



Field Margin Program



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

*Planting and managing field
margins to promote grassland
habitat and soil stability*

Why are field margins important?

Habitat loss is the greatest driver of biodiversity loss. One approach to mitigate this continued decrease in biodiversity is to enhance farmland with natural habitat through grass and wildflower strips. The Field Margin Program (FMP) supports the planting of native flowers, grass, and broad-leaved plants along farm field margins and irrigation channels.



What is the Field Margin Program?

The Field Margin Program (FMP) program offers a per acre annual payment to encourage field margin plantings.

Biodiversity and agriculture are closely connected, and agriculture can contribute to habitat conservation by utilizing unharvested areas of the landscape to support local insects, birds and other wildlife. The greater the biological diversity, the more resilient the farming system.

Why consider this practice?

Research shows that enhancing farmland with natural habitat does not have to come at the expense of profitability. Increasing biodiversity on farmland, when done right, is a long-term investment in overall profitability and can act as an insurance policy against ever-increasing changing environmental conditions.

Projects supported by this program:

Grass/wildflower strips along field edges and ditches

Wildflower plantings adjacent to and within vegetable and berry fields to support pollinators

Grass/wildflower patches seeded around remnant trees or along hedgerows or other natural features to square up field edges and improve production efficiency while maintaining habitat

Plantings to improve ditch habitat and stability: stabilize banks, reduce erosion, reduce loss of nutrients and sediment into ditches, increase shade in ditches to keep the water cooler

What's involved?

Participants plant and manage strips or patches of grass and wildflowers along field margins to stabilize soil and benefit wildlife. A mixture of flowering species and grasses provides habitat diversity for broader support of wildlife. The seed mixture used should:

- require little to no maintenance,
- enhance soil structure, and
- establish good vegetative cover for foraging, roosting and nesting wildlife.

Scan here to receive up-to-date program information, including program changes and important reminders:



What funding is available?

\$650/acre enrolled for the establishment year.

\$500/acre for up to 2 additional years to maintain the field margin.

Eligible Acreage: Field margins must be 1-10 meters wide, 10-acre maximum per participant.

Acres can be enrolled in the program for three years, with a possibility of extension if funding allows.

All field preparation and seed costs are to be paid by the cooperator.

Planting Guidelines for Spring Planting

Ideal planting date: March - May

Planting deadline: June 30th

Planting at 40-50lb/acre (or as specified by the seed company).

Field margins in their last year must be left intact until March 31 of the previous contracted year.

If establishment in the first year is deemed, for any reason, to be unsuccessful, soil tests may be conducted, and/or reseeding may be required. All costs associated with these activities are to be paid by the cooperator.

Enrolled acres may remain in the program for three years, with a possibility of extension if funding allows. This is conditional on the field margin being well maintained.

Yearly contracts run from April 1 to March 31.

Delta Farmland and Wildlife Trust (DFWT) may ask participants to mow part or all of the field margin to increase its wildlife habitat value and control weeds. While cutting or mowing the grass, co-operators are encouraged to drive slowly so that small mammals and other wildlife have some chance of escape. Mowing or harvesting should only occur after July 15.

Important factors to consider when enhancing field margins

Perennial Flowering Species:

Maximizing perennial flowering species is a critical factor in increasing the abundance and diversity of beneficial insects. Once established, perennial species will continue to grow for years to come.

Season-long Bloom:

Select species that flower at different times to provide a continual supply of blooms for a stable food source for pollinators over the growing season.

Native Plants:

Species that are native to the environment are adapted to the local climate and often have lower water, nutrient and pest-control needs than non-native species. Native species have also been found to support higher numbers of beneficial insects compared to non-native species.

Variety:

Select at least 10 species of grasses and wildflowers with varying flower sizes, shapes, and colors, as well as varying plant heights and growth habits.

Avoid Nuisance Plants:

Avoid species that are weedy, susceptible to disease, and harbor pests. Selecting native plants, in most cases, alleviates this concern as pests often tend to prefer crops to native species.

Nesting Resources:

Many native bees nest in holes in the ground and need access to bare soil surfaces as a result. It is important to leave dead plant material such as old logs and piles of sticks and leaves as these can also be nesting sites for native bees. Bumble bees nest in colonies in abandoned mouse holes and in bunches of grass, which is why it's important to consider including grass species in your mix.



What's the application process?

Participants must apply to DFWT before planting to ensure funding remains available. The Field Margin Program (FMP) is first-come, first-served, and funding will be allocated to projects in the order requests are received.

There are three ways you can start your application:

- call (604) 970-7640
- email programs@dfwt.ca
- complete the online application form at: form.jotform.com/240034919487260

Once you receive notification that your application is formally approved, you can plant your field margins knowing funding has been allocated to your project. Cost-share payments will be made through automatic funds transfer in the summer each year following project verification.

Am I eligible?

Cost-share funding is available for farmers or landowners with farmland in Metro Vancouver and Abbotsford.

Research and Verification

Research and project verification are critical components of DFWT programs. Our cost-share programs are grounded in science and require annual surveying efforts to ensure projects have the desired effect.

Winter Monitoring

Field margins may be visited by Field Technicians from November to March to assess the species using these habitats for overwintering.

Spring Monitoring

Field Technicians conduct spring breeding bird surveys in select areas to help us understand how important these habitats are in supporting grassland breeding birds.

Soil Health Baseline

Several studies have been conducted on planted margins to demonstrate the significant impact of these practices on soil health. We conduct our own soil monitoring efforts on select fields to gain a sense of soil condition when entering the field margin program and soil condition when concluding the program. Results are not shared publicly or with funding partners. DFWT utilizes this information as a resource to understand the change in soil parameters over time. Individual results for your farm can be shared with a participant if requested.

Potential Benefits of Grass and Wildflower Field Margins

Improved Crop Pollination

Recent research has demonstrated the importance of wild pollinators for crop pollination and overall yields. One BC study found that wild pollinators are required to maximize pollination in pollinator-dependent crops such as blueberries.¹ They found that highbush blueberry yields in BC could potentially increase by 30% if pollination was maximized through wild pollinators and that Duke and Bluecrop blueberries could generate an additional \$7,800/ha and \$18,400/ha, respectively if pollination was maximized.¹ Another BC study found that bumble bee abundance had a greater influence on blueberry and cranberry berry mass than honey bee abundance.² A study in the US Midwest found that blueberry fields adjacent to wildflower plantings have been found to have a higher percentage fruit set, berry weight and mature seeds per berry, resulting in higher yields.³ Finally, a study from the UK found that field beans pollinated through open pollination with wild pollinators compared to self-pollination resulted in a 185% increase in yield.⁴

Biological Pest Control

In addition to supporting crop pollination, beneficial insects also support biological pest control. Research has identified that agricultural landscapes with more non-crop habitat such as hedgerows and grassy margins support higher populations of predatory insects.⁵ Another study found that landscapes with more semi-natural areas had either fewer crop pests or more biocontrol⁶. Multiple other studies have found that non-crop (natural) habitat supports higher ratios of beneficials to pests compared to weedy field edges⁷⁻¹⁰. Increases in beneficial insect populations have been found to spill over into adjacent farm fields and assist with reducing pest populations. For some of these studies, the impact of predatory insects on pest populations was significant enough to reduce the insecticide applications required. The more biologically diverse the agricultural landscape, in terms of field hedges and the larger the landscape context, the more biological pest control one can expect to see.

Increased Yields and Profitability

Between increased pollination services and biological pest control, incorporating non-crop habitat areas into a farm operation can result in increased revenue due to higher yields for pollinator-dependent crops and decreased costs associated with reductions in required pesticide applications.

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Who is Delta Farmland and Wildlife Trust

DFWT is a grassroots organization that promotes the preservation of farmland and wildlife habitat in the Fraser River and Fraser Valley estuary by providing funding to support stewardship projects. Soil health and on-farm habitat are our two critical priorities. We work with farmers to enhance production systems through science-based approaches. Our Field Technicians survey projects to understand the impact they're having on wildlife and soil health.

DFWT has been delivering cost-share programs for farmers in Delta for 30 years. These partnerships have led to transformative change and support for wildlife on farms in this region. Starting in 2023 we have expanded some of our cost-share programs to be delivered throughout Metro Vancouver and Abbotsford. Our farmer-focused approach ensures participants receive the funding they need to get projects in the ground without a complex program process. Our organization is led by farmers and conservationists working together to support collaborative and practical efforts on farms.

Questions about the program? Get in touch with us:



604-940-3392



programs@dfwt.ca



www.deltafarmland.ca

Terms and Conditions

1. Applications to the Field Margin Program should only be made for acreage within Metro Vancouver and Abbotsford.
2. Approval is dependent on funding availability. New applications are date-stamped upon arrival at the DFWT office and are treated on a first-come, first-served basis.
3. DFWT may decline eligibility for the Field Margin Program at any time if vegetation is too sparse.
4. In the event that the participant does not maintain the field margin by the standards prescribed herein, the DFWT obligations shall cease.
5. The field margin must be planted by June 30th to be eligible if this is the first year of the agreement.
6. To receive payment, participants must maintain and manage the field margin from April 1 (or the planting date) to March 31. Participants must ensure that top kill, mowing, discing or plough down of the field margin will not occur before this date.
7. To receive payment, participants must not mow the field margin until after July 15th of any year covered by this agreement and limit harvest to one cut per year.
8. To receive payment, participants must discuss management practices with DFWT and concede to DFWT's recommendations before undertaking any management activities.
9. To receive payment, participants agree to allow DFWT to monitor the field margin for wildlife use, vegetation structure or soil quality.
10. To receive payment, participants agree not to receive reimbursement or exchange for rent payment for the field margin from any other program or agreement.

Information contained within this document is accurate at the time of printing (January 2024) and may be subject to change.



Story from a farmer who uses the Field Margin Program

Brent Harris and his family operate a 6th generation organic farm in Delta, where they grow peas, beans, barley, cattle corn, potatoes and cranberries (non-organic). Fraserland Organics incorporates several stewardship practices into their operation, finding a balance between the agronomic and environmental needs of their acres.

Brent mentioned that the fields farmed by Fraserland have varying requirements. Some fields that are newly farmed by the business include challenging areas with the occasional tree or remnant hedgerow, making it difficult for large scale equipment to move around the naturalized spaces. "Where we have found the greatest value for the grass margin program is on field edges that contain

remnant hedgerows" says Brent. "Dedicating a strip of grass outside of a hedgerow creates a clean, square edge to the field." The grass-covered space between the hedgerow and the crop means that no branches or roots from the hedgerow can damage equipment.

From a production perspective, sacrificing a small degree of farmable land is worthwhile for Fraserland as the benefits provided can be recognized within their overall farming system. "We see a benefit to having hedgerows as a refuge for beneficial insects and birds of prey" notes Brent. "The DFWT grass margin program allows us to economically manage these hedgerows and at the same time efficiently work the field", says Brent.