Blueberry Rest Program

Delta Farmland & Wildlife Trust

Partners in Stewardship

Supporting growers in managing fields to reduce disease and enhance pollinators

Why is resting soil after blueberry bush removal important?

Resting soil after the removal of blueberry bushes and planting a spring pollinator mix or short-term cover crop helps to rebuild soil structure, improve water infiltration, and increase organic matter through planting nitrogen fixers and deeply rooting plants. A diversity of plant species can support local pollinator populations by providing flowering resources within berry fields when blueberries are not in bloom. Implementing a pollinator set-aside can also help to reduce disease transfer from scorch virus by buffering healthy blueberry bushes. Fields planted with a spring set-aside or winter cover crop will also provide soil cover over the winter to reduce erosion, suppress weeds, and reduce standing water in fields.



What is the Blueberry Rest Program?

The Blueberry Rest Program (BRP) supports growers with bare soil following the removal of blueberry bushes. The program has two streams: the spring set-aside or short-term cover crop.

Spring set-aside: After the blueberry plants have been removed, participants plant a perennial pollinator mix in the spring and rest the field for up to three years before resuming crop production. Annual payments are provided to participants to offset the costs of this practice.

Short-term cover crop: an annual cover crop is planted in the fall after blueberry plants have been removed. It is left to cover the soil over the winter, and then worked up the following spring. Payments are provided to participants to offset the costs of this practice.

What is Blueberry Scorch Virus BIScV?

All highbush blueberries grown in BC are susceptible to BIScV. Scorch virus spreads through winged aphids and infected planting stock. Infected plants show symptoms one to two years following infection and will generally die within three years. If scorch is detected, the provincial recommendations are to remove plants immediately to prevent further spread of BIScV. Growers are encouraged to remove the rootball of infected plants wherever possible. Careful scouting, testing and proactive management of BIScV infected plants will help to reduce the spread across operations.



What funding is available?

Spring set-aside stream:

\$500/acre annual payment for up to three years for pollinator-focused grassland habitat

\$150/acre seeding reimbursement for the first year (in addition to the annual payment)

Eligible Acreage: The maximum allowable acreage per participant is 50 acres. All field preparation and seed costs are to be paid by the co-operator.

Short-term cover crop stream:

Cover crops planted before August 31st: \$60/acre

Cover crops planted after in September: \$50/acre



An additional \$10/acre will be applied for multi-species cover crop mixes (3 species or more, from at least 2 different plant families)

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An additional \$20/acre

will be applied for fields in Delta, Richmond and Surrey due to significant waterfowl grazing pressure in these regions.

Eligible Acreage: The maximum allowable acreage per participant (unless funding remains available) is 100 acres. All field preparation and seed costs are to be paid by the co-operator.

Participants agree to work towards completing an agri-risk assessment such as the Environmental Farm Plan.

Ineligible: • farm fields located on crown land • cover crops that are harvested prior to March 31st

Why consider this program?

This program aims to prepare soil for future blueberry plantings, allowing participants to strategically plan for future goals, source appropriate new varieties and resist the urge to replant immediately following the removal of blueberry bushes. While acres remain out of production, set-aside and cover crop plantings will reduce the spread of scorch within infected fields. Compensation provided to participate in this initiative also assists producers in covering the ongoing costs associated with acres removed from production.

Planting Guidelines for Spring Set-asides

Participants are encouraged to laser level before planting a pollinator set-aside and apply manure or fertilizer as required.

Ideal planting date: May Planting deadline: June 30th

Must seed at 40-50lb/acre to be eligible (or demonstrate that the recommendations of the seed company are being closely followed).

Spring planted acres must remain in place until March 31st the following year to receive funding.

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

DFWT may ask participants to mow part or all of the pollinator planting to increase its wildlife habitat value and control weeds. While cutting or mowing the grass, co-operators are encouraged to leave a small uncut field margin, 3-20 ft. wide, around the edges of the field to act as cover for displaced wildlife and beneficial insects. Mowing should only occur after July 15 to minimize impacts on breeding birds.

Planting Guidelines for Winter Cover Crops

Planting Dates	Before August 31	Between September 1 and 15	After September 15
Cover Crop Variety	Minimum* Seeding Rates (lbs/ac)		
Spring Barley	100	125	135
Oats	100	125	135
Spring Wheat	100	125	135**
Fall Rye	100	125	135**
Annual Ryegrass	20	25	30
Winter Wheat	100	125	135

Cover Crop Seeding Rate Recommendations

* These are minimum seeding rates; higher rates are recommended if broadcast, particularly late in the season ** Best crops to plant in late fall in areas likely to be heavily grazed by waterfowl

The earlier a cover crop is established, the greater its soil and conservation benefits will be. A well-established cover crop by mid-September will provide excellent soil cover and may withstand or recover from repeated waterfowl grazing events over the winter.

If the cover crop is planted later in the fall, seed should be drilled if possible and/or applied at a higher rate. Cover crops seeded in early October or into poorly structured or drained soil will have little capacity to provide good soil cover.

What's the application process?

Participants must apply to DFWT before planting to ensure funding remains available. This program is first-come, first-served, and funding will be allocated to projects in the order requests are received.

There are three ways you can initiate your application:

- email programs@dfwt.ca to discuss your project,
 - complete the online application form at: Spring Set-aside: <u>form.jotform.com/240034950818253</u> Short-term Cover Crop: form.jotform.com/240035376906254
- visit deltafarmland.ca to find PDF versions of our Blueberry Rest Program (BRP) agreement, and email a completed copy to programs@dfwt.ca.

Once you receive notification that your application is formally approved, you can plant your pollinator set-aside or cover crop knowing funding has been allocated to your project. After you have finished seeding, you will be requested to submit maps of your blueberry rest acres which we will use for field verification and monitoring.

Cost-share payments will be made through automatic funds transfer in the summer and fall each year, following project verification.

Am I eligible?

Cost-share funding is available for growers in Metro Vancouver or Abbotsford with five or more acres of blueberries and one or more acres of bare soil.

 $Seed \ Mix \ \ \mbox{We recommend seeding the following mix:}$

- Ethiopian rape (5%)
- Safflower (5%)
- Common Sunflower (10%)
- Lacy phacelia (5%)
- Egyptian clover (10%)
- Ribwort Plantain (5%)
- Crimson clover (10%)
- Red clover (10%)
- Orchard grass (15%)
- Tall fescue (15%)
- Perennial ryegrass (10%)

However, other mixes may be supported by DFWT based on soil conditions and availability.

Contact the DFWT office for information on where the seed mix can be obtained.



Scan here to receive up-to-date program



Phacelia

Phacelia is an ideal flowering species for spring plantings, as it germinates well in cool temperatures approximately 20 days after planting. The flower shape attracts native pollinators, particularly hoverflies, which are biological controls for aphids.

Sunflowers

Sunflowers are late blooming and provide pollination resources for insects when most flowers have come and gone. Sunflowers have long and deep tap roots. They tolerate dry conditions and work to break up soil and alleviate compaction issues, improving water infiltration. This species should be incorporated into most GLSA mixes.

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

Enrolled acres may be visited by field technicians from November to March to assess the species using these habitats for overwintering.

Spring Monitoring

Field technicians may also conduct spring breeding bird surveys in these areas, to help us understand how important these areas are in supporting grassland breeding birds and pollinators. Field technicians will work with participating growers to ensure spring monitoring does not impact spraying schedules or other essential operational practices.

Soil Health Baseline

Several studies have been conducted on set-asides to demonstrate the significant impact of these practices on soil health. We conduct our own soil monitoring efforts to gain a sense of soil condition when entering the set-aside program and when concluding the program. Results are not shared publicly, DFWT utilizes this information as a resource to understand the change in soil parameters over time. Field technicians may measure:

- Soil pH
- Bulk density
 - Water holding capacity
- Water infiltration
- Soil organic matter
- Soil workability

Individual results for your farm can be shared with you if requested.

Why are grasslands important?

Grassland ecosystems are Canada's most at-risk natural spaces. Within BC, grasslands represent less than 1% of the province's landscape. Within Delta, old field habitat once covered 8,000 hectares of land, yet currently, less than 10% of that ecosystem remains. The significant challenges facing grassland landscapes primarily stem from urbanization, industrialization, and farming. Species loss is directly connected to this loss of grassland habitat, as grassland species are among the most at risk within Canada.

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 estuary and Fraser Valley 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 are 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. Programs have recently expanded to include farms 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.



Terms and Conditions

- 1. Applications to the BRP should only be made for acreage within Metro Vancouver and Abbotsford BC..
- 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 BRP at any time if vegetation is too sparse (vegetative cover of a spring set-aside planting must be 75% or greater).
- 4. In the event that the participant does not maintain the BRP by the standards prescribed herein, the DFWT obligations shall cease.
- 5. The spring-planted BRP must be planted by June 30th to be eligible if this is the first year of the agreement.
- 6. Spring planted set-asides: participants must maintain and manage the field as a spring BRP set-aside from April 1st (or the planting date) to March 31st of the following year. Participants must ensure that top kill, mowing, discing or plough down of the set-aside will not occur before this date. Winter cover crop: participants must maintain and manage the field as a cover crop from the fall planting date to March 31st of the following year.
- 7. Participants must discuss management practices with DFWT and concede to DFWT's recommendations before undertaking any management activities.
- 8. Participants agree to allow DFWT to monitor the BRP for wildlife use, vegetation structure or soil quality.
- 9. Participants agree not to receive reimbursement or exchange for rent payment for the BRP 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 blueberry farmer

"If we know there are more native pollinators out there, and they're healthier, it can only help," says Jack Bates, who farms 400 acres of blueberries and potatoes and raises dairy cows with his extended family in Delta through Tecarte Farms.

Jack has planted several grassland plantings over the years and has recognized the change in soil fertility and structure from the practice. Even on highly degraded soils that have been farmed heavily for years, the resting and rebuilding nature of this practice result in solid yields for the crops that are grown next.

When it comes to grassland mixes, Jack notes, "I've always been a believer of adding different types of clovers into the mix so you can fixate nitrogen, and the flip side is they also support pollinators." When blackberries are finished blooming, the landscape in Delta does not offer many remaining flowering species for native pollinators and honeybees. Mixes incorporating late flowering species can help carry bees and other insects into the winter.

In 2022 a pollinator-focused planting was grown alongside one of Tecarte's blueberry fields. A simple mix of phacelia and sunflowers provided consistent blooms throughout the summer and fall and did not compete with blueberry blossoms. Jack noted that each of the sunflowers within the field had several bumble bees on them all season long.

For Jack and Tecarte farms, adding soil-building and pollinator-supporting set-asides into long-term crop management just makes sense.





