



**Delta Farmland  
& Wildlife Trust**

*Partners in Stewardship*

# **DELTA FARMLAND & WILDLIFE TRUST 2021 ANNUAL REPORT**

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## OUR MISSION

DF&WT is a non-profit organization that promotes the preservation of farmland and wildlife habitat on the Fraser River delta through cooperative land stewardship.

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# FARMLAND STEWARDSHIP IN ACTION

## Why the Work Matters

### Challenges to Farming and Wildlife Conservation

Farmland on the lower Fraser River delta is ideal for food production because the soils are fertile, and the region has a relatively long growing season. The landscape is also important for migratory birds that use the delta as a stopover before they continue their journey or spend the winter. Despite the suitability of the area for farming and wildlife, there are challenges facing both.

The heavy silt/clay soils of local farms are prone to degradation when overworked by machinery. Tractors and other farm equipment can compact the soil, and intensive tillage speeds the breakdown of soil organic matter, a crucial component of soil fertility. Farmers can fallow (rest) land by planting grasses and clovers and leaving the field alone for a period of time, however, many farms simply cannot afford to take crop fields out of production.

Wildlife, especially migratory birds, are also challenged to survive in the increasingly developed landscape of the lower Fraser River delta. Almost 80% of the marsh present 100 years ago has been drained, and only 600 hectares of grassland remain in the Municipality of Delta, where an estimated 6,000 hectares were present prior to 1890. Native shrub and tree communities have also dwindled.



# FARMLAND STEWARDSHIP IN ACTION

DF&WT has developed stewardship programs to address agriculture and wildlife conservation challenges. Through stewardship programs, local farmers are eligible for cost-share payments when crops that are beneficial to wildlife and agricultural production are planted. The management guidelines farmers follow to qualify for programs are science-based and guided by extensive research.

Each program addresses a specific example of wildlife conservation and agricultural production.

The **Grassland Set-aside Stewardship Program** pays farmers to fallow land, which improves soil fertility while providing habitat for a diversity of grassland raptors, wading birds, songbirds, small mammals, and pollinating insects.

The **Winter Cover Crop Stewardship Program** helps cover the cost of establishing vegetative cover on fields before winter, which protects the soil from erosion, improves soil fertility, and provides feeding habitat for herbivorous waterfowl and shorebirds.

Through the **Hedgerow Stewardship Program**, linear corridors of native shrubs and trees are planted along farm fields to provide habitat for songbirds, raptors, and beneficial insects. Similar corridors of grasses are planted along field edges through the **Grass Margin Stewardship Program**.



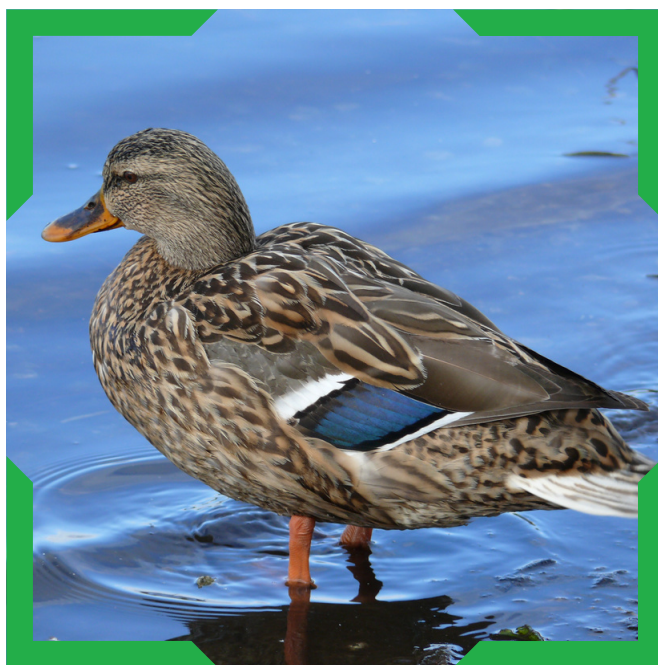


# FARMLAND STEWARDSHIP IN ACTION

Farmers can also apply to cover some of the costs of soil amendments and management through the **Soil Amendment and Laser Leveling Stewardship Programs**. Lime maintains soil pH at optimum levels so plants can grow effectively, and laser levelling improves drainage on fields prone to flooding.

**The Forage Enhancement Pilot Program**, established in 2017, assists grass forage producers with the costs of over-seeding forage fields due to waterfowl grazing. This pilot supports the enhancement and continued provision of high-valued grass forage fields for dairy cattle feed and as vital waterfowl foraging habitat.

By providing solutions for farmers that are compatible with their crop rotations, the DF&WT Stewardship Programs are contributing to the availability of wildlife habitat and the long-term viability of local farming operations, ensuring the land will continue to be accessible for food production and wildlife conservation.



# Summary of Stewardship Programs In 2021

Delta Farmland & Wildlife Trust stewardship programs are designed to contribute to soil fertility and wildlife habitat availability while mitigating conflict between wildlife and farming operations. During the 2021 fiscal year, DF&WT provided \$505,630.73 directly to farmers through cost-share programs, excluding staff time and administration costs. Included in that total was one hedgerow that was planted in the fall totaling 100m in length, which cost \$504.73 to install.

STEWARDSHIP PROGRAM	ACRES	RATE	TOTAL
GRASSLAND SET-ASIDE			
1-YEAR	77	\$400.00	\$19,400
2-YEAR	102	\$400.00	\$40,800
3-YEAR	101	\$400.00	\$40,400
4-YEAR	83	\$400.00	\$33,200
4+ YEAR	64	\$400.00	\$25,600
TOTAL	427		\$159,400
WINTER COVER CROPS			
SPRING CEREALS, WINTER CEREALS, COVER CROP MIXES AND CLOVERS	3,838.8	\$65-100	\$241,420.00
FORAGE ENHANCEMENT PILOT	577	\$75	\$43,275.00
LASER LEVELLING	176	-	\$26,825.00
SOIL AMENDMENT (*TONNES OF LIME/ GYPSUM)	797.06	\$40.00	\$28,556.00
FARMSCAPE			
HEDGEROWS	9.21	\$400.00	\$1,262.00
GRASS MARGINS	10.97	\$400.00	\$4,388.00
HEDGEROW CONSTRUCTION	0.07	-	\$504.73
TOTAL			\$6,154.73
STEWARDSHIP PROGRAMS TOTAL			\$505,630.73



# GRASSLAND SET-ASIDE STEWARDSHIP PROGRAM

Local farmers in Delta and Richmond can fallow land through the Grassland Set-aside Stewardship Program. Individual fields are planted with forage grasses and clovers and can be enrolled in the Set-aside Program for up to 4 years (extensions to 5 or 6 years on a case-by-case basis). In recent years some farmers have also been experimenting with pollinator-friendly set-aside mixes. While enrolled in the program, farmers receive cost-share payments to offset rent, seed, equipment, and labour costs (\$400/acre each year). Farmers who choose to plant a grassland set-aside with grain may harvest the nurse crop in the first year (harvest reduces a farmer's cost-share to \$200/acre).



*Figure 1: Extent of 2021 Grassland Set-aside Program*

## Role in Local Crop Rotation

Grassland set-asides (GLSA) are short-term fallows that improve soil quality. Soil organic matter comprises the residue from dead plants, fungi, and soil organisms. Soil organic matter is crucial to maintaining agricultural production, as it influences soil structure (e.g., aggregate stability), water retention, drainage (by increasing soil macro-pores), soil microbial activity, macroinvertebrates (e.g., earthworms), nutrient storage and nutrient uptake by crop plants. Additionally, the roots of grasses, and especially clover, can bore channels through compacted soil, thereby increasing drainage and aeration. The program also allows farmers to transition to organically certified production by fallowing their field during the 3-year chemical-free period.

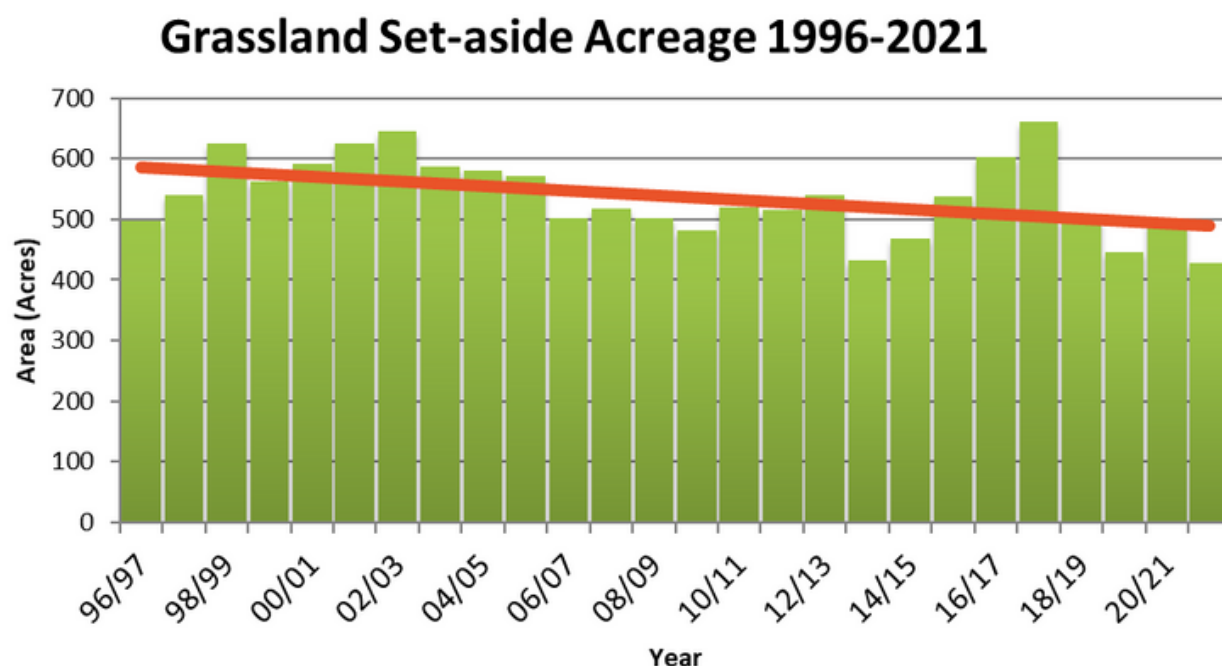
# GRASSLAND SET-ASIDE STEWARDSHIP PROGRAM

## Role in Wildlife Conservation

Grassland set-asides mimic the grasslands that were abundant on the lower Fraser River delta (LFRD) prior to 1890 (when land clearing and draining for agriculture began) and are, therefore ideal surrogate habitat for wildlife. Populations of small mammals, especially Townsend's vole, establish under the thick canopy of grass and provide prey for predatory birds. These include raptors (Northern Harrier, Short-eared Owl, Barn Owl, Rough-legged Hawk, Red-tailed Hawk, and American Kestrel) and wading birds (Great Blue Heron and American Bittern).

Grassland set-asides provide habitat for a diversity of arthropods, including pollinating insects like bumblebees. Arthropods can also serve as a food source for shrews and insectivorous birds, including Barn Swallows and Western Meadowlarks.

Set-asides also provide nesting habitat for grassland birds. Savannah Sparrows and Common Yellowthroat nests can be found in set-asides and occasionally reports of Northern Harrier nests. Short-eared Owls and Western Meadowlarks may nest in set-asides, but this has not been confirmed. It is thought that breeding populations of Western Meadowlarks have been extirpated from the lower Fraser River delta.



**Figure 2:** Historical acreage of Grassland Set-aside program enrollment from 1996 to 2021 (The line is a 3-year running average).



# WINTER COVER CROP STEWARDSHIP PROGRAM

Farmers in Delta can plant cereal grasses, clover, or annual forage grasses as a cover crop. Cover crops can be under-seeded into growing crops (e.g., cereal grains and silage corn) or planted after cash crops (e.g., beans, peas, and potatoes) are harvested. Farmers receive between \$65-75/acre to seed winter cover crops. The majority of cover crops are seeded in late summer and early fall.



*Figure 3: Extent of 2021 Winter Cover Crop Program*

## Role in Local Crop Rotation

The foliage of cover crops provide ground cover, preventing rain-induced soil erosion, while the roots increase soil porosity and break up compaction. Cereal cover crops scavenge nutrients that would otherwise leach from the soil during heavy winter rains. The cover crop can be incorporated in spring as green manure to increase soil organic matter. Soil organic matter improves soil structure, increases the water-holding capacity of soil, and increases the infiltration of water. Clover cover crops can fixate nitrogen and offset the need to use synthetic fertilizers. While directly improving soil health, cover crops can also provide many other agricultural benefits. Cover crops can shade weeds, and some release allelopathic compounds that inhibit weed growth, reducing the farmer's usage of chemical controls. They also play an important role in carbon sequestration.

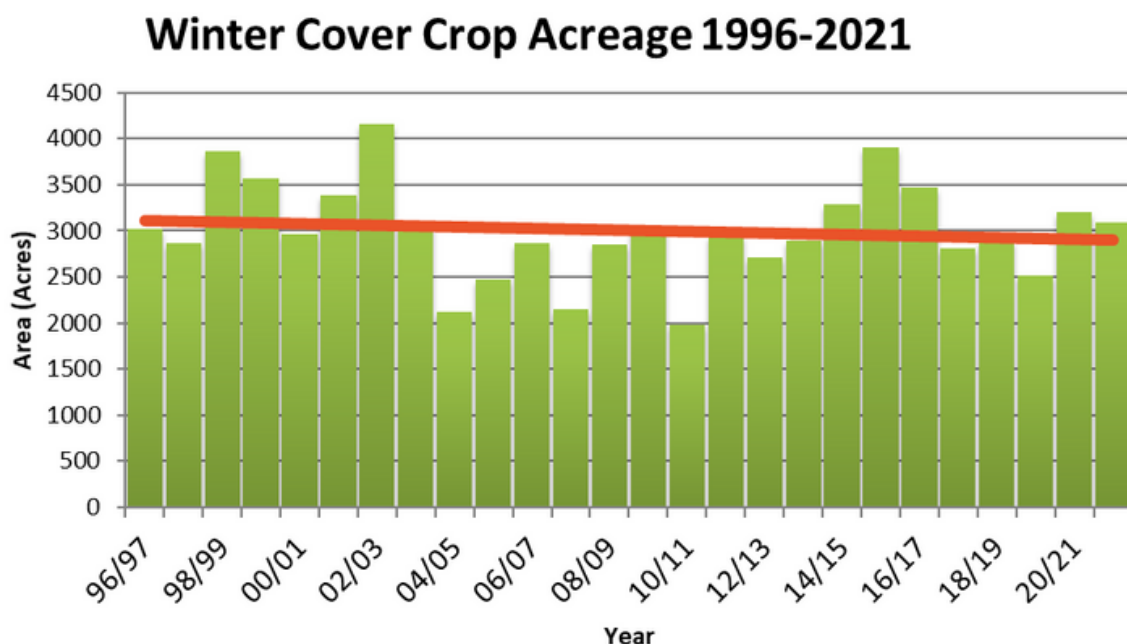
# WINTER COVER CROP STEWARDSHIP PROGRAM

## Role in Wildlife Conservation

Cover crops mainly benefit herbivorous waterfowl, providing them with a protein-rich food source during staging and wintering periods. Lesser Snow Geese, American Wigeon, Northern Pintail, Mallard, and Trumpeter Swans are all species that frequently feed on winter cover crops. To a lesser extent, Canada Geese, Cackling Geese, Greater White-fronted Geese, Tundra Swans, and Green-winged Teal feed on cover crops. Several species of shorebird have been identified using cover crop fields as well. Wilson's Snipe use the dense vegetation of early planted cover crops as shelter, and Dunlin and Black-bellied Plover have been observed feeding on invertebrates on grazed cover crop fields. In one instance, a group of 18 Northern Harriers was observed roosting in an oat cover crop that had grown higher than 50 cm.

## Other Benefits

Grasses grown for hay and pasture (perennial forage) can be grazed by waterfowl, reducing harvest yields and potentially requiring fields to be reseeded. Winter cover crops can act as lures, drawing waterfowl away from hay and pasture and providing them with an alternative source of feed. While cover crops have not resulted in a complete abatement of grazing on hay and pasture, they offset some of the loss that growers would have otherwise experienced.



**Figure 4:** Historical acreage of Winter Cover Crop program enrollment from 1996 to 2021 (The line is a 3-year running average).



# FORAGE ENHANCEMENT PILOT PROGRAM

In 2017 DF&WT, in partnership with Environment and Climate Change Canada, initiated a new program to assist grass forage producers with the increasing intensity of grazing that their forage fields are experiencing over the winter season. Through the Forage Enhancement Pilot Program, DF&WT is sharing the costs associated with over- and re-seeding forage fields in the spring due to waterfowl grazing. The goal of the program is to support the enhancement and continued provision of these high-valued fields both for dairy cattle feed and as vital waterfowl foraging habitat.

## Role in Local Crop Rotation

Perennial grass forage fields provide the bulk of feed for dairy cattle herds in Delta. Waterfowl grazing of perennial grass forage fields creates a considerable cost to many Delta forage producers including lower forage yields, reduced harvest quality (protein), a reduction in cuts (i.e. 4-5/year to 3/year), and at times destroyed plantings that require re-seeding. Impacts from waterfowl may also result in soil problems such as compaction and ponding. In some cases, grass forage fields must be re-seeded annually (as opposed to every 5+ years) at a cost upwards of \$400-650/acre.

The costs to maintain perennial forage fields in some cases are reaching a level where it is no longer economically viable. This is causing some producers to plant annual forage fields with corn. The concern with regard to waterfowl is that annual forage fields will be tilled in the fall and left bare over the winter season. Bare fields tend to dry out quicker in the spring, permitting earlier access and planting, which is critical for nutrient management. However, the consequence of this practice is that fields which once provided significant foraging habitat for waterfowl will no longer be available over the winter and migratory season. This decrease in perennial fields will exacerbate the issue elsewhere by increasing pressures on remaining grass forage and winter-cover cropped fields.

## Role in Wildlife Conservation

Grass forage fields mainly benefit herbivorous waterfowl, providing them with a protein-rich food source during staging and wintering periods. Lesser Snow Geese, American Wigeon, Northern Pintail, Mallard, and Trumpeter Swans are all species that frequently feed on grass forage fields. Past research conducted by DF&WT has identified perennial forage fields as providing some of the highest-quality foraging habitat for migratory waterfowl.

# HEDGEROW STEWARDSHIP PROGRAM

Hedgerows in Delta are rows of native trees and shrubs planted along field edges.

## Role in Local Crop Rotation

The ecology of hedgerows is complex, and although it is difficult to determine how they contribute to crop production, current research supports their role in providing habitat for predatory parasitoids and pollinating insects. Beneficial insects are known to support biological pest management and increase crop yields. Pollinating insects are required for fruit set in a number of local agricultural crops, including tomatoes, berry crops (blueberry, strawberry, raspberry, and cranberry) and cucurbits (squash, zucchini, pumpkins, and cucumbers).

## Role in Wildlife Conservation

Hedgerows provide feeding habitat for songbirds and raptors. Many hedgerow songbirds feed upon the berries from fruiting shrubs or the insects living in the hedge. Accipiter hawks like Cooper's and Sharp-shinned Hawk will hunt smaller songbirds within the hedge. Raptors, like the Red-tailed Hawk, Rough-legged Hawk, Short-eared Owl, and Northern Harrier will use hedges as perch sites. Surveys conducted of hedgerows in Delta, including those established through DF&WT's stewardship program, indicate that older, more structurally developed hedgerows provide habitat for a wider variety of bird species.





# GRASS MARGIN STEWARDSHIP PROGRAM

Like hedgerows, grass margins are linear strips of habitat running along the edge of agricultural fields. DF&WT encourages farmers to use the same mixture of forage grass and clover used in grassland set-asides when planting margins. Farmers are eligible to receive \$400/acre for grass margins enrolled in the program.

## Role in Local Crop Rotation

Grass margins can provide physical breaks between fields, especially fields that require buffer zones for organic certification. When margins are planted along ditch edges, the grass can trap soil that would erode off the field during heavy rains, preventing the ditch from filling with sediments. When grass margins contain clover, they can provide floral resources for pollinating insects.

## Role in Wildlife Conservation

Similar to grassland set-asides, grass margins can provide habitat for small mammals, which are prey for raptors and wading birds. Raptors may also roost in grass margins during winter; Short-eared Owls have been flushed from grass margins during field surveys. Grassland songbirds nest and feed in the grass margins.



# LASER LEVELING STEWARDSHIP PROGRAM

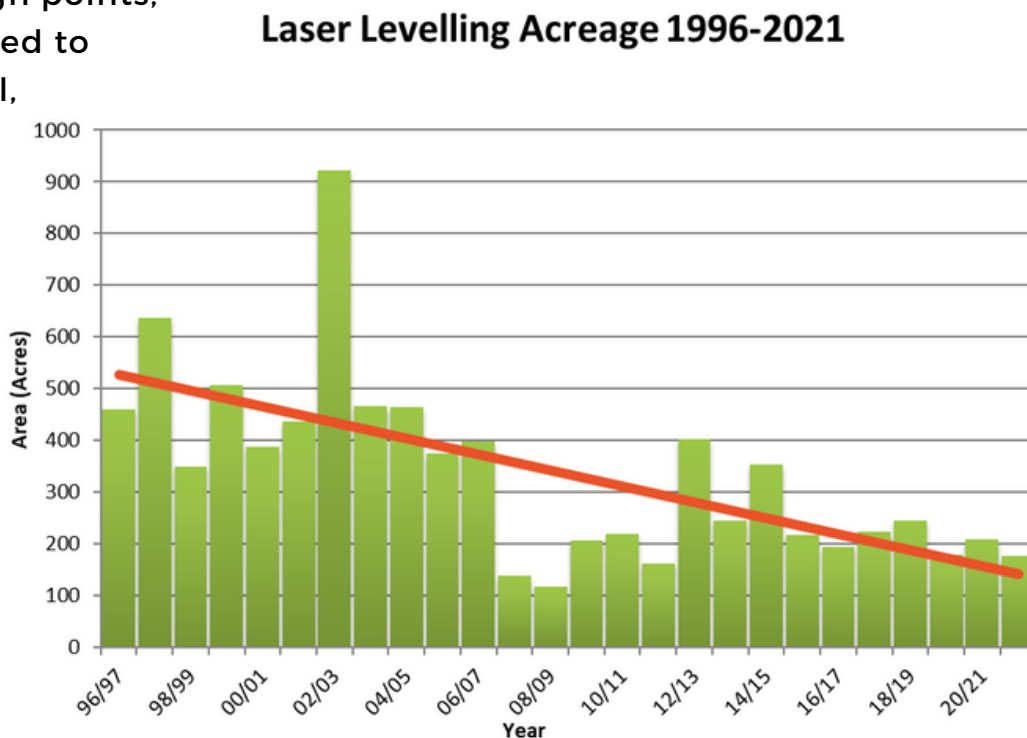
DF&WT has been offering its Laser Leveling cost-share program to farmers since 1996. Through the program, co-operators are eligible to receive up to 50% of the cost of levelling, up to a maximum cost-share of \$175/acre.

## Role in Local Crop Rotation

Drainage is an essential component of productive agriculture, especially in areas that experience periods of heavy rainfall. On the Fraser delta, heavy rains occur during the winter months, and poor field drainage can lead to soil erosion, soil compaction, and salt accumulation. Field topography plays an important role in how water is drained from a field. Steeply sloped fields can lose significant amounts of topsoil as fine particles are washed away by water runoff. Water pools in low areas and is unable to drain, and the weight of water in these areas is significant enough to cause compaction. Furthermore, these areas take longer to dry in spring, delaying farmers' access to portions of their fields. When the puddles do dry, the osmotic pressure can pull significant amounts of salt from deeper in the soil profile to the surface, thereby impacting crop production.

Delta farmers have access to laser levelling services which can recontour their fields to maximize drainage and minimize water ponding and soil erosion. Using GPS, stationary laser towers, and computer software, a laser levelling plough is pulled by a powerful tractor and can accurately recontour a field. The plough fills in low areas and removes soil from high points, and fields can be contoured to either be completely level, sloped, or crowned, depending on the field's characteristics.

**Figure 5:** Historical acreage of Laser Leveling program enrollment from 1996 to 2021 (The line is a 3-year running average).

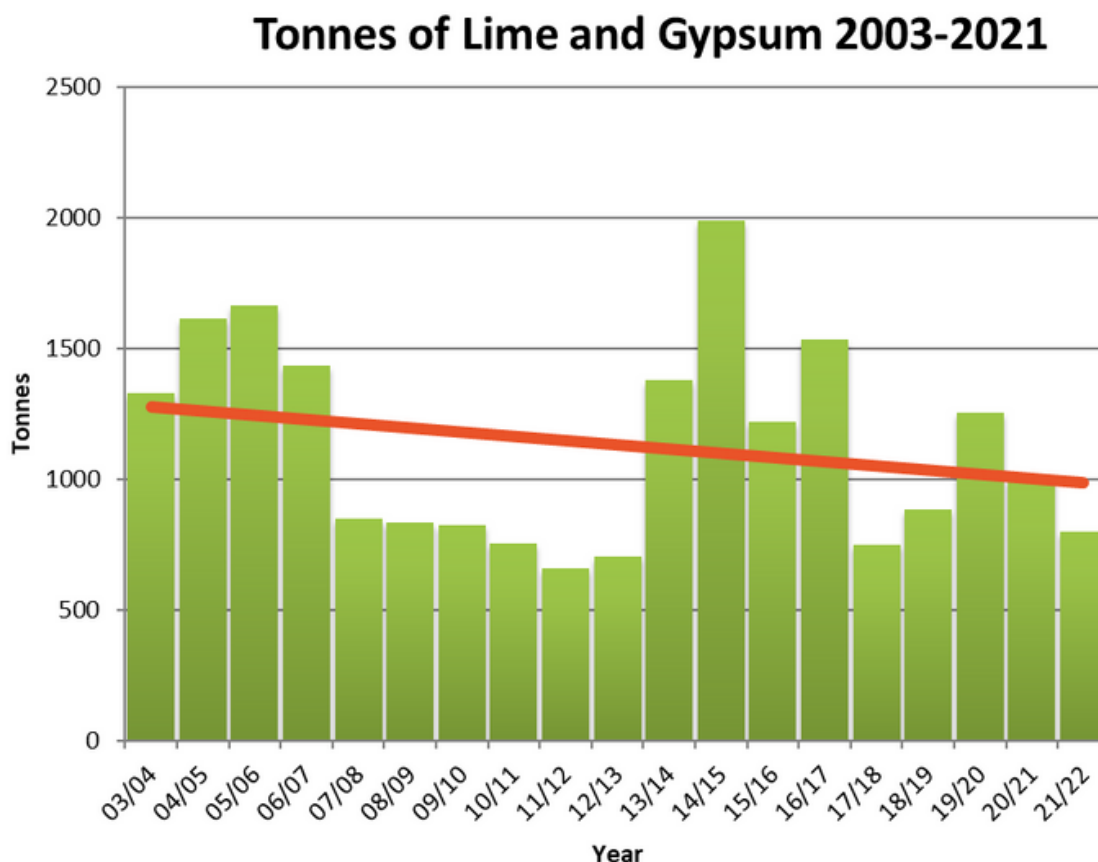


# SOIL AMENDMENT STEWARDSHIP PROGRAM

Farmers in Delta have had access to DF&WT's Field Liming cost-share since 2004. Through the program, farmers are eligible to receive \$60/tonne of lime applied, to a maximum of 2 tonnes/acre applied on a maximum of 100 acres.

## Role in Local Crop Rotation

Soils become acidic when there is an accumulation of positively charged hydrogen ions (called cations). There are several ways soils become acidic. Heavy rains can leach away positively charged ions like calcium, magnesium, potassium, and sodium. Excess nitrogen fertilizer that is not taken up by crop plants can be oxidized to acids by soil microbes. When soils become too acidic, plants are unable to take up nutrients efficiently. 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 moderate to strong acid soils will improve and maintain productivity.



**Figure 6:** Historical tonnage of Field Liming program enrollment from 2003 to 2021 (The dark green line is a 3-year running average).



# SUMMARY OF OUTREACH COMPLETED IN 2021

Delta Farmland & Wildlife Trust communicates the results of its work to the general public in a variety of ways: including field tours, reports, news articles, social media (Instagram and Facebook), community events, lectures, presentations, website features and in the publication of our bi-annual newsletter, "Farmland & Wildlife." The list below highlights the diversity of outreach activities and presentations given during the 2021 year.

OUTREACH TYPE	AUDIENCE	# OF ATTENDEES
PRESENTATIONS	City of Delta Mayor, Council and staff	20
	UBC Webinar - "Climate Change: How Nature-Based Solutions Restore Balance"	60
	Delta Ag. Advisory Committee Presentation	12
	UBC Conservation Discussion Group	10
	ACARN webinar	80
FIELD TOURS	Ministry of Agriculture - Regional Agrologist	1
	Birds Canada - Staff	2
NEWSLETTER	DF&WT Farmland & Wildlife Newsletter (Summer and Winter Issues)	900+
MEDIA	Eastlink Delta Magazine (10 min video)	3000



# SUMMARY OF RESEARCH COMPLETED IN 2021

## Assessing the Impact of Restoring Semi-Natural Habitat on Farmland on Agricultural Productivity

In 2020, DF&WT began another multi-year research project in partnership with the University of British Columbia with funding for the project provided by the Governments of Canada and British Columbia through Agricultural Partnership, a federal-provincial-territorial initiative. The program is delivered by the Investment Agriculture Foundation of BC.

The three-year study is examining the impact of DF&WT planted hedgerows, grassland set-asides (GLSA) and floral strips on beneficial insects and pests, and how these insect populations impact crop yields of blueberries. The overall goal of the project is to evaluate (1) how restoring portions of agricultural land with semi-natural or natural habitat (e.g. hedgerows, GLSAs, and floral strips) can support populations of beneficial versus pest insects in the region and (2) what impact alterations of these populations have on blueberry crop yields and overall profitability for growers located throughout the Lower Mainland and Fraser Valley.

Over 25 sites including DF&WT planted hedgerows, remnant hedgerows, grassland set-asides, floral set-asides, and annual crop fields were sampled for pollinators, predatory and parasitoid insects, and crop pests during the 2020 summer season. This research by Carly McGregor found that crop margins both with and without enhancements supported pollinators, but more insects visited flowers at hedgerows compared to plants visited at margins without hedgerows. They also found that grassland set-asides supported pollinators much more than annual crop fields.

During the summer of 2021, 6 blueberry field sites in Delta, Surrey and Langley were studied to determine the pollination deficit in blueberry flowers. The research aimed to determine if the deficits in pollination could be lowered by planting a strip of mixed wildflowers adjacent to fields.

# SUMMARY OF RESEARCH COMPLETED IN 2021

## Vegetation Surveys of Winter Cover Crop Fields

Cover crop vegetation surveys were completed over the 2021/22 winter to assess the extent of waterfowl grazing occurring on fields planted with a cover crop. Winter cover cropped fields were surveyed three times over the winter season to measure vegetation height and cover. A total of 117 cover cropped fields were surveyed. By March 2022, 26 fields (22%) were grazed to the roots and 50 fields (43%) showed no evidence of grazing. Waterfowl grazing was lower during this winter than previous years, likely due to a lower number of waterfowl observed and a series of cold snaps which damaged many cover crops, especially spring cereals.

## Species-at-Risk Surveys of Grassland Set-asides

Barn Owl, Short-eared Owl and Pacific Great Blue Heron use of grassland set-asides was monitored over the 2021/22 winter season to assess the effectiveness of grassland set-asides for providing species-at-risk habitat. Herons were detected in over three-quarters of fields, and owls were detected in half of the surveyed fields. Observations show owls are using set-asides extensively for foraging, indicating the abundance of prey species in these fields. 8 Short-eared Owls and one Barn Owl were observed during surveys, with the majority of the observations in January and February.





# SUMMARY OF RESEARCH COMPLETED IN 2021

## Assessing Waterfowl Use of Agricultural Lands in Delta & Richmond, BC

Assessing Waterfowl Use of Agricultural Lands in Delta & Richmond, BC is an ongoing study that began in 2016 to assess waterfowl use of agricultural land in the Fraser River estuary. The study is a partnership with Canadian Wildlife Service and Ducks Unlimited Canada. The study is quantifying and assessing patterns in waterfowl use between crop types and over time, and is also being used to quantify the benefit of cover crops to waterfowl.

Over the course of 30 survey days conducted between October 2021 and March 2022, a total of 28,815 waterfowl were observed, comprising ten different species. By comparison, 37,429 waterfowl were observed during the winter of 2020/2021. Waterfowl were observed foraging in annual crop fields and DF&WT's cover cropped fields. Of the 216 surveyed fields, 68 were enrolled in either DF&WT's Winter Cover Crop (WCC) stewardship program and 26 fields were enrolled in the Cereal Habitat Enhancement Program (CHEP). WCC fields supported a greater waterfowl density (0.73 waterfowl per acre) than non-cover crop fields (0.61 waterfowl per acre). We also found that fields relatively close to shore (0-1,400m; 0.93 waterfowl/acre) had more waterfowl observed per acre than fields further from shore (>1,400m; 0.38 waterfowl/acre). Additionally, waterfowl were much more frequently observed during high tides (0.96 waterfowl/acre) than at low (0.54 waterfowl/acre) or mid tide levels (0.53 waterfowl/acre).



# STATEMENT OF FINANCIAL POSITION

UNAUDITED FOR THE YEAR ENDED DECEMBER 31, 2021

Assets	Current	2021 (\$)	2020 (\$)
	Cash	135,393	95,291
	Term Deposits	199,504	198,681
	Contributions Receivables	112,886	173,459
	GST Receivables	1,483	10,962
	Prepaid Expenses		6,000
	<b>Total current assets</b>	<b>449,266</b>	<b>484,393</b>
	Restricted cash	158,460	171,700
	Long term investments – at cost	118,960	104,393
	Capital assets	295	295
	Legacy Fund Cash	775,235	
Liabilities	Current	2021 (\$)	2022(\$)
	Accounts Payable	69,786	71,778
	Payroll Liabilities	278	
	Deferred Revenue	144,710	171,700
	<b>Total Liabilities</b>	<b>228,624</b>	<b>243,478</b>
	<b>Net Assets</b>		
	General Fund	948,364	517,094
	<b>Legacy Fund (Internally Restricted)</b>	<b>775,235</b>	
	<b>Total Liabilities and Net Assets</b>	<b>1,272,592</b>	<b>517,094</b>

# STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS

UNAUDITED FOR THE YEAR ENDED DECEMBER 31, 2021

Revenue		2021 (\$)	2020 (\$)
Funding	Delta Agricultural Society	137,000	135,000
	Gov't of Canada Cdn Wildlife Service	150,000	120,000
	Vanc Fdn YVR Wildlife Stewardship Fund	127,375	127,375
	Investment Agriculture Foundation (IAF)	51,710	133,598
	B.C. Waterfowl Society	62,855	36,000
	Wildlife Habitat Canada	35,000	35,000
	Ducks Unlimited Canada	40,000	61,836
	Habitat Conservation Trust Foundation	30,000	20,000
	Vanc Fdn Boundary Shores	21,769	21,758
	City of Delta	50,000	50,000
	Tsawwassen golf Course Compensation Fund	13,750	13,750
	City of Richmond	9,700	9,700
Other	Donations	794,720	28,891
	Fundraising - BBQ		
	Fundraising - DATF	7,000	
	Interest and other income	16,189	3,639
<b>Total Revenue</b>		<b>1,347,068</b>	<b>796,637</b>



# STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS

UNAUDITED FOR THE YEAR ENDED DECEMBER 31, 2021

Expenses		2021 (\$)	2020 (\$)
Projects	Remittances to co-operators	505,125	490,967
	Executive Director	50,897	53,294
	Travel and mileage	3,121	3,685
	I.A.F. Project	60,689	136,489
	Monitoring and evaluation	26,463	26,073
	Farmscape maintenance	4,544	3,617
	Farmscape construction	5,004	7,266
	Total Project expenses	655,843	721,391
General	Administration, office, society costs	91,842	73,153
	Fundraising - BBQ		1,008
	Fundraising - DATF		1,002
	Conservation, education, communication	21,178	2,897
	<b>Total General Expenses</b>	<b>113,020</b>	<b>78,060</b>
	<b>Total expenses</b>	<b>768,863</b>	<b>799,451</b>
	Excess of revenue over expenses	778,205	(2,814)
	Net assets, beginning of year	17,097	519,911
	prior period adjustment	(21,710)	
	Net assets, end of year	1,272,592	517,097

# YVR WILDLIFE STEWARDSHIP FUND

As a result of the construction of a parallel runway and associated developments at the Vancouver International Airport between 1992 and 1996, approximately 350 ha of wildlife habitat were drastically altered. The affected area consisted primarily of farmland, providing a wide range of habitats typically associated with agricultural landscapes. Based on a series of habitat assessments and wildlife surveys conducted in the affected area, it was determined that a wide range of wildlife species would be impacted by the airport expansion. Approval of the airport expansion was contingent on a mitigation/compensation program that addressed the loss of wildlife habitat and the resulting displacement of wildlife. At the time, the Federal Government committed itself to protector replacing wildlife habitat so that no net loss of habitat capability resulted from the parallel runway project. A total of 318 ha of land had been secured for the purposes of wildlife habitat and agriculture in the vicinity of the lower Fraser River delta. Although securing these lands and conducting habitat enhancement on them contributed to the goal of no net loss of habitat capability, it did not compensate for all loss. Additional habitat capability on privately held lands was identified through land stewardship activities that promote wildlife use. To meet additional requirements, a Wildlife Compensation fund (YVR Wildlife Stewardship Fund) was established to finance land stewardship activities on private lands in perpetuity. This fund (\$2.25 million) was granted to the DF&WT who transferred it to the Vancouver Foundation as an endowment fund. Yearly returns from the fund are utilized to pay for core programs administered by the DF&WT.

## Allocation of Funds for the 2021 Program Year

Program	Amount	Percentage
Grassland Set-Aside Program	33,369.60	26%
Hedgerow Program	17,790	14%
IAF Expenses	4,409.88	3%
Day at the Farm	1,000.00	1%
Administration	6,368.75	5%
Monitoring and Evaluation	12,737.5	10%
Communications	19,855.52	16%
Executive Director	31,843.75	25%
<b>Total</b>	<b>127,375.00</b>	

# BOUNDARY SHORES COMPENSATION FUND (VANC FDN: BOUNDARY SHORES)

Boundary Shores Compensation Fund (Vanc Fdn: Boundary Shores) The development of the Boundary Shores Golf Course just southwest of the Boundary Bay Airport contributed to a loss of farmland and wildlife habitat. Covering 62 hectares of previously farmed land, the course removed approximately 16 hectares of old-field and 36 hectares of waterfowl winter grazing habitats. It had been estimated that the loss of the balance of 10 hectares, which represented old-field habitat, may be mitigated through landscape management within the footprint of the golf course. In 1990, the developers of the Boundary Shores Golf Course agreed to pay \$531,720 to the City of Delta as part of a mitigation and compensation package for 52 ha of altered habitat in the vicinity of the proposed golf course. These funds were to be used as a conservation fund (hereafter referred to as the Boundary Shores Compensation Agreement Fund or BSCA Fund) to purchase, lease, or manage land for wildlife habitat. Both the Canadian Wildlife Service and British Columbia Ministry of Environment suggested that the funds be used for the replacement of lost old-field and waterfowl grazing habitat. The comments of both government agencies were the basis of the Habitat Compensation Trust Agreement between the City of Delta and the developers of the Boundary Shores Golf Course. Under the Habitat Compensation Trust Agreement, the developer and the City of Delta agreed that the Municipality would transfer the funds to an existing or yet to be established entity whose objectives shall relate generally to the conservation of the Lower Fraser delta ecosystem. Under an agreement between DF&WT and the City of Delta, the funds were to be managed as outlined in the Boundary Shores Compensation Fund Management Plan. The compensation funds as well as \$33,866 in interest earned by the City of Delta during their possession of the funds were transferred to the DF&WT in November 2000.

## Allocation of funds for the 2021 Program Year

Program	Amount	Percentage
Grassland Set-Aside Program	8,703.20	40%
Winter Cover Crop Program	8,703.20	40%
Administration	739.77	3%
Executive Director	3,622.91	17%
<b>Total</b>	<b>21,769.08</b>	

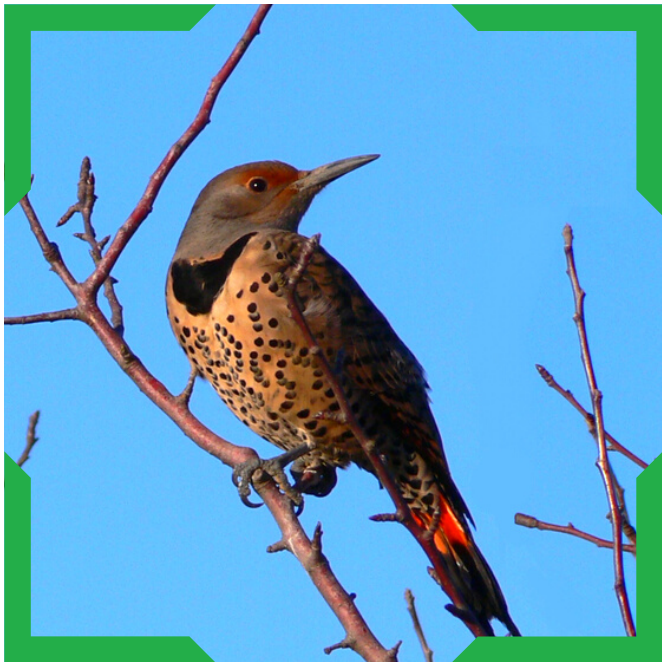


# TSAWWASSEN GOLF & COUNTRY CLUB HABITAT COMPENSATION FUND (TG&CC HABITAT COMPENSATION FUND)

The redevelopment of the Tsawwassen Golf and Country Club at Highway 17 and 52nd Street resulted in a 22-hectare loss of farmland and wildlife habitat. The parcel developed had not been farmed for a number of years and, as a result, transitioned into old-field habitat which supports many birds of prey, owls, herons and grassland songbird and wildlife species. There was no opportunity to mitigate loss of old-field habitat and compensation of lost habitat capacity needed to take place at other locations on the delta. In 2008, the developer agreed to pay \$300,000 to the City of Delta as part of a mitigation and compensation package for 22 hectares of lost farmland and old-field habitat. These funds were to be used to facilitate the long-term financing of surrogate habitat elsewhere within the lowlands of the Fraser River delta. Under the Development Agreement, the funds were earmarked to fund ongoing grassland set-aside agreements with local farmers.

## Allocation of funds for the 2021 Program Year

Program	Amount	Percentage
Grassland Set-Aside Program	13,750.00	100%
Total	13,750.00	







**Delta Farmland  
& Wildlife Trust**  
*Partners in Stewardship*

## **OUR SUPPORTERS**

Delta Farmland & Wildlife Trust would like to recognize the agencies that provided funding to deliver the full extent of our stewardship programs and research for the 2021 fiscal year.

**Delta Agricultural Society**

**Vancouver Foundation**

**Environment and Climate Change Canada**

**Ducks Unlimited Canada**

**BC Waterfowl Society**

**Habitat Conservation Trust Foundation**

**Habitat Stewardship Program**

**City of Delta**

**City of Richmond**

**Investment Agriculture Foundation of BC**

**Wildlife Habitat Canada**

**and**

**Private Donations**