected. The Crown couldn't place its own restrictions on the use of the land, as it would then be encumbering its own land against its own mandate. DUC negotiated the situation where it would enter into a covenant agreement with the dairy farmer as a condition of his purchasing the land.

"Ducks Unlimited actually took the lead, from the government's perspective," Fitzsimmons says. "I basically got the green light [for the sale] from the Ministry of Environment, saying that if Ducks Unlimited is happy, then they'll be happy. Ducks Unlimited was happy to do that because this allowed their dollars to

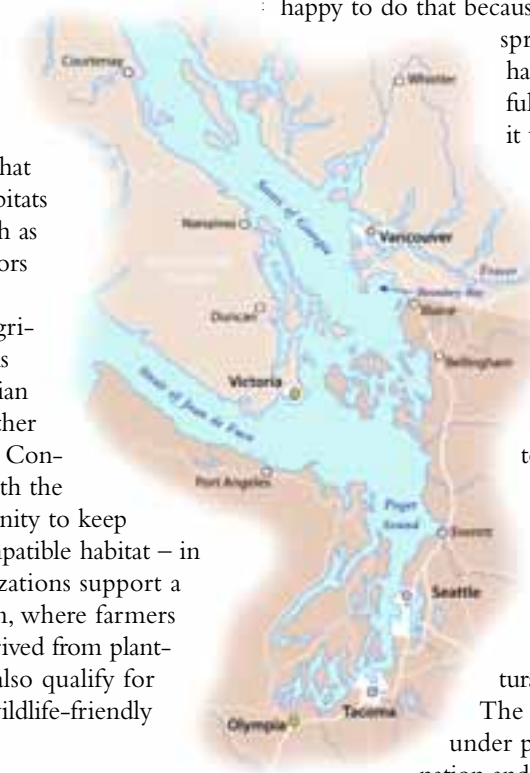
spread a lot further. We were happy because we were getting full value for the parcel, because it wasn't encumbered when we had it. The farmer was happy because he was getting land that was considerably cheaper than what he perhaps would have gotten if he had bought it without a covenant."

Soon after, a neighbouring farmer approached DUC to partner with similar conditions on the purchase of a second large parcel of land in the same area. The vital first step in farmer relations had been taken.

But it is not just the agricultural lands that are under pressure. The major foreshore habitats are under provincial management designation and face imminent pressures from

industry development. Two airports and four port authorities face expansion in the most critical foreshore and marine habitats. This potential loss of food and shelter and the concomitant crowding of birds in adjacent areas makes the securement of substitute marshland even more pressing.

In the face of a red-hot economy, over 52,000 hectares of Georgia Basin coastal habitat has been secured and DUC continues to work with interested partners to ensure waterfowl have the basic provisions for survival: a place to refuel and a winter home to come back to. ✎



dunlin: Claude Ponthieux  
swans: Andrew McLachlan  
greenhouse: Addington Point: Boyne Stanley

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