Bee BC Program – Funded Projects (June 2020)

First Application Intake (July 2018)

- Thirteen projects were approved for funding

Recipient	Project Description	Geographic Region	$
Pollinator Partnership Canada Society	• Create a ½ acre demonstration native plant pollinator meadow with area with small scale agriculture operations (urban/agricultural area). • Create best management practices • Engage schools, community groups, and First Nations in bee awareness activities.	• South Vancouver Island	$5,000
Brad Cooke – Beekeeper	• Ethical Bees initiative • Develop a locally-bred varroa sensitive hygiene bee strain.	• South Vancouver Island	$3,000
Heidi Schnepf – Beekeeper	• Ethical Bees initiative • Develop a locally-bred varroa sensitive hygiene bee strain.	• Central Vancouver Island	$3,000
Mark Schilling – Beekeeper	• Ethical Bees initiative • Develop a locally-bred varroa sensitive hygiene bee strain.	• Central Vancouver Island	$3,000
Curtis Robinson - Beekeeper	• Ethical Bees initiative • Develop a locally-bred varroa sensitive hygiene bee strain.	• South Vancouver Island	$3,000
Iain Glass - Beekeeper	• Ethical Bees initiative • Develop a locally-bred varroa sensitive hygiene bee strain.	• Gulf Islands	$3,000
Environmental Youth Alliance Society	• Enhance habitat for bees • Create native wildflower strips near/in urban farms and food-producing community gardens • Engage youth in 8-week programs to create the strips and grow bee forage	• Lower Mainland	$5,000

Michael Campbell – beekeeper	• Compare bee dysentery treatments • 3 replicates of 9 hives each will be supplemented with a diet of different treatments.	• Fraser Valley	$5,000
Morgan Creek Farm	• Enhance bee habitat and deliver education component to youth • Youth will learn about bees and plant bee forage in an agricultural area	• Central Vancouver Island	$4,665
Roselyn Lambert – beekeeper	• Queen performance comparison – VSH and Saskatraz	• Central Interior	$1,180
Bee Awareness Society	• Construct hives/observation hives and deliver education component to youth	• West Kootenay	$5,000
Michael Campbell – beekeeper	• Evaluate Yellowjacket wasp control measures in partnership with Kwantlen Polytechnic University, Emma's Acres, LINC Society	• Lower Mainland, Abbotsford, Fraser Valley	$5,000
Michael Campbell – beekeeper	• Evaluate control measures for high humidity in hives in partnership with Kwantlen Polytechnic University, Emma's Acres, LINC Society	• Lower Mainland, Abbotsford, Fraser Valley	$5,000
		TOTAL	**$50,845**

Second Application Intake (December 2018)

- Ten projects were approved for funding

Recipient	Project Description	Geographic Region	$
Ian Kennard - Howe Sound Honey & Bees	• 1: Grafting from hygienic colonies and mating of enough queens to bank in mass storage hive. • 2: Prepare and build large queen storage colonies (Queen Banks) • 3: Setup mass storage bank colonies using insulated brood boxes, lids and bottoms; collect and cage mated queens in Fall as weather indicates. • 4: Store mated queens overwinter. • 5: Assess survival rate in Spring, move mated	• South Coast (Bowen Island)	$3,313

	queens into overwintered hives that lost queens and create early nucleus colonies. • 6: Prepare a report on Mass Queen Overwintering		
The Honest to Goodness Farm Co - Carolyn Essaunce	• Restore 1 acre of land on the MacInnes farm as a Pollinator Conservation Area with designated nesting ground and beneficial trees/plants/flowers focusing on blossom times that are lacking. The area will have a path through it with benches and educational plaques to encourage home/land owners to create space for pollinators on their own land. • Plant beneficial plants/trees specially selected by a volunteer Horticulturist to provide year-round diverse nutrition to local pollinators, benches, and educational plaques. • Labour will come from volunteers with support from LEPS. Plants and trees will be planted/transplanted throughout 2019 as seasonally appropriate and will be completed and open to the public starting 2020	• Lower Mainland	$5,000
Bradford Vinson – Heartford Honey	• The standard set up for many honey bee research projects uses a minimum of 10 hives for each test. This project compares 2 different protein sources among 20 colonies. These will be set up in the spring of 2019 and include our 7 hives. Thirteen packages will be ordered, and every colony will be given clean and new hive equipment to control for pesticide residue, disease or parasites in old equipment.	• Lower Mainland	$5,000
Nancy Leonard - Sunnyside Farm and Apiary	• This funding request is to continue to raise and improve locally adapted hygienic and disease resistant queens. o learn to do liquid nitrogen freeze testing of brood and will learn to do sampling of	• South Coast (Bowen Island)	$4,100

	honey bee antennae to send for analysis at Dr. Foster's mass spectrophotometer (mass spec) lab to look for bio-markers that are related to reducing hive diseases. ○ Based on results of these tests, graft and raise queens which will be naturally mated using increased populations of selected drone (male) bees.		
Yellowhead Community Services	• Increasing Nectar and Pollen sources: Volunteers and community partners will plant nectar and pollen-rich plants in community and municipal park spaces, school gardens and community gardens. Also, distribution of plants/seeds to home-owners to plant in their yards. • Increase winter survival rates of local hives: Secure a bee health consultant to travel to our community and attend a Clearwater Bee Club meeting to share in-depth information and education relating to best management practices for hive health and winter survival of colonies.	• Thompson Nicola	$5,000
Ryan Jenks	• Planting of carefully selected natural bee forage to increase the overall health of bees and production of honey stores. Eventually after the plants have established themselves, it is anticipated that the use of nectar substitutes will not be required, and bees will be fed their own honey in times of seasonal shortfall. • Goal is to create a working model to demonstrate how the community can also select and plant nectar and pollen efficient garden areas within the community as well as translate it to urban environments in the form of backyard gardens and bee friendly lawn substitutes. • Intention is to share progress, information and	• Kootenay	$5,000

	innovations with West Kootenay Beekeepers, the community in general.		
Honey Bee Zen Apiaries Ltd. Jeff Lee	• This project will focus on identifying whether commercially-available extracts of mycelium (fungi) are beneficial in reducing levels of viruses in honey bees. • In the 2019 beekeeping season establish two test groups, each made up of 20 colonies: 10 overwintered “survivor” hives from our operations (likely carrying viruses) and 10 imported packaged colonies established in the spring of 2019. A total of 40 hives will be involved. • One test group will be fed a 1% solution of Stamets’ mycological extract mixed in a 1:1 sugar syrup. The second test group will be fed 1:1 syrup without extract. • Pre-treatment samples will be taken of both groups; a second sampling after 28 days (post-one brood cycle) and a third sampling after 56 days (post-two brood cycles). All hives will be monitored through the 2019 pollination and honey season. A final sampling will be done in August, when viral loads would be expected to reach a peak in untreated colonies. • Samples will be sent to the National Bee Diagnostic Centre located at the Beaverlodge Research Farm in Beaverlodge, Alberta for viral detection and quantification. • Expectation is to determine whether the application of mycological extracts reduces the level of up to seven viruses identified in our honey bees, including five of the most prevalent in Canada: Black Queen Cell Virus, Deformed Wing Virus, Lake Sinai Virus, Israeli Acute Paralysis	• Kootenay	$5,000

	Virus and Sacbrood Virus. • If these mycological extracts are helpful, they may offer other beekeepers a cost-effective method for reducing levels of viruses in honey bees.		
Central Cariboo Beekeepers' Association	• Applicant will monitor their group's collective colonies for desirable attributes that can be selected for the best performing bees in the Cariboo Chilcotin as breeding prospects. • The proposal is to preserve these outstanding lines by grafting eggs from established healthy colonies, then see that these virgin queens are well mated in the open to strong, acclimatized male drones.	• Cariboo-Chilcotin	$5,000
Oceanside Hive: A Beekeepers Collective	• Add hygienic Canadian queen stock to "amp up" queen mating yard and create diversity. • Complete hygienic testing • Continue queen rearing program progressing from queen cells to mated queens. • Increase forage availability with suitable forage plants for honey bees and native pollinators on the farm where the Queen Mating Yard is located.	• Vancouver Island	$3,350
Honey Bee Zen Apiaries Ltd. Jeff Lee	• This project will focus on making available IOTRON sterilization transportation services to beekeepers in the Kootenay region of B.C. • Beekeepers would be responsible for paying their own IOTRON sterilization costs, but the project covers the cost of transport to and from the facility. • The project will to create up to three transitional collection points for beekeepers; Cranbrook, Creston and Castlegar, with a final collection point for the transport truck in Creston. • The plan is to organize a community collection of hive equipment beekeepers need to sterilize.	• Kootenay	$4,500

		TOTAL	**$45,263**

Third Application Intake (March 2019)

- Six projects were approved for funding

Recipient	Project Description	Geographic Region	$
Green Bee Honey Darwyn Moffatt-Mallett	• The project includes the purchase of insemination equipment to help with the Bowen Island breeding project in collaboration with UBC; learning how to use the equipment from Sue Cobey in Washington state and then offer to train other interested beekeepers in the community to use the equipment. • Objective is to test the performance of the instrumentally inseminated queens in different wintering configurations including regular, nucleus and 'bank' colonies. • The most successful queens will be made available to local beekeepers in addition to the knowledge of the use of the equipment.	• South Coast (Bowen Island)	$5,000
Smithers Beekeeping Association	• The Association will research pollen sources and consult with the District Agriculturalist, Pollinator Partnership Canada, Xeres and other beekeeping associations to determine appropriate and varied forage sources for honey bees and other pollinators. • They will plant flowering trees and ground cover or other suitable forage plants to widen the variety and feeding season in the area	• Smithers	$5,000
Cariboo Apiaries	• From the beginning of June until August, pollen traps will be used for 3-day periods every 7 days in 3 different yards. This will indicate when pollen forage is most abundant, and which pollen bees prefer to collect.	• Lillooet	$4,110

	• Pollen will be dried as collected and prepared in September be fed back to hives starting in early October. • A control group will be fed regular pollen substitutes and pathogen levels between the two groups will be monitored.		
Elizabeth Huxter	• This project involves the planting of at least two different varieties of sunflower and buckwheat to enhance nectar and pollen sources for bees at critical times of the year to enhance winter survival and bee performance.	• Grand Forks - Boundry	$4,770
Chilliwack Beekeepers Community	• This project is intended to provide educational and awareness opportunities in the Chilliwack community in partnership with apiary businesses, the City of Chilliwack and the elementary and secondary schools in the District. • School field days, City endorsed educational events and resource materials will provide awareness to the broader community. • The timing of the events coincides with anticipated regulatory changes in the City's by-laws to encourage urban bee keeping.	• Chilliwack	$3,285
Peace River Beekeepers Association	• This project is intended to demonstrate, using modern electronics and the internet, how the beekeepers (either beginner or professional) of a region could more accurately adjust their existing management to take better advantage of the forage available, and achieve healthier colonies resulting in better survival and higher yield. • This project involves the purchase of bee health monitoring equipment including scales which will measure the foraging success of the bees. • Information will be shared on how the bees are performing and what management practices can	• Dawson Creek	$4,727

	be changed to take better advantage of forage availability, resulting in healthier colonies, higher survival and yield.		
		TOTAL	**$26,892**

Fourth Application Intake (July 2019)

- Thirteen projects were approved for funding

Recipient	Project Description	Geographic Region	$
Orchard Blossom Honey	Bee Foraging Improvement to Meet Demands of Climate Change • Applicant proposes increased bee forage and accessibility by seeding one-acre of apiary with plants that produce in high heat and drought conditions • Learnings to be shared with backyard and hobby beekeepers to advise on low cost/low maintenance, drought-tolerant forage	• Okanagan	$5,000
Bee Awareness Society	Full Day Education Program • Project proposes use of live learning tool (glass observation beehive) to provide education program for schools in the Kootenays—to be taught in English & French. • Evaluation survey will be provided to teachers/students; with scheduled follow-up	• Kootenays	$5,000
Worker Bee Honey	Electronic monitoring of hives to assess hive conditions • Project proposes inserting hive monitors from Nectar Technologies, for 8-weeks monitoring for brood quantification, brood pattern assessment, examining early signs of disease. • Hives also assessed for queen rightness and laying pattern, disease symptoms, hive size/growth	• South Coast (Rosedale)	$4,495

Elk Root Conservation Farm	Winter Survival & Spring bee forage optimization: The Bee Barn • Project proposes for design and construction of a "Bee Barn" to improve overwintering and colony survival (application detailed impact on temperature/humidity regulation, ventilation & predator protection, metabolism & cluster management, mite control, stimulation of early Spring Brood rearing etc.) • Community partnerships (West Kootenay Beekeepers); long term potential as educational resource & community involvement.	• Central/West Kootenay	$5,000
Evan Machin	Native Bee Houses and Seed Bombs • Project proposes the construction of "Bee Houses" and seed bombs made available to preschool and student groups to use as an educational tool to learn about bees and the roles that pollinators play in agriculture and the broader ecosystem	• Vancouver Island (Victoria)	$1,355
Alberni District Secondary School Bee Club	Exploring Hygienic Bees in the Alberni Valley • Project proposes exploration and experimentation of new strategies for bee health, including the purchase a new equipment to apply oxalic acid treatments, learn about how to breed VSH queens (workshops & guest speakers), experiment with pollen patty replacements and planting forage. • Communication plan includes newsletter to community partners and local newspaper submission	• Vancouver Island (Port Alberni)	$2,050
Environmental Youth Alliance Society	Nectarscapes: Youth-led citizen science monitoring native wildflower lawns • Proposing to implement 2nd phase of 2018	• South Coast	$5,000

	project---Engaging youth to enhance and assess meadow establishment, measure impact of the native wildflower meadows as bee forage through citizen science surveys and communicate their findings to the public. • High potential for education and public/community engagement; identified partners include Copley Community Orchard, Still Moon Arts Society, Urban Native Youth Association. Communication plan includes newsletter to community partners and local newspaper submission.		
Simone Schlichting	The Bee Can • Project proposes is to retrofit a sea container to create a controllable environment for year-round hive/colony housing for up to 16 colonies. • Communication proposal includes “open house” for beekeepers in area to see results of environmental control.	• West Kootenays	$4,680
Heidi Schnepf	Healthy Bees: Mite Free, Disease Free, Chemical Free! • Project proposes the acquisition of the Bienensauna, or ’BeeSauna’, a sophisticated, finely tuned piece of equipment designed and manufactured in Germany, that eliminates the use of chemical treatments and strengthen the health of the bee colony. • Main project activities include testing, monitoring and tracking hive data (varroa mites) for BeeSauna results	• Denman & Hornby Islands	$4,700
Sun Hill Apiaries and Neskonlith Education Center (NEC)	Enhancing Bee Health at Sun Hill Apiaries and Neskonlith Education Center • Proposes to assist hives preparing for Winter by using Apipasta fondant, and pollen substitutes.	• Shuswap, Southern Interior (Chase/Salmon Arm)	$5,000

	Monitor hive activity and health, applying Shungite pebbles in late Summer to assess for mites in Spring. • Strong community involvement and educational component with Neskonlith Education Center as well as Neskonlith Indian Band reserve #1.		
Thetis Island Bee Keepers Co-operative	Thetis Island Bee Co-operative Forage Corridors • Project proposes to address lack of forage issues (Thetis Island). Main project activities include identifying dearth times/locations, mapping/selecting planting sites, planting, report and article creation	• Thetis Island, Cowichan Area	$4,925
BC Honey Producers Association	Education days, website and printed magazine • BeeBC project participants will be invited to attend the BCHPA two-day educational event in Prince George on Oct 2 to 4, 2019. • Funding for eligible participants will be provided to assist with travel, 1-day conference registration, and preparing posters/communications materials to report the results of their projects, through oral or poster presentations, and/or to present the results through the BCHPA web page and printed magazine.	• All BC	$5,000
Worker Bee Honey	Electron Beam Sterilization • Project aims to reduce the prominence of European Foulbrood (EFB) in hives via Electron Beam Sterilization to improve hive health, increase productivity, while decreasing or eliminating the need for antibiotics and chemical treatments. • Electron Beam Sterilization reduces disease, destroys pathogens (including bacteria, mold, micro-organisms etc.).	• South Coast (Rosedale)	$2,650

	TOTAL	**$54,855**

Fifth Application Intake (March 2020)

- Twenty-four projects were approved for funding

Recipient	Project Description	Geographic Region	$
Janet Simpson, Lyall Acheson, and Victoria Acheson	• Project proposes testing, developing and improving hive design (insulated, biologically appropriate housing). • Share best practices, ideas, innovations and construction methods. • Engage and educate local beekeeping community and general public.	• Gulf Islands	$5,000
Evan Machin, Beekeeper	• Project proposes to compare overwintering survival rate between Langstroth hive and natural-style hive. • Build hive that closely resembles natural hive honeybees in the wild reside in. • Monitor and report on hive status.	• South Vancouver Island	$1,050
Bee Awareness Society	• Education program for schools in Kootenays and surrounding areas. • Teach the life-cycle of the honey bee, the importance of pollination, and the importance of bees and other pollinators on the larger eco-system. • Utilize glass observation bee hive as “live learning tool”.	• West Kootenay	$5,000
Hives for Humanity Society	• Convert urban area into a forage site for managed and native bees (replace existing lawn with clovers and wildflowers). • Grow pollinator friendly native scrubs and perennials. • Workshop series to correlate with seasonal activities on site (lawn alternatives, disease and pest management, native bee identification, seed	• South Coast	$5,000

	collection and propagation, preserving habitat for over-wintering pollinators).		
Blueberry Commons Farm Cooperative	• Prepare 2.5-acre area with diverse forage crops (best forage crops for region include combination of perennials and annuals). • Engage with schools and community groups to promote increasing forage for bees throughout community. • Hold school group tours and workshops of bee forage pasture and apiary. • Increase capacity for beekeeping through mentoring program.	• Central Vancouver Island	$5,000
Alan Wong	• Testing brood breaks in an urban setting. • Test effectiveness of Nosevit. • Test need for pollen patties vs naturally sourced pollen in urban environments.	• South Coast	$5,000
Rushing River Apiaries	• Host local elementary schools' classes for apiary visits to educate on honeybee lifecycle, hive organization, mechanics of pollination and hive products.	• Omineca-Skeena	$1,350
BC Honey Producers Association	• Convert planned 2-day educational event to an online education meeting (due to COVID-19) to distribute education material to increase beekeeper capacity to manage colonies, allow better colony survival, better crop pollination, and more successful practices of beekeeping business.	• South Coast	$5,000
Worker Bee Honey Company	• Test if probiotic supplements are effective against snotbrood disease in bees involved in blueberry pollination.	• South Coast	$4,800
Sun Hill Apiaries and Neskonlith Education Centre	• Scientific study on different methods of enhancing bee health (avoid hard chemicals in mite treatment, fondant and pollen patties for hive health and management, new forage	• Interior	$3,275

	purchased). • Provide education, mentorship to novice beekeepers.		
Thetis Island Bee Keepers Co-operative	• Claim/recover land for mass forage planting. • Design and plant custom forage cover crop blend. • Tend and monitor forage cove crop plantations. • Share education and reporting with other beekeepers and community partners.	• South Coast	$4,919.50
BC Honey Producers Association	• Enable network of electronic monitoring of hives in Southern BC.	• Vancouver Island	$5,000
BC Honey Producers Association	• Enable network of electronic monitoring of hives in Northern BC.	• Omineca Skeena	$5,000
BC Honey Producers Association	• Enable network of electronic monitoring of hives in Southeast BC.	• Thompson Nicola	$5,000
Chilliwack Beekeepers Community	• Host several community education open-hive days to teach good beekeeping management related to varroa mite control and treatment. • Demonstrate the use of Oxalic Acid Vapour to treat mites.	• South Coast	$330
Cariboo Apiaries	• Test overwintering nucleus colonies inside of reefer sea cans, to prevent starvation and increase survival.	• Southern Interior	$5,000
Hay Meadow Honey	• Conduct research to better understand what factors can predict when fireweed will produce nectar.	• Cariboo Chilcotin	$5,000
The Salty Hive	• Mass planting nectar trees and other perennial bee flowers to address lack of local summer nectar forage during summer dearth period.	• Gulf Islands (Salt Spring)	$5,000
Honey Bee Zen Apiaries	• Provide IOTRON sterilization transportation services to regional beekeepers, in order to reduce transmittable hive diseases and improve hive health.	• Kootenay (Creston)	$5,000
Honey Bee Zen Apiaries	• Continuing study to determine if mycelium (fungi)	• Kootenay	$5,000

	are effective in reducing levels of viruses in honey bees in commercial beekeeping operations.	(Creston)	
Central Cariboo Beekeepers' Association	• Thermal Monitoring of Overwintered Colonies for Selective Queen Breeding.	• Cariboo Chilcotin Coast (150 Mile House)	$716.53
Oceanside Hive: A Beekeepers Collective	• Breed and raise locally adapted stock to increase winter survival. • Increase local forage availability with suitable forage plants for honey bees and native pollinators. • Promote concept of local bee forage to community.	• Vancouver Island (Nanaimo)	$2,750
Elk Root Conservation Farm	• Construct equipment to make natural swarm cycle queen rearing more efficient.	• Central/West Kootenay (Winlaw)	$5,000
Country Bee Honey Farm Ltd	• Plant 7 acres of flowers for forage crops. • Create educational pamphlets and provide tours.	• Vancouver Island	$5,000
		TOTAL	**$99,191**

At June 2, 2020
- **TOTAL # OF PROJECTS – 66**
- **TOTAL CONTRIBUTION - $277,046**