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Message from the Chair

In the early 1990s a group of farmers and conservationists recognized the values of the Fraser River delta to farming and wildlife. With support from the Corporation of Delta and staff from UBC, the Ministries of Agriculture and Environment, this group met over six months and put together the constitution of the Delta Farmland and Wildlife Trust (the Trust). I am pleased to see that 13 years later the work of the Trust continues to benefit both farming and wildlife contained in this vital ecosystem.

The success of this partnership is first and foremost because Delta has a farming community that is willing to participate in the stewardship programs offered by the Trust. Second, the Trust is fortunate to have Board members from both founding sectors who continue to volunteer their time and expertise to work together and provide informed leadership. At the Annual General Meeting, two valued members left the Board after serving their six years: Ron Harris who has was Vice Chair and Susan Jones who was Treasurer. The Trust thanks them both for their dedication and full service on the Board. We welcomed Westham Island farmer Hugh Reynolds and naturalist Anne Murray as their replacements. Another vital ingredient that keeps the Trust running so professionally is our splendid staff: Markus Merkens as Wildlife Coordinator, Heather Meberg and Lena Syrový as Agriculture Coordinators and Margaret Paterson as Office Coordinator.

The Trust is fortunate to have the support of many funding partners. We continue to benefit from the YVR Wildlife Stewardship Fund (established over a decade ago as a result of compensation for the expansion of Vancouver International Airport) as well as the Boundary Shores Compensation Agreement funds (derived as compensation for development of a local golf course). These two endowments held in trust form the financial base of our programs. Our greatest single benefactor, the Delta Agricultural Society, has made it possible for the Trust to diversify programs and increase the area under stewardship. Further, the Trust receives annual funding from the BC Waterfowl Society, Ducks Unlimited, Canadian Wildlife Service, the Corporation of Delta, as well as corporate and private donations. On behalf of the Board, I wish to thank all these funding partners for their continued, generous support. With their contributions, whole field and field margin stewardship programs continue to have a significant impact on the conservation of soils and habitats in the delta ecosystem.

The summer solstice barbecue (2005) was a success again thanks to the expert organization of Margaret Paterson and support from other staff and a host of volunteers. It is an important fundraiser and a splendid way of connecting and celebrating with our generous supporters of farmland stewardship.

The October Fall Field Tour and the Farmland Awareness Campaign were highly successful thanks to the excellent work of staff and funding by partners including VanCity and Ducks Unlimited Canada. Through such activities the Trust increases public awareness of sustainable farmland stewardship. An additional tool this year was the establishment of a website. So you can keep up to date with the Trust between Annual Reports at: www.deltafarmland.ca.

Dr. Mary J. Taitt, Chair
Delta Farmland and Wildlife Trust

Board of Directors 2005/06

Mary Taitt, Chair

Mary is a tutor with Thompson Rivers University, a naturalist for Vancouver Whale Watch and an ecological consultant. She is interested in conserving Delta's ecosystem and is a director of the Boundary Bay Conservation Committee. She is a founding Director of the Trust and returned to the Board in February 2005.

Anne Murray, Treasurer (as of February 2006)

Anne is a lifelong naturalist with a keen interest in birds, and a background in education and has recently published A Nature Guide to Boundary Bay. She is a volunteer board member with Nature Canada and BC Nature and returned to this Board after a brief hiatus.

John Malenstyn

John is a second generation Delta farmer initially operating a dairy operation. He now grows row crops. He is member of the Delta Farmers Institute. He completed a 6 year term as a Board member in 2003 and returned in February 2005 to serve again.

Hugh Reynolds (as of February 2006)

Hugh is a fourth generation vegetable farmer. He is dedicated to the economic sustainability of farming in the Fraser Valley and has been studying the changes to Delta's geography and the effects on the environment. He is a founding Director and returned to the Board in 2006.

Noel Roddick, Vice Chair

Noel is a founding director of DFWT has been active on our Board on numerous occasions over the past decade. He is the owner of an agricultural supply and services company in Delta. He rejoined the Board in 2002.

John Hatfield, Secretary

John is a retired biologist who spent most of his career as a land manager for the Canadian Wildlife Service. He is a founding director of the Delta Farmland and Wildlife Trust and has filled his current position on the Board since 2000.

Jim Ronback

Jim is a retired engineer, member of the Delta Naturalists and director of the Boundary Bay Conservation Committee. Jim's interests include bird watching, biodiversity, habitat conservation and pollution issues. He joined the Board in February 2005.

Edward van Veenendaal

Edward is the owner/operator of a landscape business offering environmentally friendly garden services. He is a member of the Delta Naturalists. Local ecology and sustainability issues hold his interest. He joined the Board in February 2005.



What does the Delta Farmland & Wildlife Trust do?

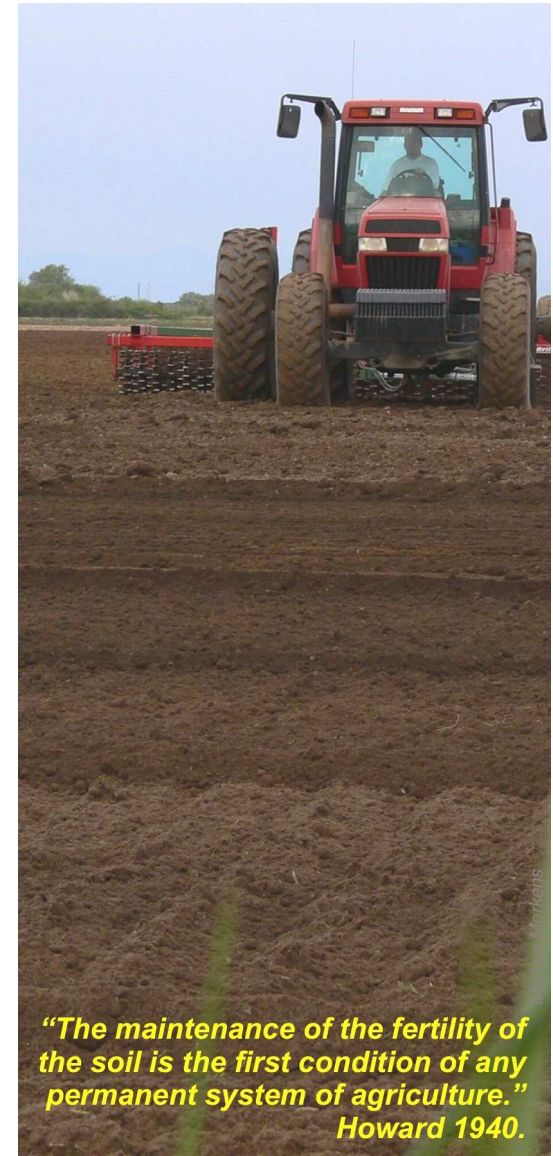
Over the last 13 years Delta Farmland and Wildlife Trust (DFWT) has been working with Delta and Richmond farmers to invest in the conservation of soil and wildlife habitat on local farms. The Trust's mission is to ***promote the preservation of farmland and associated wildlife habitat on the Fraser River delta through sustainable farming and land stewardship***. Guided by a voluntary Board of farmers and conservationists, it has developed into a model for farmland and wildlife habitat conservation. It continues to work towards developing creative solutions to conflicts, barriers and challenges to farming and wildlife in the area. This report summarizes the work of DFWT over the last year and outlines goals for the coming years.

Why conservation of farmland is important

Within and close to human population centers, wildlife utilizes and, in many instances, depends on habitats that occupy lands managed to maximize some economic commodity important to human society. In some of these areas wildlife become pests; in others they are important ecosystem components that are of conservation concern. Sometimes, they become both. It is entirely possible to support these species within these working lands provided that systems are developed that make the land economically productive while retaining habitat characteristics suitable to them. Agro ecosystems (farmland) are prime examples of managed land that are capable of providing this multifaceted role.

Farmland is a precious, finite and irreplaceable resource. It can not be generated at whim, and, in many cases, may not be reclaimed once significant degradation due to non-agricultural development or poor farm management occurs. World-wide, farmland is under great pressure to be converted into urban, sub-urban and/or industrial developments. This is particularly evident in close proximity to large urban centers that are expanding, frequently, under programs of poorly planned and unsustainable development.

The importance of conserving the rich farmlands of the Fraser River delta should not be understated. Although today's local farms occupy land that was once an expanse of native grasslands, shrub communities and bogs (North and Teversham 1984); they continue to be capable of providing internationally important wildlife habitat while being utilized for agricultural production. In fact, Canada's densest winter populations of shorebirds, birds of prey and waterfowl as well as important year-round habitat for an extremely diverse wildlife community continue to be found on the delta (Butler and Campbell 1987, Butler 1992). As a



***"The maintenance of the fertility of the soil is the first condition of any permanent system of agriculture."
Howard 1940.***

result, Delta's farmland is now considered part of Canada's most significant Important Bird Area. Furthermore, much of the area is considered amongst the most productive agricultural lands in Canada and provides significant environmental services to the greater community. What's more, these important resources continue to be present within 25 km of downtown Vancouver.

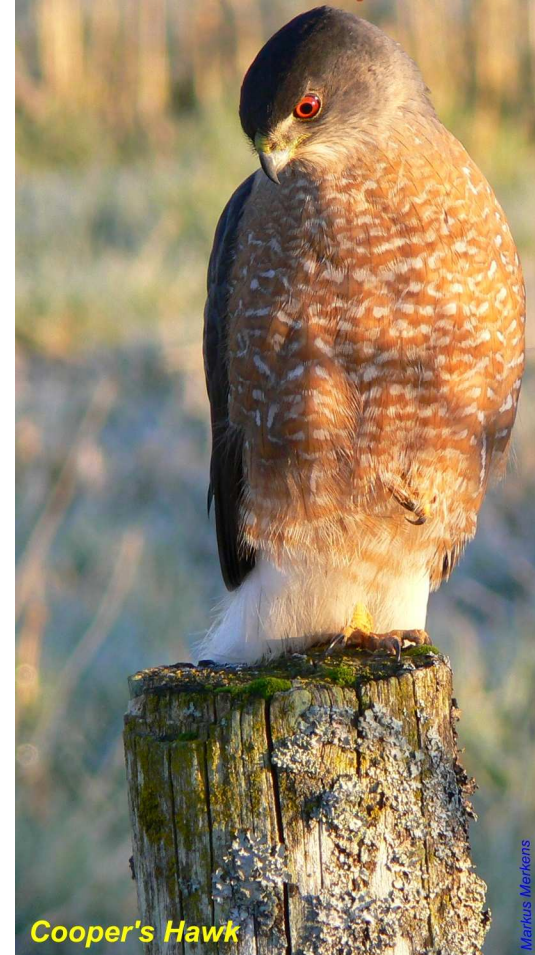
Good stewardship of the Fraser River delta's fertile soil is becoming more and more vital to the overall health of the human and wildlife communities that occupy the delta and beyond. The conservation of these resources is also becoming more and more difficult to sustain as the human population in the Greater Vancouver Regional District grows. Since its designation in 1974, the Agricultural Land Reserve (ALR) within the GVRD has shrunk by 8.8% relative to an overall Provincial net increase of 2.8% over the same period (BC Provincial Agricultural Land Commission 2006). This reduction in ALR will continue into the future, putting more and more pressure on the remaining agricultural resources.

Although "the maintenance of the fertility of the soil is the first condition of any permanent system of agriculture" (Howard, 1940); societal support of diverse local agricultural production and management practices that enhance wildlife habitat may well be the second and third conditions for conserving farmland within the Fraser River delta over the long term.

Delta contains one of Greater Vancouver's last regions of extensive open and productive farmland. Approximately 10,000 hectares remain within the ALR. Management of the land is controlled and constrained by balancing ecological, socio-economic, and political factors, frequently within short time horizons. Under these conditions ensuring that agricultural resources are conserved in a manner consistent with long term agricultural sustainability and wildlife habitat capacity can be made difficult. By sharing in the cost of land management to facilitate soil and wildlife habitat conservation, land stewardship programs available to farmers through DFWT address all the conditions for conservation mentioned above. Strategies and tactics employed by DFWT are built around an integrated program of research, education and financial incentives in the development and promotion of land stewardship activities directly contributing to soil and wildlife conservation and enhancement in Delta.

"We face the challenge of managing trade-offs between immediate human needs and maintaining the capacity of the biosphere to provide goods and services in the long run."

Foley et al. 2005.



Cooper's Hawk

Marius Merrens

Land Stewardship Programs

Currently, DFWT offers cost share programs for winter cover crops, grassland set-asides, land leveling, field liming and establishing new hedgerows or grass margins. All of these programs have been implemented in order to address specific soil and/or wildlife habitat conservation concerns. Landowners enter into formal agreements with DFWT which lay out acceptable management practices on specific fields/areas for varying periods of time. In return for their cooperation, DFWT shares the cost of managing the field or structure for the period outlined in the agreements.

The programs have impacted a significant area of farmland in Delta. A total of 50 farming operations spread across Delta participated in the programs during 2005/06. In total, approximately 17% of the land within the ALR in Delta was affected by these programs at a total cost share of \$363,153 (Figure 1, Table 1). Details of each of the programs are given below.

Winter Cover Crops

A cover crop is typically a cereal or leguminous (part of the pea (*Fabaceae*) family) crop which is planted after a cash crop has been harvested; usually in late summer or early fall. Use of cover crops is worldwide and, particularly in Delta, is an excellent way of contributing to soil and wildlife habitat enhancement and conservation.

Cover cropping is an example of a management tool that can contribute significantly to the sustainability of agro ecosystems at many levels. These crops protect fields from rain induced soil erosion over winter months and provide a green manure that can be incorporated into the soil before the next growing season (Sustainable Agriculture Network 1998). Incorporation of the cover crop increases organic matter content of soil and this contributes to improved soil structure as well as increased infiltration and water holding capacity. Higher concentrations of organic matter in soil also result in greater capacity for the soil to store important plant nutrients. Some cover crops can also trap excess nutrients left in the field that would otherwise leach out of the soil and be lost or potentially pollute groundwater after cash crop harvest.

Although cover crops are typically used to provide some soil or moisture related agricultural benefit, they often contribute to increased biodiversity within fields and across agricultural landscapes. It has been shown that agricultural systems that include the use of cover crops

Table 1. Summary of total area covered and cost share transferred to farming operations for all DFWT Land Stewardship Programs during the 2005/06 fiscal year.

Program	Acres	Hectares	Program Cost
Winter Cover Crops	2,470	1,000	\$111,128
Grassland Set-asides	571	231	\$152,950
Land Laser Leveling	395	160	\$47,243
Field Liming	1,251	507	\$49,884
Hedgerows	6.62	2.7	\$907
Grass Margins	3.44	1.4	\$1,041
Total	4,697	1,902	\$363,153

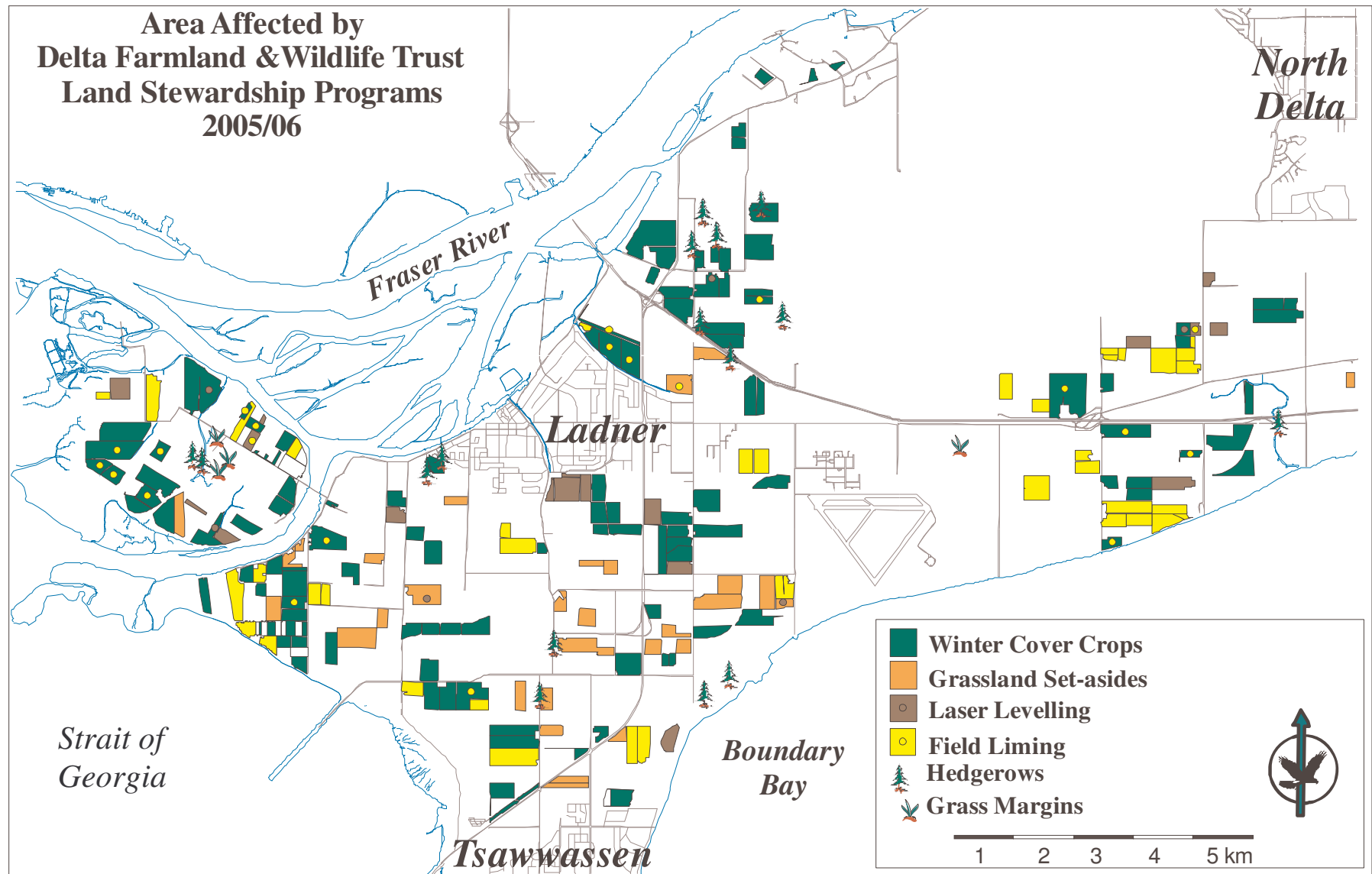


Figure 1. Area affected by 6 land stewardship programs through Delta Farmland and Wildlife Trust for the 2005/06 fiscal year.

can be more diverse than ones that do not (Freemark and Kirk 2001). Many researchers believe that ecosystems with greater levels of biodiversity in the form of species richness and complexity are able to buffer the community from environmental stresses and disasters, rendering them more stable. An ideal system for agricultural production would be one that shows the same tendencies. Cover crops can also be used to reduce atmospheric greenhouse gases by sequestering carbon in plant biomass while the crop is growing and subsequently in soil organic carbon when the crops are ploughed under.

An added environmental benefit of winter cover crops is their ability to support diverse and abundant populations of waterfowl that overwinter on the Fraser River Delta. Every year hundreds of thousands of these medium to long distance migrants come to the delta to spend time feeding on productive foreshore and farmland. As foreshore forage resource access and availability decline due to overuse by waterfowl, industrial development and hazing programs in other areas on the lower coast, the upland areas of the delta will become more and more important in supporting waterfowl. While here, many ducks, geese and swans feed intensively on unharvested crops, crop residue, perennial forage crops (hay fields and pastures) as well as winter cover crops. Significant winter waterfowl grazing damage to hay fields and pastures has been documented over the last two decades presumably due to increased feeding pressure by waterfowl (Baumbrough 2002, Delta Farmers' Institute 2006). Minimizing damage to these economically important farm fields is best achieved through the management of alternative foraging areas (AFAs) in the landscape. Ensuring that sufficient alternative forage resources exist on upland areas is a challenge. Providing farmers with a cost share for establishing appropriate winter cover crops is a cost effective method of providing AFAs for waterfowl while at the same time contributing to soil conservation.

The Greenfields (Winter Cover Crop) program has been available to Delta farmers since the early 1990s. Since then, an average of close to 3,000 acres (approximately 12% of the ALR in delta) has been planted annually (Figure 2). During 2005/06, a total of 2,470 acres (1,000 ha) of winter cover crop were established by Delta farmers under DFWT's program (Table 1, Figures 1, 2 & 3, Appendix 1). Cash crop composition and weather limited the total area planted with winter cover crops although 250 more acres were established relative to last year. Harvest season tended to be drier than during the previous year, however, a prolonged harvest season resulted in fewer cover crop fields. Farmers received \$45/acre (\$111/ha) for every acre planted with cover crops under the guidelines established for the

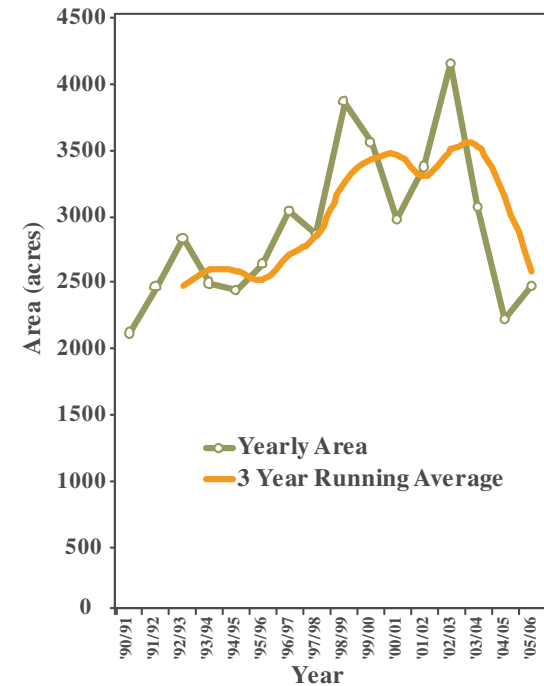


Figure 2. Annual winter cover crop acreage since implementation of the Greenfields Program in 1990.

program.

Farmers working under tight planting and harvest schedules fit cover crop planting in when they can get to it. Over half of the winter cover crop area planted this year consisted of spring barley planted before September 10 (56%) (Figure 3). Winter wheat, planted primarily after September 10, was the next most abundant crop (25%). Oats, annual rye, fall rye, spring wheat and timothy accounted for 19% of the area planted.

For the fourth year in a row, some farmers have added cover cropping to their silage corn management programs. Just over 100 acres (40 ha) of silage corn were relay cropped with Italian rye grass. Relay cropping is a practice that allows farmers to overlap crops in the same fields effectively growing two crops at the same time. In Delta, farmers plant Italian Ryegrass between established corn rows relatively early in the growing season. Corn dominates the field throughout summer and after harvest, the ryegrass takes over lapping up excess nitrogen in the field throughout the late fall and winter.

During winter the relay crops can attract waterfowl that will feed on the nitrogen rich grass crop. It is suspected that these crops are effective in luring waterfowl away from less preferred perennial forage fields. When grazing on these fields is not intensive, the ryegrass can be harvested the following year as an early season silage crop. Yield and silage quality continue to be high with some farmers filling their silage bunkers. Relay crops in east Delta tend to be grazed off early during winter, presumably by American Wigeon, whereas those established north of Crescent Slough typically grow into the following spring despite being grazed by Trumpeter Swans and Canada Geese throughout the winter months.

The winter cover crop program has clearly demonstrated that agricultural lands can be managed in such a manner to improve soil productivity while providing important wildlife habitat and potentially contributing to carbon sequestration. Cover crop types, planting dates and spatial distributions will be evaluated over the next several years to refine the program and provide input to farmers so that the combined benefit to soils, forage producers and wildlife is maximized.

Grassland Set-asides

The nature of grasslands within Delta's landscape has changed over the last 150 years. Before the delta was converted to farmland beginning in 1868, much of it was covered in a grass or grass/shrub vegetation community that was regularly flooded during winter by high

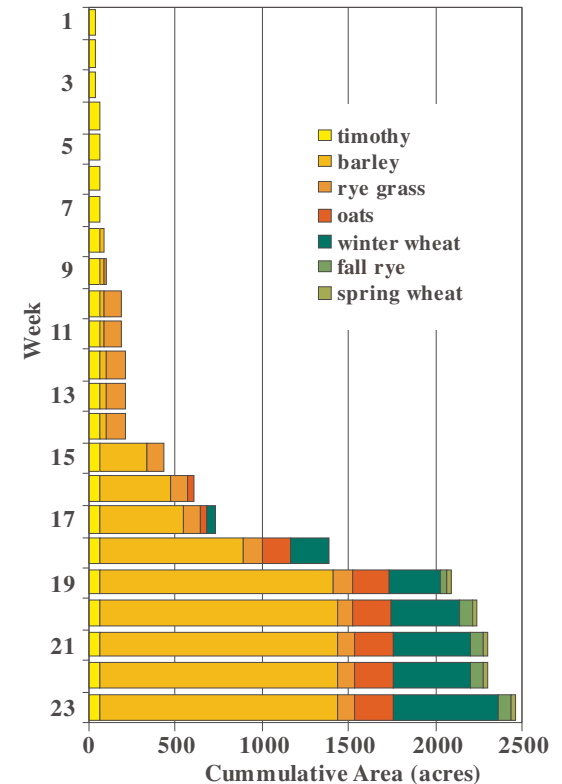


Figure 3. Cumulative area of cover crops planted in Delta by week (starting May 1) and crop type for the 2005/06 fiscal year.

tides and in spring by the increased flow of the Fraser River during snow-melt in the mountains (North and Teversham 1984). After the delta was diked and drained in the late 1800s, the majority of farmland was used in the production of grain and grass crops which were the mainstay of early agriculture in Delta. These crops produced animal fodder that fed livestock, grains that were milled at sites outside of Delta and, in the early 1900s, they were used to support Delta's growing dairy industry. Since 1950, intensification of agriculture on the delta has resulted in a reduced area committed to grass and grain crops and those areas used in hay production are managed differently. Whereas hay fields would be cut once or, rarely, twice a year up until the middle of the last century, modern intensive hay production systems yield up to 5 cuts a year.

Over the same period, urban and industrial development throughout the lower mainland has resulted in a reduction in old-field habitat and agricultural habitats containing old-field characteristics (Sullivan 1992, Moore 1990). It is recognized that old-field habitat is used preferentially by many raptor species that reside within or visit the Delta (Butler and Campbell 1987, Sullivan 1992, Merckens 2005). These raptors will feed on small mammals that live within old-field and other grassland types. The Townsend's Vole, a relatively large-sized native rodent, is an important component of grassland habitats in the Fraser lowlands and can reach high densities in old-field habitats (Taitt and Krebs 1983, Sullivan 1992, Merckens 2005).

Data collected by the DFWT have shown that the re-introduction of short to medium term grassland rotations into farmland management plans can provide valuable habitat for a variety of grassland hawks and owls particularly during winter months (Merckens 2005). The provision of grassland set-asides is meant to benefit wildlife by providing some of the values encountered in old-field habitat. Grassland set-asides contain important food sources and adequate cover for dense populations of Townsend's Vole, which are utilized by many birds of prey, some of which are listed as being of conservation concern. The Short-eared Owl has been listed as an "Identified Wildlife Species" in British Columbia. This is based on recent population trends and habitat alteration throughout its range and particularly in its main wintering area on the Fraser River delta. It is Blue-listed in BC and is a species of Special Concern under the Federal Species at Risk Act (SARA). The western population of Barn Owls is also listed as a species of special concern under SARA. These species are just examples of the many grassland dependent species world-wide that have in recent years been declining in numbers, presumably due to intensification of agricultural systems

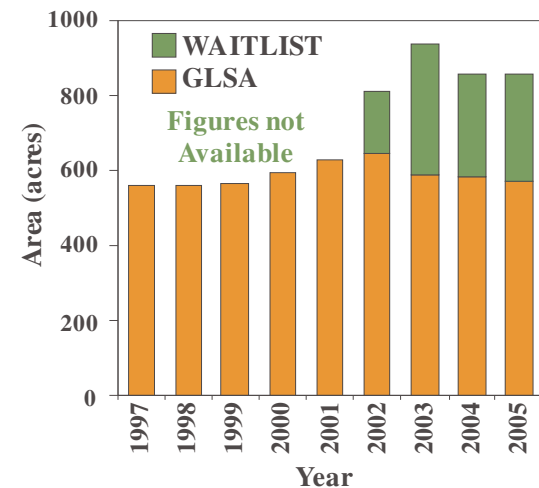
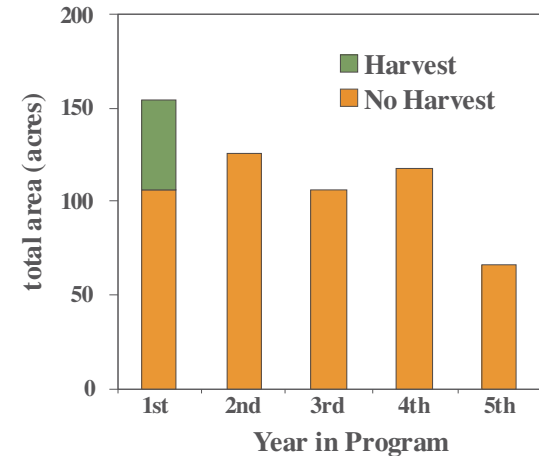


Figure 4. Area of set-asides in program by age for 2005/06 (top), and total area of set-asides by year showing waiting list area since 2002 (bottom).

(Newton 1998, Murphy 2003, Vickery et al. 2004). Among the factors contributing to the decline of bird habitat on farm grasslands are: spring ploughing, early season harvest, loss of mixed farms, and general declines in pasture and hay field area.

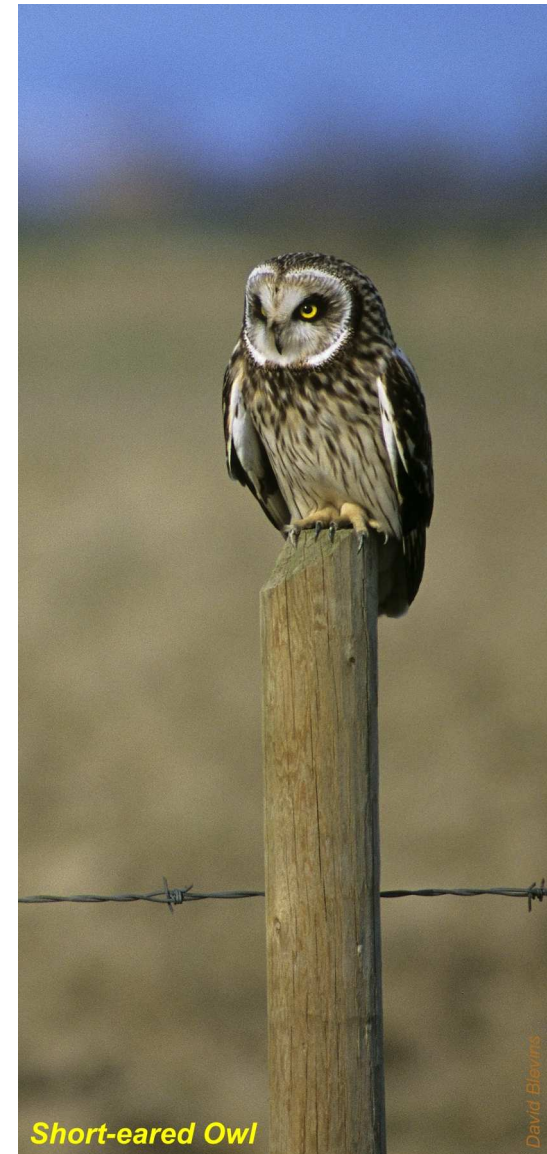
Increasing the relative value of some fields in an agricultural landscape for short periods can partially offset the effects of intensifying agricultural production systems. Some grassland raptor species use 2nd year or older set-asides on the Fraser River delta as their most preferred foraging and/or roosting habitat during winter months. The set-asides are not immediately colonized by Townsend's Voles and must be in at least their second winter to become valuable habitat to these species groups. Although literature suggests that old-field habitat is important to Short-eared Owls (British Columbia Ministry of Water, Land and Air Protection 2004) relatively short-term grassland habitats provide dense prey populations and suitable cover for wintering hawks and owls (Merkens 2005).

The management objectives of grassland set-asides are two-fold: improvement of soils for farming and provision of wildlife habitat. Farmers are encouraged to introduce short- to medium-term rotations of grass mixes into their operations by sharing the cost for the management of land used in grassland set-asides. Improvement in farmland productivity following the set-aside fallow period can be significant, particularly for severely degraded soils.

Twenty farming operations co-operated with DFWT to maintain 29 fields totalling 570.5 acres (231 ha) of grassland set-asides for the 2005/06 fiscal year at an average cost share of \$270/acre (\$667/ha) (see Figures 1 & 4, Appendix 2). Of these, 7 fields (154 acres or 62 ha) were newly established set-asides.

In recent years, local farmers have been subscribing to the Grassland Set-aside program to bridge the transition period required for organic crop production. A three-year set-aside qualifies a field for organic certification provided that no restricted chemicals or management practices were used during that period. In a recent analysis of set-asides over the last 8 years it was determined that between 15 and 20% of the area in set-asides is converted to organic systems after being ploughed under. The transition to organic agricultural production further benefits wildlife by reducing the degree of pesticide use that is potentially harmful to both wildlife and humans in the delta.

Due to funding constraints DFWT's Grassland Set-aside program is habitually



oversubscribed. Our figures indicate that there is an interest from local farmers to commit an additional 200 - 300 acres (81-121 ha) to grassland set-asides if a funding source could be found (Figure 4). In fact, some larger farms have chosen to establish over 150 acres (60 ha) of grassland set-asides outside of the program to rebuild soil structure and productivity on lands that have been intensively used for vegetable production over the last decade. At the end of 2005/06 there were 287 acres (115 ha) on the waiting list.

Although \$173,850 was budgeted for grassland set-asides for 2005/06, final cost share expenditures reached only \$153,950. Our total set-aside acreage was 10 acres (4 ha) short of the maximum planned for and 40 acres (16 ha) of new set-asides contained nurse crops that were taken to grain and harvested. Ducks Unlimited Canada covered some of the set-aside cost-share payments under their On Farm Management Plan Program initiated two years ago. These combined factors resulted in excess revenue of \$4,453 which will be added to the Long-term Grassland Set-aside Management Fund established 4 years ago to buffer fluctuations in grassland set-aside revenue and maintain the set-aside program at levels above 550 acres.

Laser Levelling

Land laser levelling can be an effective and, at times, costly tool contributing to sustainable agriculture. Used in various agricultural systems worldwide, it offers farmers the opportunity to control moisture levels across entire fields. In arid agricultural regions it can be used to improve irrigation efficiency particularly when combined with the application of drip irrigation systems. In relatively wet areas, like the delta, precision field contouring allows farmers to control excess water flow within a field, prevent areas of standing water and provide more uniform moisture levels across fields. Water movement and ponding can damage soil through erosion, soil compaction and/or concentrating salt in low spots.

Reduced wintertime flooding of fields also improves the establishment and longevity of winter cover crops and grass fields that are subject to grazing by waterfowl. This contributes to improving the habitat for wildlife and reducing the risk of costly damage to economically important crops for farmers.

Laser levelled fields also tend to dry out more quickly in the spring. Earlier access and planting dates give farmers more options on what to plant in their fields and also make it more likely that a cover crop can be planted on the field once the cash crop is harvested.

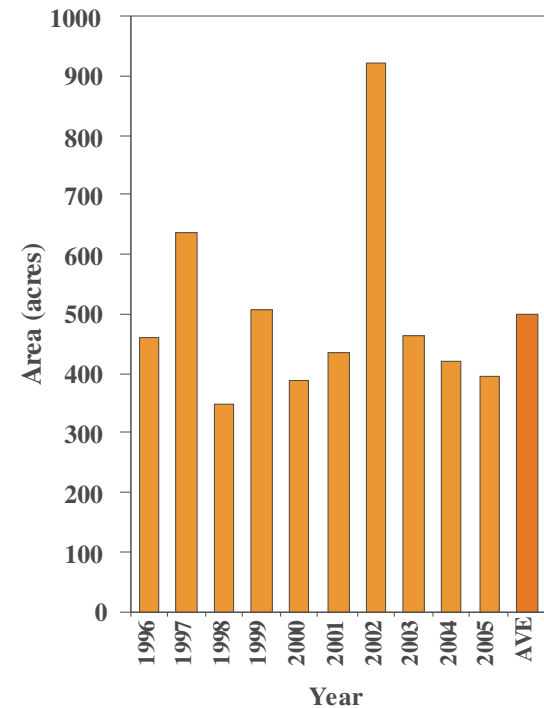


Figure 5. Total area levelled under program by year since 1996.

Ultimately land levelling contributes to increasing productivity for both agriculture and wildlife.

Since 1996, Delta farmers have been eligible to receive 50% of the cost of laser levelling their fields up to a maximum of \$125/acre (\$309/ha) from DFWT. Under the program up to 50 acres (20 ha) per co-operator per year is cost shared annually. All levelling agreements received prior to the end of October are included in the program in any given year. At the end of October, the approved budget is allocated so that every farmer who has submitted an agreement and has completed the levelling work will receive cost-share support.

A total of 395 acres (160 ha) of levelling was completed at 20 sites within Delta during 2004/05 (Figure 1 & 5, Appendix 3). A cost share of \$48,571 was committed to this. Fields affected by the program had an estimated average of 348 cubic yards of soil moved per acre (125 m³/ha) to facilitate field contouring for a total of almost 140,000 cu yd (107,000 m³). The area levelled, about 100 acres (40 ha) lower than the average, is the third lowest since implementation of the program (Figure 5). Once again, wet weather reduced the window of levelling opportunity significantly.

Field Liming

In Delta the soils have a tendency to acidify relatively quickly. Farmers must work to maintain soil pH in a range that allows important plant nutrients to be available for their crops to absorb. Soil chemistry can be complex and must be matched to the crops to ensure optimum growth (see Figure 6 for a schematic on the relative availability of soil organisms and plant nutrients). The application of lime to fields allows farmers to adjust soil pH to approach a level that maximizes yield potential, particularly for vegetable crops. While many factors, such as the kind of crop, soil type, and climate, influence the effect of liming a field, it can be generally stated that the application of lime on all moderately to strongly acid soils will improve and maintain productivity.

At a cost of \$69 per tonne it is an important investment in the stewardship of agricultural soils. In an economic climate of increasing farm input costs and high land values, the application of lime has become challenging for many farms in Delta. Forgoing lime application can result in declining productivity over time. The effect of lime is not always immediate. Often as much as six months is needed before pH changes significantly and long-term effects may be realized over as many as 10 years.

This is the third year that DFWT has been able to offer a cost share for application of lime to



Figure 6. Effect of soil pH on the availability of soil organisms and plant nutrients.

soil. The intent of this program is to encourage growers to invest in field liming to improve the productivity of their lands and those that they rent/lease. Under the program applicants are allowed to apply for a maximum \$30/ton of lime applied to their fields. Restrictions within the program include a maximum of 100 tons per farming operation and a maximum application rate of 2 tons/acre.

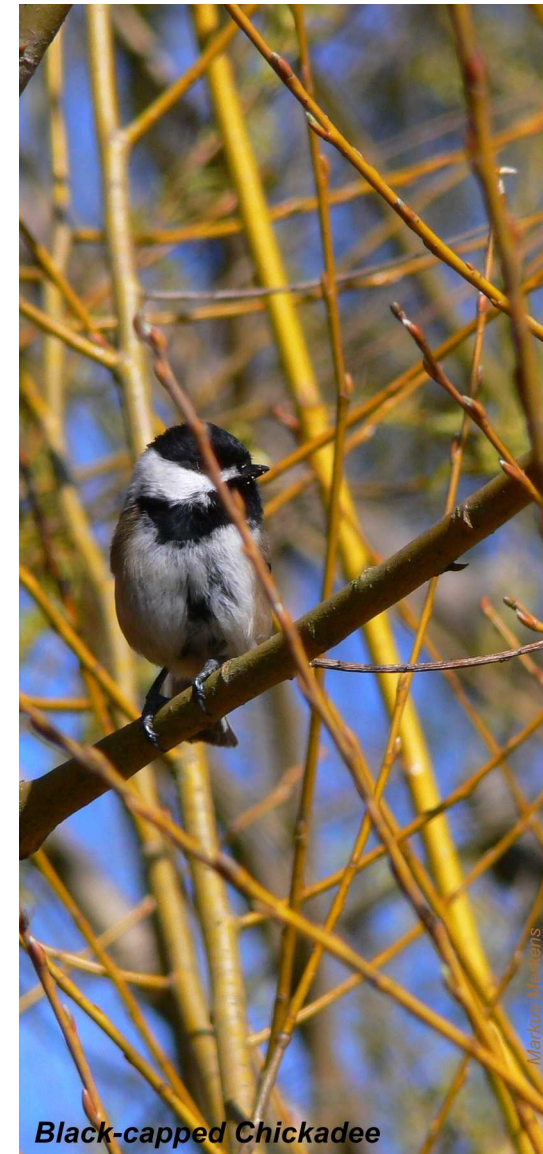
In total, farms applied 1,662 tons of lime to 1,250 acres (506 ha) under the program. The maximum cost share of \$30 per ton was made available to applicants even though the program was significantly over subscribed.

Hedgerow and Grass Margin Programs

Hedgerows are linear barriers of trees, shrubs, perennial forbs and/or grasses usually associated with field boundaries. This simplistic definition fails to include the many functional roles that hedgerows can play in a landscape. A more complete definition could be: *“Hedgerows are linear strips of vegetation within arable landscapes. They induce many important abiotic properties, such as windbreaks and different microclimates, but also provide valuable biotic qualities such as habitats, refuges or stepping stones for small mammals, birds and invertebrates”* (Tischendorf et al. 1998).

Within an agricultural landscape hedgerows can provide food, offer concealment and thermal cover, provide breeding sites and can function as travel corridors connecting habitat fragments for many species of wildlife. In some areas, habitat provided by these structures has become extremely important in supporting wildlife communities, particularly breeding birds (Sparks et al. 1996). Worldwide, intensification of agriculture has resulted in the rapid loss of a significant amount of these important ecosystem components and many countries, particularly in Europe, have implemented agri-environment schemes to rebuild hedgerows. Under these programs, landowners receive payments for creating and maintaining hedgerows on their farms.

These planted margins can also provide agricultural benefits in many ways. For instance, when they include plant species of economic value, they can be used to diversify the income base of farms. They can act as living fences keeping livestock in and trespassers out. They can act as two way buffers strips keeping pollution, weeds and pests out of cultivated fields while reducing loss of soil, sediment, nutrients and pesticides to neighbouring areas. They can improve within field micro-climates by abating winds and trapping heat. They can also



Black-capped Chickadee

increase biodiversity in agro ecosystems by acting as reservoirs for micro-organisms as well as plant, insect and vertebrate species. Some of these components can be to the farmer's advantage by potentially contributing to control of pest species within croplands.

DFWT has been funding the establishment of new hedgerows within Delta since 1995. The ultimate goal of this program is to build hedgerows that provide valuable year-round habitat for songbirds, raptors and other wildlife groups. New hedgerows typically consist of 1-5 m wide vegetation strips planted along field boundaries that include a diversity of native shrub and tree species that are intensively managed to develop into a structurally complex and species diverse hedgerow.

Building hedgerows can be an expensive undertaking. Construction costs in Delta range from \$40,000 - \$60,000 per km. These costs include preparing the field margin for hedgerow placement, building a hedgebank or berm, purchase and planting of all plant material, installation of 3-4 year battery-operated, programmable irrigation systems, placement of a sawdust or bark mulch layer and a limited warrantee of 1 or 2 years for replacement of dead planting material.

DFWT hedgerow agreements with co-operators span 10 years and can be extended for a second 10-year term. During this time, the co-operator is compensated at a rate of \$300/ac/yr (\$741/ha/yr) for any land taken out of agricultural production for the purposes of establishing a hedgerow.

Like hedgerows, linear patches of grassland habitat around cultivated fields can also provide benefit to wildlife and farming interests under certain situations. Grass margins will be used by small mammals, songbirds, raptors and insects. Some forms of agriculture (organic crop production) require field margins around cultivated areas and, if maintained as grass, these can choke out agricultural weeds and provide refuges for beneficial insects. Grass margins can also provide a transition between the agricultural field and the hedgerow or ditch habitats. They also improve the filtration of field run-off reducing the amount of soil, silt and excess nutrients that leach from a field. Farmer interest in this program has been limited to date; however, with the increase in organic production within the delta the area covered by grass field margins may also increase.

A combined area of 10.02 acres (4.06 ha) was affected by the program this fiscal year, consisting of 6.62 acres (2.68 ha) of hedgerow and 3.44 acres (1.39 ha) of grass margin



(Figure 1, Appendix 5). There are 17 distinct hedgerow sites and 4 grass margin sites within the program. This inventory of hedgerows requires significant maintenance to ensure the survival of the planted stock and thereby maximum benefit to wildlife. The greatest maintenance objective is the control of competing vegetation until the hedgerows become well established and shade out competing vegetation. Just under \$3,320 were used to support maintenance of DFWT hedgerows during this year.

One new hedgerow was partially established this year at Grove Crest Farms adjacent to Burns Road (Appendix 6). Only 150 m of the planned 480 m of 2-m wide hedgerow was planted at this site at a cost of \$10,500. The remaining 330 m will be established early in the next fiscal year. Grove Crest Farms has agreed to maintain a 3-m grass strip between the hedgerow and cultivated field. The strip will be mowed to control weeds for the first two years and further maintenance of the grass margin will be assessed on a yearly basis.

Monitoring, Evaluation and Research Update

DFWT believes that it is important to continue to study the impacts of these stewardship practices in an ongoing research program to ensure that objectives are being met and to provide information important to the adjustment of programs over time. These programs are not meant to become stagnant. Strategies and tactics used for soil, farm and wildlife conservation will need to be altered as agricultural systems and land-use patterns in the area change. There is no doubt about it; agriculture of the future will be different – different from that of today and that of the past.

Monitoring, evaluation and research continued on winter cover crops, grassland set-asides and hedgerows this year. Field work was completed on winter use of set-asides by raptors, small mammal winter densities in set-asides, winter use of farmland habitat by swans and raptors at the landscape level, songbird surveys along selected field margins and waterfowl use of winter cover crop fields. A brief summary of surveys and results follows.

Cover Crops

Field monitoring of cover crops occurred three times over the winter of 2005/06. Grazing surveys on all cover crop fields registered in the program were conducted in November, February and March. Although surveys usually occur in January, it was necessary to postpone the mid-winter survey till February due to extremely wet weather.



**Researcher and
Potato Crop Residue**

During each survey, an observer walked through each field to visually estimate the proportion of field that was grazed by waterfowl as well as the intensity with which it was grazed (not grazed, partially grazed (evidence of waterfowl clipping vegetation), heavily grazed (half of crop plants grazed off), extremely grazed (cover crop stubble left), completely grazed (no evidence of cover crop left)).

Inclement weather, extremely high tides and high waterfowl population densities resulted in the upland areas on the Fraser delta being heavily used by waterfowl during the winter of 2005/06. By the end of winter (March 2006) 82% of 2,556 acres of cover crops showed evidence of grazing and 51% were either extremely or completely grazed (Figure 7).

Late planted wheat crops appear to be particularly vulnerable to waterfowl grazing with 98% of the total area planted with wheat showing evidence of grazing by March. Of 32 wheat fields planted, 19 were completely grazed by the end of winter, all of which were planted after September 1. Likewise, timothy fields were grazed off early in the season, although little was planted (65 acres) and all of this was in the Brunswick Point area of Delta. Brunswick point is traditionally heavily used by Snow Geese throughout the winter and it is apparent that this species grazed the timothy fields relatively early in the season (Dave Bradbeer, Master's Student, University of BC, Vancouver, BC, pers. comm.). In many instances, there was little wheat or timothy cover crop left to plough down at the end of the season.

On the other hand, barley fields appeared to be used less by grazing waterfowl. Of 64 fields planted with spring barley, only 8 were extremely grazed (95% or more of the field area completely grazed). Barley tended to yellow and die part way through the winter, leaving little nutritious value for foraging waterfowl. Biomass of barley fields tended to be high at the end of winter and allowed for significant incorporation of organic carbon after plough down.

Farmer's choices of cover crop variety and planting dates are made in response to the earliest planting date possible following cash crop harvest. Early harvested vegetable crops tend to be followed by spring barley whereas later crops are usually followed by wheat. Choice of which crops will be grazed is likely a function of forage palatability and nutrient-energy requirements of wintering waterfowl.

In many instances, cover crops are grazed before they can provide full soil cover. In these cases cover crops usually do not survive early season grazing events. The plants are nitrogen rich and highly palatable containing very little coarse fibre. These tender young

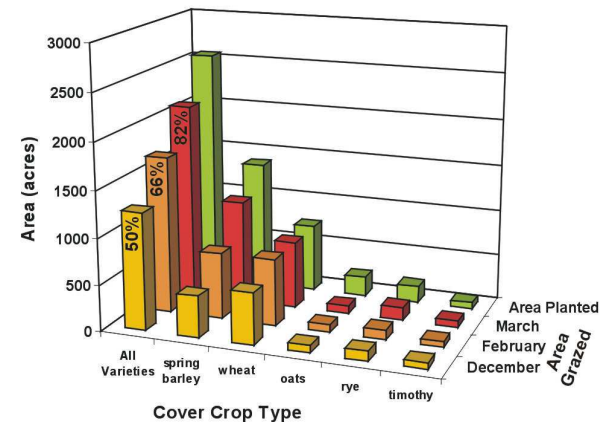


Figure 7. American Wigeon and Mallards graze on cover crop (top); Total winter cover crop acreage planted (green bars) compared to waterfowl grazing extent during three winter surveys during 2005/06 (bottom).

plants may be ideal for waterfowl nutritional requirements, but do not provide forage throughout winter nor do they provide any residual crop for plough down.

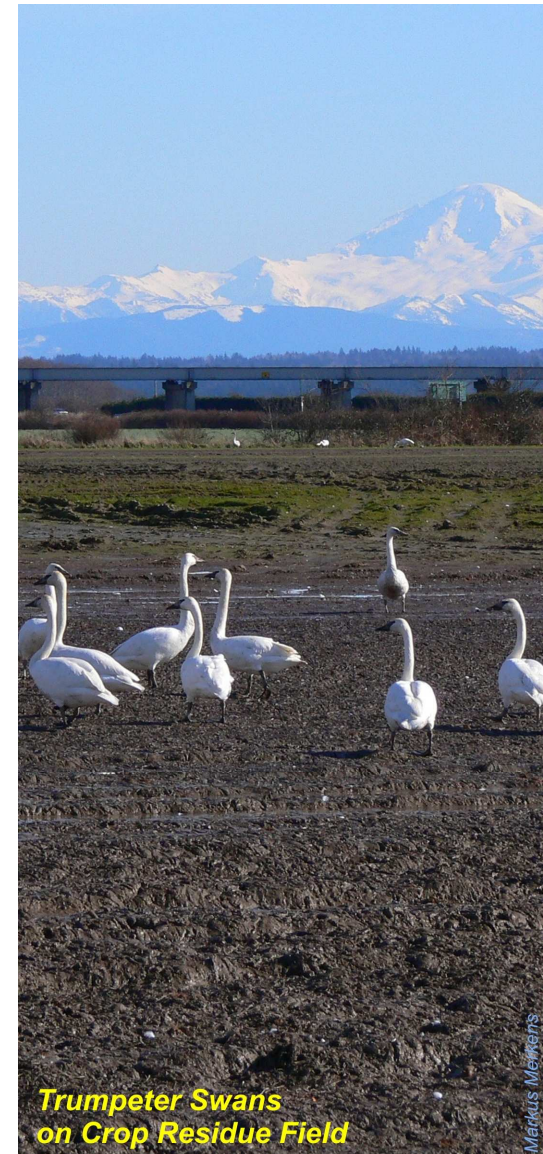
Over the next few years the benefits of these late planted cover crops should be further evaluated to determine if planting guidelines of the program need to be adjusted.

Trumpeter Swan Habitat Use Study

Trumpeter Swans have made a remarkable recovery after being driven to near extinction in the early 1930s. In 2000, it was estimated that the continental population had reached 23,647 individuals. The Pacific Coast subpopulation represents over 70% of all Trumpeter Swans on the continent and a significant proportion of these winter on the south coast of BC. Midwinter counts of swans on southern Vancouver Island and the Fraser River delta have shown that the winter population in the area grew from 947 in 1970 to 7,570 in 2005 (Andre Breault, Environment Canada, Canadian Wildlife Service, Delta, BC). It is suspected that, as the population continues to grow, medium to large estuaries associated with agricultural lands will likely continue to be important in supporting wintering swans in the future (Sean Boyd, Environment Canada, Canadian wildlife Service, Delta, BC). Accommodating these large grazers on agricultural lands can be difficult as they are capable of causing significant damage to economically important fields. The planting of cover crops can provide significant lure areas that have the potential to draw swans away from important crops such as perennial forage. This tactic has been implemented both in the Comox Valley on Vancouver Island and on the Fraser River delta.

Although ample data on the use of winter cover crops by waterfowl exists for the Fraser delta in the way of grazing surveys, no formal study has been conducted on the use of cover crops specifically by wintering Trumpeter Swans in the area. A pilot study was conducted over the winter of 2005/06 to determine habitat preferences of Trumpeter Swans across 3 regional areas containing mixed field cover (Figure 8). The goal of the study was to gain insight into the relative importance of cover crops in supporting wintering swans.

Surveys conducted between mid-November and the end of March observed swan flocks in all three areas and documented crop type, swan numbers and which fields they fed in. This use was compared to the availability of different field types to determine if swans had particular habitat preferences in each location.



**Trumpeter Swans
on Crop Residue Field**

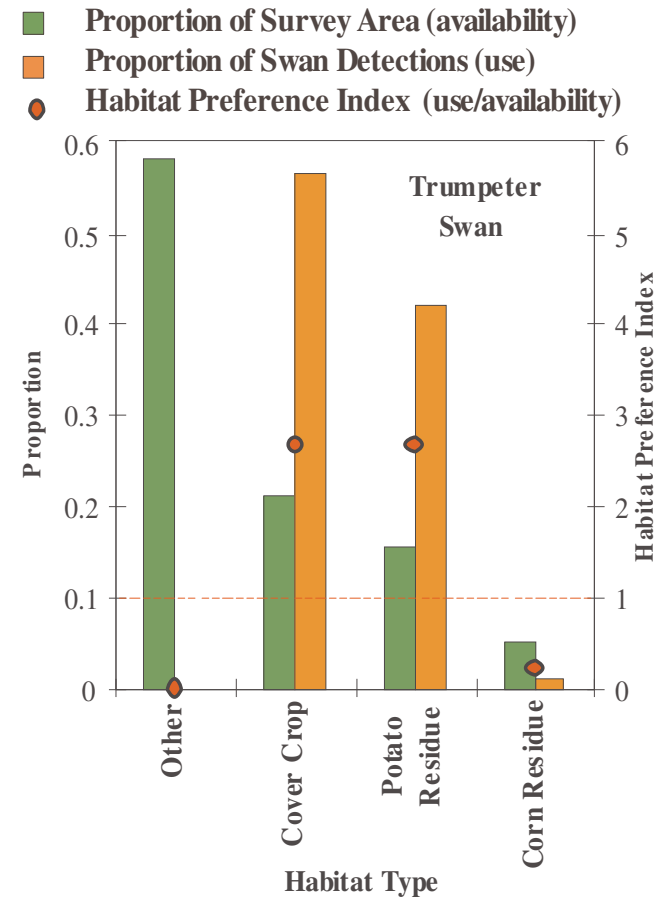
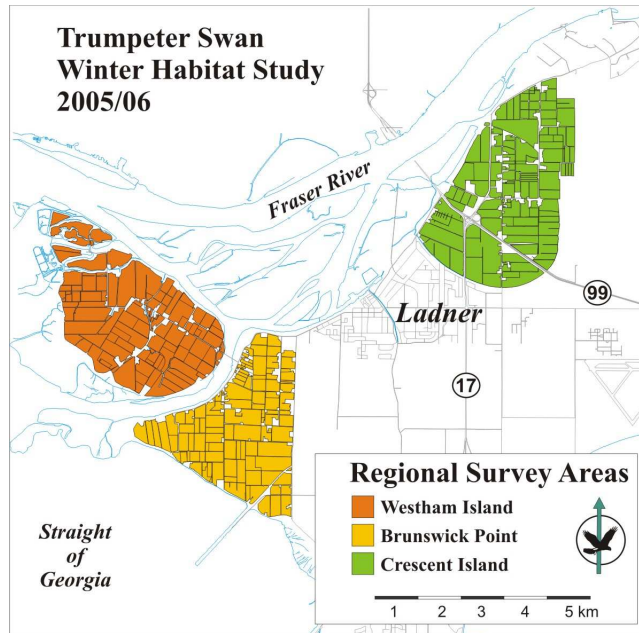


Figure 8. Extent of Trumpeter Swan study showing three regional survey areas within Delta (left), and use and availability of habitat types for swans within the area over the winter 2005/06.

The study revealed that within the surveyed areas swans used only winter cover crops, potato residue fields and corn stubble fields (Figure 8). These field types represented considerably less than half of the combined survey area with cover crops, potato residue and corn stubble accounting for 21%, 16% and 5% of the total area, respectively. The greatest proportion (57%) of all swans detected was using cover crops. Next, were birds using potato residue fields (42%) followed by those seen in corn stubble fields (1%).

A crude index of habitat preference for swans can be obtained by calculating the ratio of relative use of habitat to availability of habitat (red dots in Figure 8). Using this method, a habitat preference index of lower than one indicates a tendency to avoid a habitat and one higher than one indicates a tendency to prefer the habitat type (field type) in question. Habitat preference indices equal to or nearly equal to one indicate neither a preference for the habitat nor an avoidance of the habitat. It must be noted that although indices may indicate a trend in either direction, actual preference or avoidance can only be shown for habitat types whose availability is significantly different from their use by a species. Swans showed the same preference for potato residue and cover crop fields with a habitat preference index of 2.68 for both.

Although no formal surveys were conducted in east Delta during the same winter, casual observation indicated that swans there tended to concentrate within unharvested carrot fields until they were depleted and then moved to nearby carrot and potato residue fields and possibly to foraging areas within the areas surveyed during this pilot study. A large increase in swan numbers was detected in the survey area in February which roughly coincided with movement of swans from depleted carrot fields in east Delta.

These data clearly show that crop residue and cover crops play an important role in supporting wintering Trumpeter Swans on the Fraser River delta and that economically important perennial forage fields are likely not significant habitat for swans.

Grassland Set-asides

Landscape Level use of Farmland Habitat by Raptors

Agricultural landscapes provide a patchwork of habitats to wildlife. Fields within this patchwork frequently provide individuals using the landscape with resources necessary to increase their fitness by promoting survival and ultimately contributing to reproductive output. The landscape must contain appropriate resources for individual species' requirements or



they will either not survive in the landscape, or move on to search for areas that might. Documenting patterns of habitat use at the landscape level can help us in identifying habitat types that are important to individual species. This year landscape level use of farmland by raptors during winter was studied to identify critical areas/habitat types.

Censuses of diurnal birds of prey were conducted along six transects covering an area of 6,920 acres (2,800 ha) from 34th Street to 88th Street in Delta from mid-November to early March. During each biweekly survey, the locations and behaviour of raptors encountered on each 1.6 km (1 mile) wide transect were recorded on approximately 1:12:000 map sheets. The field type associated with each record was also noted.

Digital GIS maps generated by Agriculture and Agri-food Canada including individual field polygons were used to classify field types along survey routes. Field type data collected in October were used to quantify availability of habitat types and included the following classes: bare field, berry crop, winter cover crop, crop residue (included unharvested summer crop), short grass, and tall grass. Short grass habitats included pastures and hay fields that are typically mowed before winter. Tall grass habitats included grassland set-asides, old-fields and some tall forage fields. Fields and interstitial areas not fitting into the above mentioned categories were described and, for the purposes of data analysis, classified as other.

Sufficient numbers of Northern Harrier and Red-tailed Hawk detections were made over the survey season to estimate habitat preferences. Data on habitat use (proportion of raptor detections/field type) were compared to habitat availability (proportion of transects covered by field type) to determine any affinity for specific habitat types (Figure 9). As for the swans above, a crude index of habitat preference for both raptor species was obtained by calculating the ratio of relative use of habitat to availability of habitat (red dots in Figure 9). Northern Harriers and Red-tailed Hawks both showed highest preference for tall grass habitat using it 5.7 and 3.2 times, respectively, as much as they should, based on its availability.

A number of owl species also use grassland set-asides as winter and, for some species, year-round habitat. Short-eared owls and barn owls have been flushed from set-asides during winter field work activities. They have also been seen hunting within set-asides early in the morning or late in the day. It is suspected that Short-eared Owls communally roost within the dense cover provided by grassland set-asides, but there have been no detailed studies on these nocturnal/crepuscular species have been done.

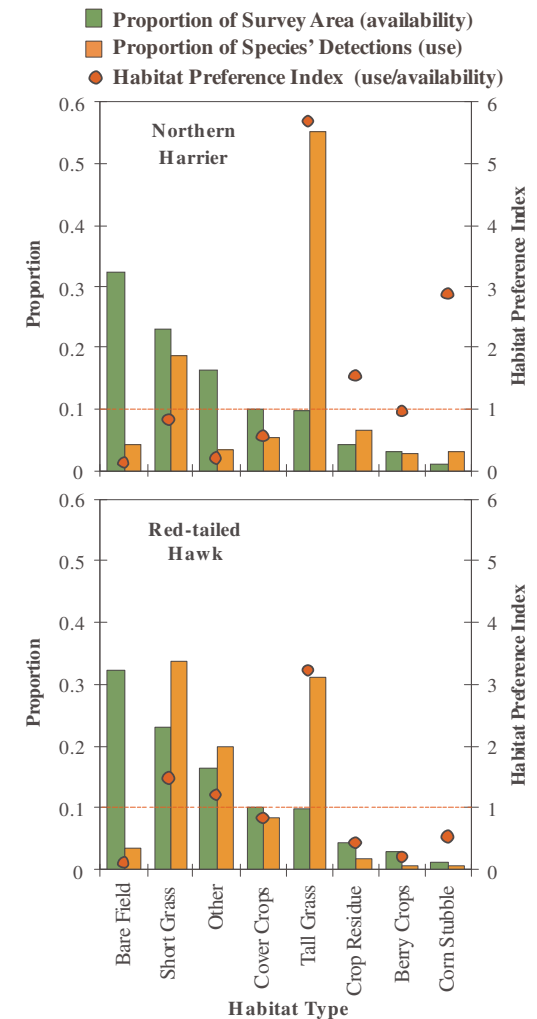


Figure 9. Availability, use and habitat preference indices for Northern Harriers and Red-tailed Hawks during the 2005/06.

Tall grass habitats accounted for 9.7% of the upland areas included in our surveys. Set-asides funded by DFWT accounted for 70% of the area covered by these tall grass habitats.

Clearly, these data show that tall grass habitat continues to be important to grassland raptors wintering on the delta. Set-asides provide them with abundant thermal and hiding cover as well as dense populations of their preferred food (Townsend's Voles).

Raptor and Small Mammal Densities in Selected Grassland Types

Winter surveys of small mammals and raptors continued within selected grassland set-asides and forage fields this year. The objectives of these surveys were to quantify: 1) relative densities of small mammals within these field types and 2) measure relative use of selected grass field types by wintering raptors.

Index lines (20 live-traps spaced at 10-m intervals) were used to monitor small mammal relative density at three replicates of three set-aside age classes and perennial forage fields. Although five 2-day trapping sessions were planned over the winter of 2005/06 only three could be completed due to excessive field flooding during lengthy periods of heavy rain in December and January. Data collected this year showed the same general trends in Townsend Vole relative density in relation to age of set-asides as were found in previous years (Figure 10). Vole density was higher in older set-asides relative to first year set-asides and perennial forage fields. Vegetation surveys showed that grass cover and height was greater in 2nd and 4th year grassland set-asides relative to the other two field types studied. This provided adequate cover and food for voles occupying the field, conditions that are important to supporting dense vole populations (Taitt and Krebs 1983).

Raptor use was assessed within the same fields using four 60-minute field surveys over the winter months of 2005/06. As with small mammal trapping, more surveys had been planned but extreme weather interfered with many of the planned surveys. During these 60-minute field watches, all raptor movements within the field areas were observed, characterized by location and behaviour and timed to the nearest second. Seven raptor species were recorded during surveys of set-asides with Northern Harriers accounting for 95% of all observations. Other raptor species included Bald Eagles, Red-tailed Hawks, Rough-legged Hawks, Merlin, American Kestrel, and Short-eared owls.

Northern Harrier hunting effort varied somewhat between grass field types. Overall, harrier

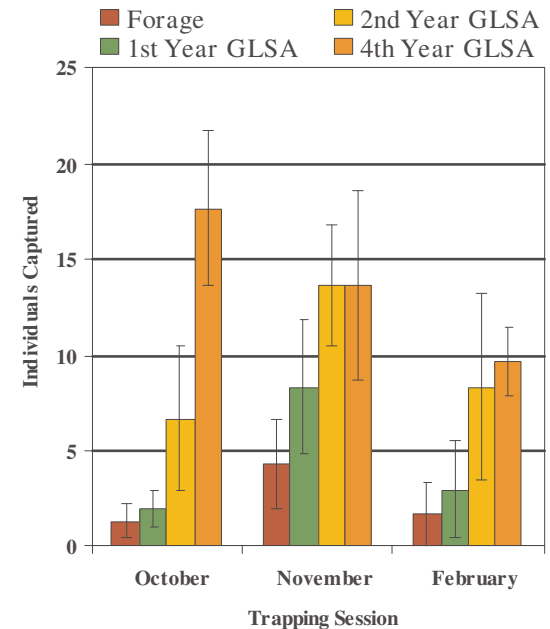


Figure 10. Relative density of Townsend's Vole in four grass field types during the winter of 2005/06. Error bars indicate 1 S.E.

use of fields surveyed was low relative to data collected in some previous years but very similar to last year. This may be the effect of the poor weather encountered over much of the winter. Less than 1 minute of Harrier hunting/hour/acre (2.5 min/hour/ha) was observed during most field surveys across all age classes (Figure 11). Harrier use of second year set-asides peaked during January. By February, use of second year fields had dropped but was still higher than other field types surveyed.

Data collected from grassland set-asides during the winter of 2005/06 continue to show that these habitats are populated by Townsend's Voles and are used by raptors, particularly the Northern Harrier. Winter raptor habitat capacity of the Fraser River delta has undoubtedly been improved through implementation of the grassland set-aside program. The program now provides between 50 and 60% of available tall grass habitats on farmland in the delta and many of the set-asides older than 2 years have been shown to contain prey densities greater than found in old-field sites (Merkens 2005). Grassland set-asides provide adequate cover and food resources for at least three species of grassland raptors based on data collected over the last decade. Were it not for the financial incentives provided to farmers by DF&WT, these fields may have remained bare or would have potentially remained in crop production instead of long term set-asides. Short-term set-asides (1 year) do not provide good wintering raptor habitat. It would be fair to say that the average habitat capacity has likely increased as a result of implementing the set-aside program.

Further research should focus on the effects of the set-aside program on nocturnal and crepuscular species such as the Barn Owl and Short-eared Owl. It is suspected that these species likely also benefit from the dense concentrations of prey offered by set-asides.

Hedgerow Songbird Surveys

Continued monitoring of hedgerows created under the DF&WT Farmscape Program will provide data necessary to document changes in bird use over time and, ultimately, measure the success of the hedgerow program. All DF&WT hedgerows are less than 10 years old and have not developed into the complex structures that some mature hedgerows in Delta have. Some of the older hedgerows (5-8 year-old) are beginning to develop distinct vegetation layers and are approaching shrub canopy closure in the 0-3 m height category. Spring breeding bird surveys conducted in 2006 continued to assess the development of the hedgerows, particularly with respect to increases in bird species richness.

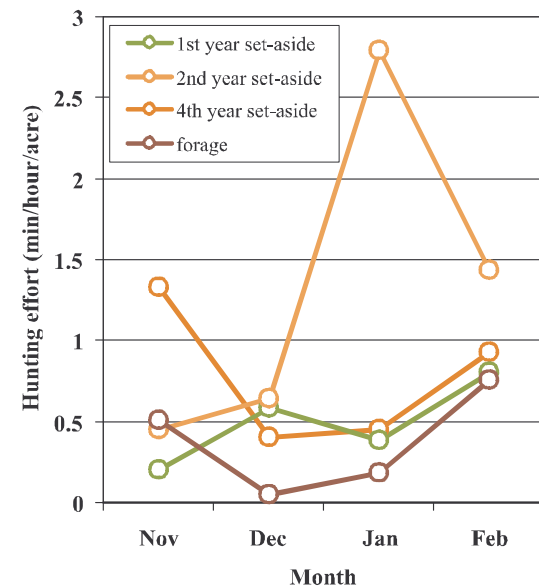


Figure 11. Comparison of Northern Harrier hunting effort between four grass field types across four surveys during the winter of 2005/06.

Bird surveys were conducted along 21 field margins found throughout Delta. These field margins were stratified into 4 basic groups: those having no “hedgerows” (control), those having young hedgerows established under the DFWT Farmscape Program (1-4 years old (new)), those having 4 to 8 year-old hedgerows developed by DFWT (old) and those having mature hedgerows likely 20 years old or older (mature). A total of 6 early morning (5:00 am to 9:00) surveys were completed over a six-week period at each site during breeding season (mid April to early July). Encounter transects were used to establish presence of species and rough estimates of relative abundance. For each bird detection, the species, detection type (call, song or visual), number of individuals, location within hedgerow and perching substrate were recorded. Surveys were discontinued if heavy rain, strong wind or excessive traffic (or farm machinery) had the potential to significantly reduce detectability of birds.

A total of 37 species were detected along surveyed field margins for all surveys combined during the 2006 breeding season. Species richness (number of species) (Figure 12) as well as overall relative abundance (total number of bird detections/ 100 m) of birds appeared to be highest in mature hedgerow margins relative to all other margin types. The increased structural and plant species diversity of the mature hedgerows obviously attract a greater diversity of songbirds than the simpler control, new and old margin types although the “old” hedgerows are beginning to increase in both richness and density relative to the “new” and “control” margins.

Many factors contribute to the habitat value of hedgerows. Floristic composition and diversity, size (height, width, and volume), fragmentation, management practices, and nature of adjacent habitat all contribute to the relative value of individual hedgerows (Arnold 1983, Yahner 1983, Burel and Baudry 1990, Green et al. 1994, Parish et al. 1994, MacDonald and Johnson 1995, Parish et al. 1995, Sandiford et al. in prep.). All of these factors likely have a larger combined effect than just hedgerow age considered here.

The new DF&WT hedgerows are still quite small in stature with 1-3 year-old hedgerows being between 0.5 and 2 m in height and 1-5 m in width. Although some of the mature hedgerows surveyed here are less than 30 years old years old, they have developed into structurally complex hedgerows with a well developed shrub layer, often in excess of 2 m, and an intermittent tall tree canopy (6-10m tall). Densely planted DF&WT hedgerows have been designed to develop, relatively quickly, into hedgerows exhibiting these characteristics. Increased density and diversity of trees and shrubs have been shown to increase density

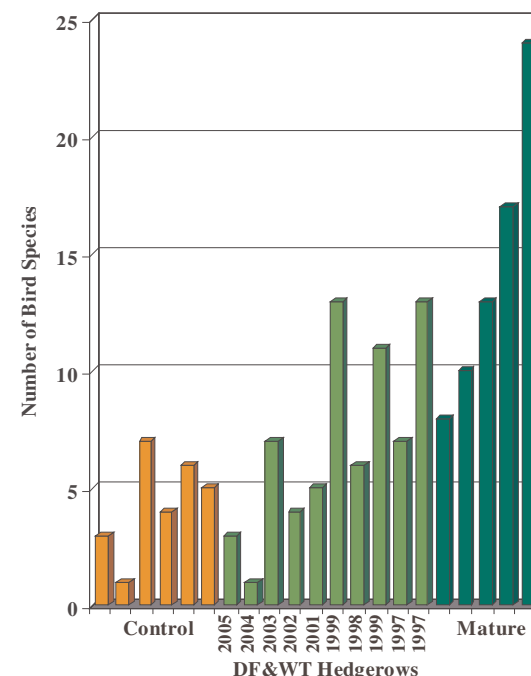


Figure 12. Bird species richness for 21 field margins surveyed during the 2006 breeding bird season. DF&WT hedgerows have been labeled with the year in which they were established.

and diversity of songbirds in hedgerows. More recent DF&WT hedgerow installations have increased both the density and diversity of trees and shrubs to provide a diverse habitat for songbirds using hedgerows in accordance with these studies.

Factors extrinsic to the hedgerow such as connectivity with other hedgerows, adjacency of grass strips, ditches, nearby woodlands, and the nature of bordering fields all potentially influence the bird communities that will use specific hedgerows (Hinsley and Bellamy 2000). These can not be controlled for in the relatively small sample size that we have used here.

The continued monitoring of bird use of DF&WT developed hedgerows will provide added data on the impact of these structures on the songbird habitat capacity of the delta over time. A more detailed study on hedgerow characteristics within the delta could provide information on how to plan and install more valuable bird habitat specific to the area in the future. The guidelines derived from assessing habitat models in the general literature are likely a good starting point, however more refined hedgerows could be developed with additional data on how they function specifically in the agricultural landscape found in the lower Fraser River delta. Intensive and extensive hedgerow surveys including many more variables than explored by Sandiford et al. (in prep) would allow for bird community or species specific hedgerow management.

Furthermore, surveys in the future could focus on which season is found to be most important to contributing to bird conservation. Breeding bird surveys may not be as important with respect to conservation goals if the hedgerows are more valuable as temporary habitat for migrant species traveling through the delta or those that winter in the delta. Local hedgerows typically house common species during the breeding season that are not of significant conservation concern.

Collaboration, Education and Communication

As a community based Society, DFWT's activities are not limited to land stewardship programs. DFWT continues to work with other organizations to develop solutions to the conflicts between urban-, agricultural- and wildlife-use on the delta. In this regard, DFWT participates in important programs outside of the Trust's core programs. We participate on the Delta Forage Compensation Program Steering Committee; the Wire Worm Task Force Working Group; on the BCIT Fish, Wildlife and Recreation Advisory Committee as well as relevant workshops and conferences as they come up. We offer access to applied lessons



in land management to BCIT and UBC students through coordination of field exercises showcasing some of our land stewardship programs. DFWT also provides advice and shares data with organizations involved in the management of land in Delta as well as individuals or companies involved in conducting land development impact assessments. Data and expertise are also shared with undergraduate and graduate students working on theses at local colleges and universities.

DFWT recognises that public education and communication are valuable to the successful implementation of farm stewardship programs and wildlife habitat conservation. DFWT actively participates and co-operates with government and non-government agencies to communicate the benefits of farm stewardship practices and wildlife habitat conservation. A variety of extension materials are maintained and updated, such as a regular newsletter (Farmland and Wildlife), a static display, program fact sheets and a regularly updated information pamphlet.

In October 2005, DFWT initiated a new Farmland Awareness Campaign, one of its most ambitious communication projects in years. The project, funded through a \$10,000 community grant from Vancity and contributions from Ducks Unlimited Canada, is meant to raise public awareness of the value of farmland to society. The message is clear: Farmland is a precious, finite and irreplaceable natural resource and society must support its continued existence through buying local produce and supporting initiatives that conserve farmland. The campaign consisted of 4 elements: bulk mailed information postcards, posters to be distributed to local merchants, schools and Vancity branches, a self-guided farmland tour, and a new website.

The kick-off to the project involved bringing a piece of the country to the city. A total of 400 5-lb bags of Delta grown potatoes (generously provided by Lower Mainland Vegetable Distributors) were given to passers-by in front of Choices Market on West 16th Ave in Vancouver while a number of invited guests gave brief speeches on the issue of local farmland preservation from the back of a farm tractor and trailer (provided by Friesen Equipment).

One week after the potato toss, over 32,000 information post cards were mailed to all households in Delta (See Appendix 7). The colourful postcard with a collage of farm related images directs people to learn more about the farmland around them and to support local farms. A self-guided farmland tour was put together with field markers, maps and a



**Potato Toss -
from farmer's hands to you**

description of tour sites. In the future the number of tour stops will increase and locations will be moved around to highlight the most interesting sites from year to year. Although DFWT farmland stewardship sites will be emphasized, other locations will also be marked so that tour participants can begin to appreciate the complexities and interactions between farming and upland habitat conservation in this internationally significant wildlife area.

A new addition to our repertoire of communication devices is a dedicated website that was launched on October 26, 2005. After a number of years of contemplating the design of the website, our new farmland awareness campaign resulted in the perfect opportunity to make it happen. After registering our domain name (www.deltafarmland.ca) our biologist, with considerable help from Kathleen Fry (BC Education Coordinator, Ducks Unlimited Canada), put together an informative new website outlining why the work of the Trust is important, the stewardship programs available through the Trust and details on new initiatives. The site also includes links to partners, conservation organizations/programs and other related sites.

Staff will provide frequent updates to the site including many images of farmland and wildlife throughout the seasons.

Twenty-five UBC agriculture students were among guests that attended our fall field tour. Part of the focus of this year's tour was to provide post secondary students with a view of agriculture in practice. Six farms were visited as participants learned about wildlife, grassland set-asides, winter cover crops, hedgerows, greenhouse tomato culture, post harvest potato processing, fruit wine production, dairy production, soil nutrient studies, cranberry culture and harvest as well as many facts along the way. The underlying concepts of food production, soil conservation and wildlife habitat enhancement were discussed as the group spent 7 hours exploring important issues related to the agricultural landscape in Delta. One tour guest commented that he was unaware of the extensive and complex farming operations that existed right in his back yard.

DFWT staff continued to present lectures, slide shows and brief mini tours to local, regional and international organisations as well as post secondary institutions upon request or on DFWT's suggestion. As part of this, DFWT's biologist gave presentations/tours to: Tsawwassen Rotary Club; BC Greenhouse Open House; BCIT Fish, Wildlife and Recreation students; Environmental Farm Plan Biodiversity Workshop; two tours connected to the 2006 International Range Management conference in Vancouver; UBC 4th Year Agroecology Course; Ladner/Tsawwassen Kiwanis Club; BC Ag/Wildlife Advisory Committee; Delta



Danny Chong showing potato facility during Fall Field Tour

Annual Report - 2005/06

Farmers' Institute AGM and the Land Trust Alliance Annual Seminar Series.

A broader audience has access to the newsletter. Another means of dissemination is the creation of press releases and publication of information articles in local newspapers.

Two newsletters were produced in this last fiscal year (July and December 2005) (Appendix 8) and mailed to over 1,100 people on our main mailing list.

Financial Highlights

During 2005/06 revenue totalled \$568,476 (See Appendix 9 and 10 for detailed financial statements). This is up 10% from last year due to a successful fundraising event, more diversified program funding and a well supported expansion in our communications program. Once again, the Delta Agricultural Society provided the greatest single contribution to our programs accounting for 42% of revenue. Our two endowment funds held at the Vancouver Foundation provided total dividends of \$119,623 representing almost 23% of total revenue. These returns are 3.8% lower than last year. See Appendices 11 and 12 for details on the endowments including budget projections for the 2006/07 fiscal year.

Other major funding partners included BC Waterfowl Society, Ducks Unlimited Canada and the Canadian Wildlife Service accounting for 15.7% of revenue. Their combined contribution was instrumental in supporting the winter cover crop program. The Corporation of Delta provided a grant of \$15,000 to support both the cover crop and grassland set-aside programs accounting for 2.6% of revenue. Just under \$59,000 in revenue was raised during our Summer Solstice Fundraiser thanks to the generous donations of numerous supporters.

Once again, the majority of expenses went directly to Land Stewardship and Research Programs. As mentioned previously, just under \$370,000 (71% of total expenses) went directly into sharing the cost of land stewardship with farming operations. Staff and office costs accounted for 22.2% of expenses. Staff provides administration, coordination, extension, fundraising and research services important to the smooth operation of programs. Fundraising costs include special event costs, donor stewardship costs, and advertising costs.

Delta Farmland & Wildlife Trust

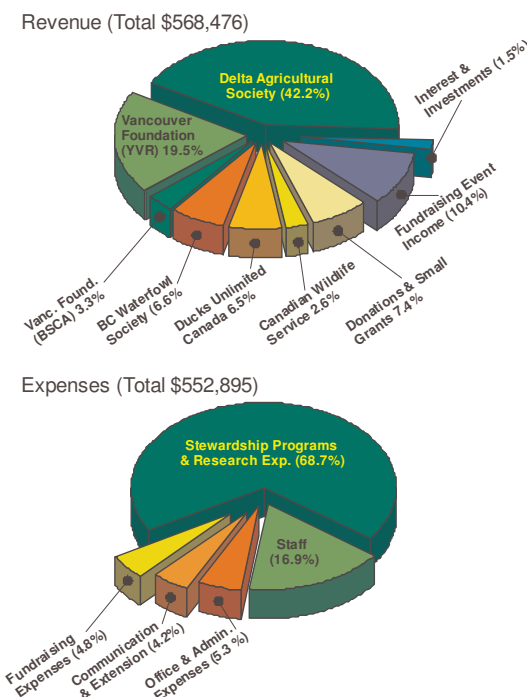


Figure 13. Breakdown of DFWT revenues and expenses for the 2005/06 fiscal year.

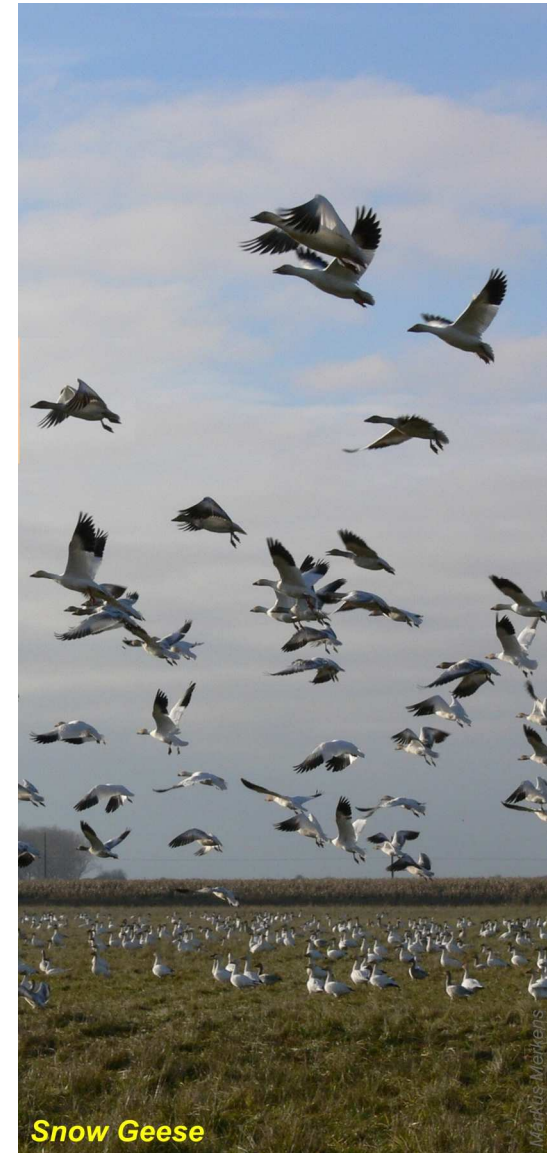
Future Goals

The primary goal for the upcoming years will be to maintain or increase current stewardship programs. The greatest barrier to this objective is lack of additional funding. In fact, it is likely that funding from current supporters will, temporarily, decline over the next two years. Accordingly, DFWT will be focusing expenditures on specific priority programs where possible. Currently, grassland set-asides and winter cover crops are the most important programs and a greater proportion of available funds will go towards them. As a result, installation of new hedgerows will be put on hold until funding for field programs stabilizes. Concerted effort will be directed towards seeking new funding sources specifically towards supporting set-asides.

DFWT will be conducting new work on the value of environmental services provided by local farms. By defining these services and ranking them in terms of importance to society, new programs may become available for stewardship practices that promote or improve those services. After identifying possible management tools to affect these services, DFWT can pursue new funding opportunities to support them. New programs may include carbon sequestration, improved upland habitat for shorebirds, additional lure crops for wintering waterfowl and integrating programs within farms to maximize on farm biodiversity. This will be a relatively long term process and new programs, once identified, may not be implemented for several years.

Work on raising public awareness on the importance of farmland conservation will remain a priority as well. DFWT will continue with its awareness campaign and search for funds to support the development of additional extension materials such as brief farmland related field guides and educational material for inclusion in school curriculum. An important component of the extension programs will be introducing the public to farms through tours and open houses.

With these goals in mind, the Trust has set a course to conserve farmland for future generations to benefit from.



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Appendix 1. Details of Winter Cover Crop Agreements for the winter of 2005/06

Contract	Cooperator Name	Area (acres)								total ac	# of fields
		winter wheat	annual rye grass	fall rye	spring barley	oats	spring wheat	clover	timothy		
WCC05-01	Sohi Blueberry Farm	40.0								40.0	2.0
WCC05-02	Del Cory Farms				78.0					78.0	3.0
WCC05-03	Westcoast Instant Lawns			71.0						71.0	2.0
WCC05-04	Jowkema Enterprises Ltd				27.0					27.0	2.0
WCC05-05	Warren Nottingham				29.0					29.0	2.0
WCC05-06	Featherstone Farms	34.0								34.0	1.0
WCC05-07	Martiann Holsteins		83.0							83.0	3.0
WCC05-08	Never Idle Farms		18.0							18.0	1.0
WCC05-09	Grovecrest Farms	14.5			213.0					227.5	7.0
WCC05-10	Port Guichon Farms Inc.	13.0								13.0	1.0
WCC05-11	Felix Farms Ltd				257.0	32.0				289.0	14.0
WCC05-12	Canoe Pass Farms Ltd	59.0			18.0		31.0		65.0	173.0	10.0
WCC05-13	Dhaliwal Farms Ltd	54.0								54.0	7.0
WCC05-14	Tecarte Farms	55.0		3.0						58.0	2.0
WCC05-15	Fraserland Farms				363.0					363.0	18.0
WCC05-16	Hothi Farms Inc				50.0					50.0	9.0
WCC05-17	Emma Lea Farms Ltd	9.0			25.0	29.0				63.0	6.0
WCC05-18	Reynelda Farms	52.0			114.0					166.0	4.0
WCC05-19	Zellweger Farms	158.0								158.0	9.0
WCC05-20	Joe Vaupotic Farm					108.0				108.0	3.0
WCC05-21	R&D Sherrell				20.0					20.0	1.0
WCC05-22	Brent Kelly Farms Inc				114.0					114.0	5.0
WCC05-23	Gordon Ellis Farms				13.0					13.0	1.0
WCC05-24	Ed McKim Farm Ltd				22.0	43.0				65.0	9.0
WCC05-25	Randy Newman & Sons	125.0			30.0					155.0	3.0
		613.5	101.0	74.0	1,373.0	212.0	31.0	0.0	65.0	2,469.5	125.0

Appendix 2. Details of Grassland Set-aside Agreements for the 2005/06 Fiscal year

<i>Agreement</i>	<i>Cooperator</i>	<i>Est. year</i>	<i>Measured area</i>	<i>Harvested</i>	<i>Mowed</i>
GLSA01-1	Port Guichon Farms	2001	15	0	0
GLSA01-5	W&A Farms (2006) Inc.	2001	21	0	0
GLSA01-9	Harlow Burrows	2001	30	0	0
GLSA02-01	Kamlah Farms Inc.	2002	12	0	0
GLSA02-02	Canoe Pass Farms	2002	24	0	0
GLSA02-03	Mike Guichon Ltd.	2002	20	0	0
GLSA02-04	Felix Farms Ltd.	2002	40	0	0
GLSA02-05	Bow Chong Farm Ltd.	2002	8	0	0
GLSA02-10	Don LeBrun	2002	13.5	0	0
GLSA03-02	Kamlah Farms Inc.	2003	28	0	0
GLSA03-03	Snow Farms	2003	30	0	0
GLSA03-05	Stuart Evans	2003	15	0	0
GLSA03-06	Laurence Manning	2003	23	0	0
GLSA03-08	Delta Pride Farms Ltd.	2003	7	0	0
GLSA03-09	Fraserland Farms	2003	4	0	0
GLSA04-01	Fraserland Farms	2004	10	0	0
GLSA04-02	Fraserland Farms	2004	25	0	0
GLSA04-03	Canoe Pass Farms	2004	16	0	0
GLSA04-04	Dhaliwal Farms Ltd.	2004	5	0	0
GLSA04-04	Dhaliwal Farms Ltd.	2004	10	0	0
GLSA04-05	Tecarte Farms	2004	20	0	0
GLSA04-06	R&M Townsend	2004	40	0	0
GLSA05-01	Zellweger Farms	2005	21	0	0
GLSA05-02	Dhaliwal Farms Ltd.	2005	25	0	0
GLSA05-03	Mike Guichon Ltd.	2005	20	20	0
GLSA05-04	Tecarte Farms	2005	20	0	0
GLSA05-05	Burr Farms Ltd.	2005	28	1	0
GLSA05-05	Burr Farms Ltd.	2005	10	0	0
GLSA05-06	Hothi Farms Inc.	2005	30	0	0
			570.5		

Appendix 3. Details of Land Laser Leveling Agreements for the 2005/06 Fiscal Year

<i>Agreement</i>	<i>Farm name</i>	<i>Total acres eligible</i>	<i>cuyd moved</i>	<i>cuyd/acre</i>
LL05-01	K. Ming Farm	8	3,000	390
LL05-02	Emma Lea Farms	46	11,993	262
LL05-03	Rod Swenson Farms Inc	24	6,240	265
LL05-05	Mike Guichon Ltd.	20	8,200	410
LL05-06	Mike Guichon Ltd.	17	5,590	325
LL05-07	Felix Farms	50	16,250	325
LL05-08	Sohi Blueberry Farms	38	22,270	589
LL05-09	Grovecrest Farms	20	8,700	446
LL05-10	Didar Agriculture	14	14,000	1,000
LL05-12	Kajla Farm	22	6,500	290
LL05-13	Pickmick Dairy Farm	18	5,157	291
LL05-14	Reynelda Farms	42	12,540	300
LL05-15	Fraserland Farms	25	5,566	220
LL05-15	Fraserland Farms	19	3,601	189
LL05-16	Jowkema Enterprises Ltd	6	600	100
LL05-17	Dhaliwal Farms	17	6,800	400
LL05-18	Burr Farms Ltd	10	1,099	110
<i>Total</i>		<i>395</i>	<i>138,106</i>	
<i>Average</i>				<i>348</i>

Appendix 4. Details of Field Liming Agreements for the 2005/06 Fiscal Year

<i>Agreement</i>	<i>Farm name</i>	<i>area applied for (acres)</i>	<i>eligible area (acres)</i>	<i>application rate (tons/acre)</i>	<i>eligible application rate (tons/acre)</i>	<i>total eligible tonnes</i>
FL05-01	Bow Chong Farms	58	58	4.52	2.00	100.00
FL05-02	Fraserland Farms	40	40	2.27	2.00	80.00
FL05-03	Felix Farms	50	52.68	2.43	2.00	100.00
FL05-04	Sohi Blueberry Farm	40	20	1.00	1.00	20.00
FL05-05	Canoe Pass Farms Ltd	106	106	1.72	1.72	100.00
FL05-06	Grove Crest	100	100	1.06	1.06	100.00
FL05-07	Warren Nottingham	13	13	1.67	1.67	21.70
FL05-08	H.R.Savage and Sons	45	45	2.82	2.00	90.00
FL05-09	Zellweger Farms	70	70	1.48	1.48	100.00
FL05-10	Brent Kelly Farms Inc	95.3	95.3	1.00	1.00	95.31
FL05-11	Reynelda Farms	59	59	2.10	2.00	100.00
FL05-12	Del Cory Farms	72	72	1.43	1.43	100.00
FL05-13	Dhaliwal Farms Ltd	55	55	2.13	2.00	100.00
FL05-14	J&M Farms	18	18	2.31	2.00	36.00
FL05-15	Eagle View Farms Ltd	68	68	2.23	2.00	100.00
FL05-16	Ellis Farms	32	32	0.99	0.99	31.53
FL05-17	Ed McKim Farm Ltd	47	47	1.22	1.22	57.44
FL05-18	Rod Burr Farms Ltd	60	60	1.54	1.54	92.60
FL05-19	Davie Farm	18.5	18.5	2.34	2.00	37.00
FL05-20	Emma Lea Farms Ltd	121	121	1.51	1.51	100.00
FL05-21	DJM Farms Ltd	100.00	100.00	1.00	1.00	100.00
Total		1267.8	1250.48			1,661.58
Average				1.85	1.60	

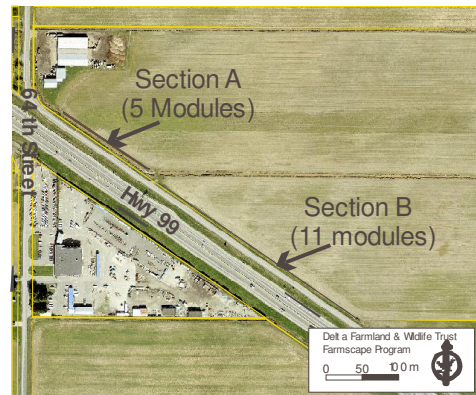
Appendix 5. Details of Grass margin and Hedgerow Agreements for the 2005/06 Fiscal Year








	COOPERATOR	year est.	WIDTH (m)	LENGTH (m)	AREA (ac)	FIELD LOCATION	Tree Species	Shrub Species
Grass Margins	Ian and Micheline Cameron	1996	4	225	0.22	Tamboline Rd.	N/A	N/A
	Don Cameron	1999	3	290	0.22	Tamboline Rd.	N/A	N/A
	Abtar Singh	1999	5	600	0.75	Westham Island Rd.	N/A	N/A
	Fraserland Farms	2005	8	1140	2.25	3643 64th Street	N/A	N/A
	SUBTOTAL				3.44			
	Jack Van Dongen	1996	3	50	0.04	4769 112 St.	4	0
	Casey Houwelling	1997	10	185	0.46	2776 64th Street	12	14
	Casey Houwelling	2002	3	230	0.17	2777 64th Street	5	7
	Don Campbell	1998	7	615	1.06	6432 64th Street	6	10
	Donald and Beryl Cameron	1996	3	225	0.17	Tamboline Rd.	4	0
Hedgerows	John and Maureen Malenstyn	1995	varied	varied	1.15	6556 60th Ave.	9	4
	Ian and Don Cameron	1999	2	300	0.15	Tamboline Rd.	6	12
	Ian and Micheline Cameron	1996	3	560	0.41	Tamboline Rd.	5	0
	Laurence Guichon	1997	12.5	470	1.45	4302 River Road	17	20
	Laurence Guichon	2001	5	270	0.33	4302 River Road	5	7
	Laurence Manning	1999	2	620	0.31	5280 64th St	6	8
	Nottingham Farms Ltd.	1997	3	188	0.14	6720 60th Ave	1	2
	Patricia Rippenburg	1996	2	270	0.13	6438 60th Ave.	5	1
	Roland and Sharon Embree	1997	2	460	0.23	6466 68th St.	2	0
	Stuart and Naomi Evans	2004	3	228	0.17	2680 52nd Street	8	10
	Bob and Marilyn Townsend	2003	1.5	190	0.07	3028 Arthur Drive	5	7
	Grove Crest Farms	2005	5	150	0.19	5628 64th Street	2	5
	SUBTOTAL				6.62			
	TOTAL				10.06			

Appendix 6 Farmscape Construction Projects

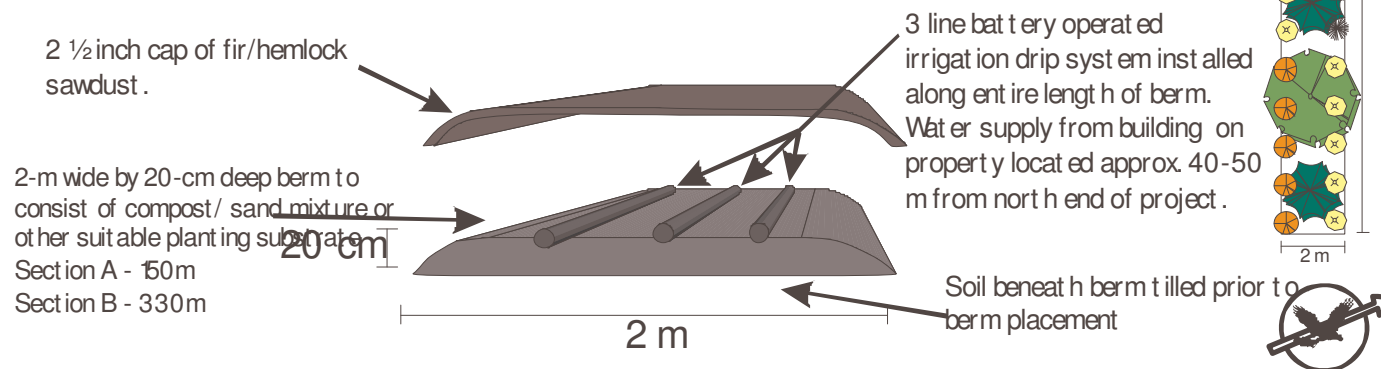
Trevor Harris Hedgerow Design - Spring 2005 5628 64th Street, Delta, B.C.

PCL B (R14935E) N ½ OF NW ¼ SEC 1 TWP 6 NWD



-  Red Alder (*Alnus rubra*)
-  Western Red Cedar (*Thuja plicata*)
-  Red Elderberry (*Sambucus racemosa*)
-  Nootka Rose (*Rosa nutkana*)
-  Beaked Hazelnut (*Corylus cornuta*)
-  Tall Oregon Grape (*Mahonia nervosa*)
-  Sitka Willow (*Salix sitchensis*)

Each 30-m section (module) consists of 5 Red Alder (*Alnus rubra*) and 5 Western Red Cedar (*Thuja plicata*) planted alternating at approximately 3-m intervals centered on the berm. In addition, five groups of five shrubs to be planted in a straight line at 1.2-m spacing on either side of the central tree row.



Appendix 7. Farmland Awareness Campaign Material

Appendix 8. Farmland and Wildlife – Newsletter of the Delta Farmland and Wildlife Trust

Appendix 9 Detailed Financial Statement for the Delta Farmland and Wildlife Trust for the 2004/05 Fiscal Year

SCHEDULE	Projects Fund (restricted)								General and Capital Asset Fund (unrestricted)						Capital Assets	TOTAL
	3	4	5	6	7	8	14	15	9	10	11	12	13			
	Farmscape	Grassland Set-asides	Winter Cover Crops	Laser Levelling	Field Liming	Monitoring & Evaluation	Wildlife Coord.	Agriculture Coord.	Admin.	IAF Fundraising	Commun. & Extension	Special Event Fundraising	Donations			
Revenue:																
Vancouver Foundation (YVR)	\$ 21,035	\$ 43,178				\$ 1,661	\$ 26,017	\$ 5,536	\$ 11,071		\$ 2,214			\$ 110,712		
Vancouver Foundation (BSCA)		\$ 7,565	\$ 7,565				\$ 1,891	\$ 1,248	\$ 643					\$ 18,911		
Delta Agricultural Society (DAS)		\$ 96,650	\$ 28,660	\$ 44,805	\$ 49,884		\$ 10,000		\$ 10,000					\$ 240,000		
B.C. Waterfowl Society (BCWS)			\$ 37,265											\$ 37,265		
Ducks Unlimited Canada (DUC)			\$ 30,000								\$ 6,825			\$ 36,825		
Canadian Wildlife Service (CWS)			\$ 15,000											\$ 15,000		
General Funding		\$ 11,000					\$ 6,000		\$ 2,000		\$ 250		\$ 4,350	\$ 23,600		
Farmland & Wildlife Day Sponsorship												\$ 2,010		\$ 2,010		
Donations		\$ 60	\$ 60						\$ 600		\$ 12,028		\$ 3,730	\$ 3,850		
Restricted Donation									\$ 1,653				\$ 7,078	\$ 12,628		
Interest and Investment Income												\$ 58,943		\$ 8,731		
BBQ Income														\$ 58,943		
REVENUE TOTAL	\$ 21,035	\$ 158,452	\$ 118,550	\$ 44,805	\$ 49,884	\$ 1,661	\$ 43,908	\$ 6,784	\$ 25,967	\$ 0	\$ 21,318	\$ 60,953	\$ 15,158	\$ 0	\$ 568,476	
Expenses:																
Remittance to Co-operators	\$ 1,948	\$ 153,950	\$ 111,128	\$ 47,243	\$ 49,884										\$ 364,152	
Accounting: includes \$4300 for audit									\$ 5,677						\$ 5,677	
Newsletter											\$ 3,398				\$ 3,398	
Display Updating											\$ 710				\$ 710	
Bank Charges									\$ 314			\$ 579			\$ 893	
Postage									\$ 421		\$ 82	\$ 18			\$ 520	
Courier, Delivery, Freight									\$ 145						\$ 145	
Memberships (LTA, DCC)									\$ 198						\$ 198	
Donor Stewardship											\$ 60				\$ 60	
Meetings									\$ 192						\$ 192	
Advertising									\$ 186		\$ 77				\$ 262	
Capital Asset Depreciation											\$ 25			\$ 1,282	\$ 1,282	
Event Participation															\$ 25	
Insurance									\$ 3,139						\$ 3,139	
Legal (incl. Annual report submission)									\$ 25						\$ 25	
Program Materials and Supplies	\$ 8	\$ 13	\$ 204			\$ 438					\$ 277			\$ 1,282	\$ 941	
Reports									\$ 123						\$ 123	
Office Services (water, internet)									\$ 337						\$ 337	
Office Co-ordinator (Wages)									\$ 25,045						\$ 25,045	
Office Supplies									\$ 2,999						\$ 2,999	
Wages							\$ 58,204	\$ 5,198							\$ 63,402	
Rent									\$ 11,762						\$ 11,762	
Donor Recognition									\$ 29			\$ 175			\$ 205	
Board Recognition									\$ 548						\$ 548	
Farmland & Wildlife Day											\$ 2,074				\$ 2,074	
Farmland Awareness Campaign											\$ 15,868				\$ 15,868	
BBQ Cost												\$ 25,882			\$ 25,882	
Telephone									\$ 1,267						\$ 1,267	
Travel/Mileage	\$ 122	\$ 36	\$ 345			\$ 966			\$ 198		\$ 337	\$ 71			\$ 2,076	
Professional Development and Fees									\$ 225						\$ 225	
Farmscape Construction	\$ 10,509														\$ 10,509	
Farmscape Maintenance	\$ 3,319														\$ 3,319	
EI contributions							\$ 1,098	\$ 137							\$ 1,874	
CPP contributions							\$ 1,944	\$ 150							\$ 3,085	
WCB									\$ 108						\$ 108	
Website Development											\$ 568				\$ 568	
EXPENSE TOTAL	\$ 15,906	\$ 153,999	\$ 111,677	\$ 47,243	\$ 49,884	\$ 1,404	\$ 61,246	\$ 5,485	\$ 54,567	\$ 0	\$ 23,477	\$ 26,726	\$ 0	\$ 1,282	\$ 552,895	
Net Income (loss)	\$ 5,129	\$ 4,453	\$ 6,873	\$ (2,438)	\$ 0	\$ 257	\$ (17,338)	\$ 1,299	\$ (28,600)	\$ 0	\$ (2,159)	\$ 34,228	\$ 15,158	\$ (1,282)	\$ 15,580	
Interfund Transfers	\$ 0	\$ 0	\$ (6,873)	\$ 2,091	\$ 0	\$ 0	\$ 17,338	\$ (1,299)	\$ 33,170	\$ 8,000	\$ 574	\$ (41,744)	\$ (11,257)	\$ 0	\$ 0	
Fund Balances - Beginning	\$ 22,273	\$ 30,490	\$ 0	\$ 346	\$ 0	\$ 119	\$ 0	\$ 0	\$ (5,642)	\$ (38,000)	\$ 1,586	\$ 24,142	\$ 72,283	\$ 4,544	\$ 112,145	
Fund Balances - End	\$ 27,403	\$ 34,943	\$ 0	\$ 0	\$ 0	\$ 376	\$ 0	\$ 0	\$ (1,071)	\$ (30,000)	\$ 0	\$ 16,626	\$ 76,184	\$ 3,262	\$ 127,723	

Notes for Detailed Financial Statement –

Revenue Sources :

Delta Agricultural Society - Annual contribution based on proposal submitted by Delta Farmland and Wildlife Trust

Vancouver Foundation (YVR) – Revenue from endowment held at the Vancouver Foundation. The result of habitat compensation funds from Transport Canada for the development of the third runway at Vancouver International Airport.

Ducks Unlimited Canada - Annual contribution based on proposal submitted by Delta Farmland and Wildlife Trust

BC Waterfowl Society - Annual contribution based on proposal submitted by Delta Farmland and Wildlife Trust

Vancouver Foundation (BSCA) - Revenue generated by an endowment held at the Vancouver Foundation originally awarded to DFWT was the result of habitat compensation funds from Ahoy Industries for the development of a golf course on farmland adjacent to Boundary Bay.

Program/expense Schedules:

Farmscape Program – Stewardship program consisting of hedgerow and grass margin installation.

Grassland Set-asides – Stewardship program consisting of the establishment and maintenance of grassland set-asides

Winter Cover Crops - Stewardship Program consisting of the establishment and maintenance of winter cover crops

Laser Leveling – Land Laser Leveling Stewardship Program

Field Liming - Cost share program to support field liming in Delta

Monitoring and Evaluation – Expenses related to conducting Wildlife Monitoring and Evaluation activities. These activities consist of scientific studies on the effect of DFWT's land stewardship programs on wildlife communities. Expenses do not include staff time. These are reported under schedules Wildlife Coordinator and Agriculture Coordinator.

Wildlife Coordinator – Wages paid to DFWT's full-time wildlife biologist. Covers administration and coordination of stewardship programs, extension activities, wildlife research (monitoring and evaluation), fundraising activities and participation in various steering and advisory committees related to DFWT's activities.

Agriculture Coordinator – Wages paid to DFWT's agriculture coordinator who, at the moment, is on part-time contract to DFWT. Covers administrative duties related to selected stewardship programs and research into waterfowl use of winter cover crops.

Administration – Costs related to the administration of DFWT's activities. These include office rent, office supplies, computers, accounting, insurance, legal costs, general office expenses and the wages for DFWT's part-time office coordinator.

Investment Agriculture Foundation (IAF) Repayment – This schedule was set up to repay a grant given to DFWT by the IAF to establish a formal fundraising program in 1999. The formal program was discontinued in 2000 due to inadequate return.

Communications and Extension – All costs linked directly to extension (education and outreach) programs. These include newsletter costs, display costs, and expenses related to attending conferences or activities where DFWT's display is set up.

Special Events Fundraising – On occasion DFWT will organize special events for the express purpose of fundraising. Revenue and expenses for these activities are tracked under this schedule. Funds generated from these events are also reallocated to other Schedules when necessary.

Donations- this schedule tracks "unsolicited" donations that come, usually by mail, into DFWT's office. Funds generated here are reallocated to other Schedules when necessary.

Appendix 10. Summarized Statement of Financial Position – March 31, 2006

ASSETS	
Cash	27,943
Term Deposits	53,843
Contribution receivables	15,000
GST Receivable	2,366
Investments – at cost	65,638
Equipment	3,261
TOTAL	168,051
LIABILITIES	
Accounts payable	0
Payroll liabilities	2,364
Grant repayable – current year	8,000
Grant repayable – long term	30,000
TOTAL	40,364
NET ASSETS	127,687

Appendix 11. YVR Wildlife Stewardship Fund Update

Vancouver Foundation - Statement of Fund Activity

Established: April 5, 1995

Statement for January 1, 2005 Through December 31, 2005

YVR Wildlife Stewardship Fund	Market Value	Contributed Principal	Income
Beginning Balance as of January 1, 2005	\$2,485,272.10	\$ 2,250,000.00	\$ 26,808.35
Contributions Received		\$ -	\$ -
Income (See Schedule C below)			\$110,711.55
Distribution (See Schedule D below)			(\$109,360.54)
Ending Balance as of December 31, 2005	\$2,597,563.09	\$ 2,250,000.00	\$ 28,123.05

No. of units @ December 31, 2005: 151,288.68

Unit Value @ December 31, 2004: \$16.4274

Unit Value @ December 31, 2005: \$17.1696

Schedule C - Income

Date	Description	Amount
03/31/2005	Income Allocated to Fund	\$ 27,186.58
06/30/2005	Income Allocated to Fund	\$ 27,528.49
09/30/2005	Income Allocated to Fund	\$ 27,873.43
12/31/2005	Income Allocated to Fund	\$ 28,123.05
	Totals:	\$ 110,711.55

Schedule D - Distribution

Date	Grantee/Purpose	Amount
02/01/2005	Delta Farmland and Wildlife Trust Endowment Income	\$ 26,772.04
05/02/2005	Delta Farmland and Wildlife Trust Endowment Income	\$ 27,186.58
08/02/2005	Delta Farmland and Wildlife Trust Endowment Income	\$ 27,528.49
11/01/2005	Delta Farmland and Wildlife Trust Endowment Income	\$ 27,873.43
	Totals:	\$ 109,360.54

Use of YVR Wildlife Stewardship Fund Endowment Income and Net Assets for Fiscal year 2005/06

Note: Reporting period different than for YVR Wildlife Stewardship Fund Statement of Fund Activity on previous page

	Budget	% of	Actual	% of Actual
	2005/06	Budget	2005/06	
<i>Revenues:</i>				
Vancouver Foundation - YVR WSF	\$108,900.00		\$110,711.55	
Revenue Total	\$108,900.00		\$110,711.55	
<i>Expenses:</i>				
Farmscape	\$ 20,691.00	19	\$ 21,035.19	19
Grassland Set-asides	\$ 42,471.00	39	\$ 43,177.51	39
Newsletter	\$ 2,178.00	2	\$ 2,214.23	2
Monitoring and Evaluation	\$ 10,890.00	10	\$ 11,071.15	10
Co-ordination	\$ 21,780.00	20	\$ 22,142.32	20
Administration	\$ 10,890.00	10	\$ 11,071.15	10
Total	\$108,900.00		\$110,711.55	
Revenues Minus Expenses	\$ 0.00		\$ 0.00	
Net Assets - Beginning	\$ 0.00		\$ 0.00	
Net Assets - Ending	\$ 0.00			

Anticipated Budget for 2006/07 for use of YVR WSF Income

Reports from the Vancouver Foundation indicate that the usable income from the YVR WSF would be approximately \$113,450 for the 2006/07 fiscal year.

	Budget 2006/07	% of Budget
<i>Revenues:</i>		
Vancouver Foundation - YVR WSF	\$113,450.00	
Revenue Total	\$113,450.00	
<i>Expenses:</i>		
Farmscape	\$ 5,672.50	5
Grassland Set-asides	\$ 60,128.50	53
Newsletter	\$ 2,269.00	2
Monitoring and Evaluation	\$ 11,345.00	10
Co-ordination	\$ 22,690.00	20
Administration	\$ 11,345.00	10
Total	\$ 113,450.00	
Revenues Minus Expenses	\$ 0.00	
Net Assets - Beginning	\$ 0.00	
Net Assets – Ending	\$ 0.00	

Appendix 12. Boundary Shores Compensation Agreement Fund (Partners in Stewardship Fund) Update

Vancouver Foundation - Statement of Fund Activity

Established: December 6, 2000

Statement for January 1, 2005 Through December 31, 2005

<i>Partners in Stewardship Fund</i>	<i>Market Value</i>	<i>Contributed Principal</i>	<i>Income</i>
<i>Beginning Balance as of January 1, 2005</i>	\$424,536.91	\$ 531,720.00	\$ 4,573.12
<i>Contributions Received</i>		\$ -	\$ -
<i>Income (See Schedule C below)</i>			\$ 18,911.43
<i>Distribution (See Schedule D below)</i>			(\$ 18,680.65)
<i>Ending Balance as of December 31, 2005</i>	\$443,708.13	\$ 531,720.00	\$ 4,803.90

No. of units @ December 31, 2005: 25,842.69

Unit Value @ December 31, 2004: \$16.4274

Unit Value @ December 31, 2005: \$17.1696

Schedule C - Income

<i>Date</i>	<i>Description</i>	<i>Amount</i>
03/31/2005	<i>Income Allocated to Fund</i>	\$ 4,643.93
06/30/2005	<i>Income Allocated to Fund</i>	\$ 4,702.34
09/30/2005	<i>Income Allocated to Fund</i>	\$ 4,761.26
12/31/2005	<i>Income Allocated to Fund</i>	\$ 4,573.12
	<i>Totals:</i>	\$ 18,911.43

Schedule D - Distribution

<i>Date</i>	<i>Grantee/Purpose</i>	<i>Amount</i>
02/01/2005	<i>Delta Farmland and Wildlife Trust Endowment Income</i>	\$ 4,573.12
05/02/2005	<i>Delta Farmland and Wildlife Trust Endowment Income</i>	\$ 4,643.93
08/02/2005	<i>Delta Farmland and Wildlife Trust Endowment Income</i>	\$ 4,702.34
11/01/2005	<i>Delta Farmland and Wildlife Trust Endowment Income</i>	\$ 4,761.26
	<i>Totals:</i>	\$ 18,680.65

Use of Partners in Stewardship Fund Endowment Income for Fiscal year 2005/06

Note: Reporting period different than for Partners in Stewardship Fund Statement of Fund Activity on previous page

	Budget 2005/06	% of Budget	Actual 2005/06	% of Actual
<i>Revenues:</i>				
Vancouver Foundation – Partners in Stewardship Fund	\$ 18,600.00		\$ 18,911.43	
Revenue Total	\$ 18,600.00		\$ 18,911.43	
<i>Expenses</i>				
Grassland Set-asides	\$ 7,440.00	40.0	\$ 7,564.57	40.0
Winter Cover Crops	\$ 7,440.00	40.0	\$ 7,564.57	40.0
Delivery, Co-ordination, M&E	\$ 3,087.60	16.6	\$ 3,139.29	16.6
Administration	\$ 632.40	3.4	\$ 643.00	3.4
Total	\$ 18,600.00		\$ 18,911.43	
Revenues Minus Expenses	\$ 0.00			
Net Assets - Beginning	\$ -			
Net Assets - Ending	\$ -			

Anticipated Budget for 2006/07 for the use of BSCA Fund Income

Reports from the Vancouver Foundation indicate that the usable income from the BSCA would be approximately \$19,350 for the 2006/07 fiscal year.

	Budget 2006/07	% of Budget
<i>Revenues:</i>		
<i>Vancouver Foundation – Partners in Stewardship Fund</i>	<i>\$ 19,350.00</i>	
<i>Revenue Total</i>	<i>\$ 19,350.00</i>	
<i>Expenses</i>		
<i>Grassland Set-asides</i>	<i>\$ 7,740.00</i>	<i>40.0</i>
<i>Winter Cover Crops</i>	<i>\$ 7,740.00</i>	<i>40.0</i>
<i>Delivery, Co-ordination, M&E</i>	<i>\$ 3,212.10</i>	<i>16.6</i>
<i>Administration</i>	<i>\$ 657.90</i>	<i>3.4</i>
<i>Total</i>	<i>\$ 19,350.00</i>	
<i>Revenues Minus Expenses</i>	<i>\$ -</i>	
<i>Net Assets - Ending</i>	<i>\$ -</i>	

Appendix 13. Details of North Growth Management Funds

Delta Farmland and Wildlife Trust received two gifts of \$25,000 held within North Growth Management Funds from the Rudy and Patricia North Foundation in 2000 and 2004. At the time of receipt DF&WT decided to follow the advice of the donor and commit to leaving each donation within the fund for at least the suggested 5-year period with distributions from the fund being reinvested in the fund. We are now 5½ and 1½ years into the investment period and the market value of the initial donations has grown by 68% and 19% respectively. DF&WT's balance sheet reflects the book value of the fund, which is allocated to Schedule 13 (Donations).

*North Growth Management Ltd. - Statement of Fund Activity**North Growth U.S. Equity Fund**Established: October 31, 2000**Statement for March 31, 2005 Through March 31, 2006*

<i>North Growth U.S. Equity Fund</i>	<i>Book Value (contributed principal)</i>	<i>Unit Balance</i>	<i>Unit Price (\$)</i>	<i>Market Value</i>
<i>Opening Balance as of March 31, 2005</i>	<i>\$ 33,278.69</i>	<i>1536.714</i>	<i>\$ 24.9508</i>	<i>\$ 38,342.24</i>
<i>Distribution (Income)</i>	<i>\$ 4,247.64</i>	<i>184.103</i>	<i>\$ 23.0721</i>	<i>\$ 4,247.64</i>
<i>Ending Balance as of March 31, 2006</i>	<i>\$ 37,526.33</i>	<i>1720.817</i>	<i>\$ 24.4682</i>	<i>\$ 42,105.29</i>

*North Growth Canadian Equity Fund**Established: December 16, 2004**Statement for March 31, 2005 Through March 31, 2006*

<i>North Growth Canadian Equity Fund</i>	<i>Book Value (contributed principal)</i>	<i>Unit Balance</i>	<i>Unit Price (\$)</i>	<i>Market Value</i>
<i>Opening Balance as of March 31, 2005</i>	<i>\$ 25,281.41</i>	<i>1956.155</i>	<i>\$ 12.8521</i>	<i>\$ 25,140.70</i>
<i>Distribution (Income)</i>	<i>\$ 2,830.63</i>	<i>232.847</i>	<i>\$ 12.1566</i>	<i>\$ 2,830.63</i>
<i>Ending Balance as of March 31, 2005</i>	<i>\$ 28,112.04</i>	<i>2189.002</i>	<i>\$ 13.5798</i>	<i>\$ 29,726.21</i>

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