

#### October 23, 2017

#### Dear Donor:

Attached is our Letter of Inquiry for our Bring Back the Beekeepers of St. John Project.

Because of Hurricane Irma, little now remains of this once lush tropical island. Our aim is to help restore the St. John ecosystem.

We hope for an opportunity to discuss our project with you and submit a formal proposal. Please contact me at Jasmine@bigbeecount.org.

Sincerely yours,

Save the Bees, Inc.

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Jasmine Adolphe President



# BRING BACK THE BEEKEEPERS OF ST. JOHN:

A Project to Help Restore the Tropical Forests of St. John's, U.S. Virgin Islands

Two-thirds of the 20-square-mile island of St. Johns is a protected national park where beekeeping created an industry that helped to sustain the local economy. The number of bees per acre is a critical metric of the health of a forest. Before Hurricane Irma, St. John's Bees were already declining by 15-25% each year. Little now remains of this once lush tropical island. The project aims to bring back the native pollinators vital to restoring the ecosystem.

Figure 1





Hurricane Irma Literally Changed The Color Of These Devastated Islands – the once lush, tropical island of St. John is now a brown desert. Local capacity to sustain the ecology will be required for St. John to recover. Photo taken from Forbes Magazine Website: https://www.forbes.com/sites/ericmack/2017/09/11/hurricane-irma-virgin-islands-satellite-images-landsat-color-change-vegetation-nasa/#6efb1a4970e5

On July 23, 2017 Save the Bees conducted a field study in St. John U.S. Virgin Islands to assess how the decline of native bees impacts a local economy. The National Park Service protects two-thirds of the forested, 20-square-mile island of St. John. And former Park Ranger Elmo Rabsatt taught beekeeping to more than 50 residents helping to create a unique apiarian industry. In the Virgin Islands, where almost every foodstuff is imported, the local apiculture industry reduced imports and the resulting carbon emissions. Moreover, tourists considered the local artisanal honey with mango and lime accents as therapeutic. Even before Irma, St. John has seen wild bee die offs resulting from colony collapse disorder (CCD). Also, the recent retirement of Mr. Rabsatt's resulted in a tremendous loss of local knowledge and expertise.



The effects of CCD and Mr. Rabsatt's retirement were already being felt in July 2017 as the number of managed hives at Caneel Bay declined by more than 50% and several apiarian themed businesses that were popular tourist attractions shuttered their doors. Pollinators are vital to creating and maintaining the habitats and ecosystems many animals rely on for food and shelter. Approximately 35% of our food crops and nearly 74% of the world's flowering plants depend at least to some extent on animal pollination ("Insects & Pollinators," n.d.). And bees are amongst the most productive and efficient of the animal pollinators. Worldwide, over half the diet of fats and oils comes from crops pollinated by animals. They facilitate the reproduction in 90% of the world's flowering plants. The estimated annual value of pollination in the U.S. is over \$25 billion ("Fact Sheet," n.d.).

The ecology in St. John cannot be restored without pollinators. The problem however isn't as simple as releasing new bees back into St. John. Each bee species is a specialized pollinator. For example, the honeybee, remarkable as it is, does not know how to pollinate tomato or eggplant flowers. The honeybee, a species that is not native to America does very poorly compared to native bees when pollinating many native plants, such as pumpkins, cherries, blueberries, and cranberries.

The local knowledge needed to identify the right bee for the flowers, plants, and animals native to St. John is now all but gone. Thus, we aim to provide the equipment, supplies, stipends, and training to sustain 5 beekeepers in St. John for 18 months.

## Total Budget of for Project

Save the Bees, Inc. is seeking \$50,000 funding to equip, supply, mentor, train, and sustain beekeepers for 18 months. Below is our project line item budget:

\$3 = 8 days of supplies for a beekeeper in St. John.

2018 Big Bee Count Project (Timeline 18 Months)		
ITEM	DESCRIPTION	BUDGET
Supplies	Hives and beekeeping equipment for 5 beekeepers	\$4,050
Stipends	\$15 dollars per day for 5 beekeepers for 18 months	\$20,250
Training	Two weeks of training for 5 beekeepers	\$5,500
Mentoring	One Master Beekeeper (in St. John to provide mentoring and capacity building support) 30 days at \$340/day	\$10,200
Seeds/seedlings/plants	Replanting native plants to provide nutrition for bees (1 acre)	\$10,000
TOTAL		\$50,000

#### Measureable Results

Our project will produce the following results in 18 months:

- 1. Provide an income stream that will sustain 5 beekeepers for 18 months
- 2. Provide equipment and supplies for five beekeepers to re-establish their businesses and also enable them to sell their unique honeys online
- 3. Provide mentoring and capacity building to teach local beekeepers how to identify native and invasive species, maintain healthy managed hives, and run a profitable business
- 4. Reforest one acre (approximately 190 native trees and plants) to sustain the beekeeping operation

# **Contact Information**

Please contact me with your questions: EIN: 82-1949852, Jasmine Adolphe, Cell 571.315.7859, Email: Jasmine@bigbeecount.org, website: https://bigbeecount.org/



### About Save the Bees, Inc.

At the age of twelve Jasmine Adolphe, a seventh grader at The Potomac School in McLean, Virginia, was aware of the role bees play in the ecosystem and the problems caused by the loss of bee pollinators for humans and their diet.

Her interest in bees developed with her father during a Potomac School third grade science fair project. Conducting research for her project she learned about Colony Collapse Disorder a mysterious phenomena causing the mass disappearance of worker bees in a colony. When Jasmine presented her findings, she was surprised to learn that many of her peers didn't know where their food came from.

As a result, Jasmine and her family decided to plant a vegetable garden and grow fruits and vegetables to gain a better understanding of the issues causing colony collapse. Year after year, Jasmine noticed fewer and fewer bees visiting her garden and the family began using "Q-Tips" to hand pollinate their tomato crops. She quickly understood that it would be impossible to feed a nation this way. And in 2017, Jasmine and her brother Quentin, launched Save the Bees, Inc., to conduct a global and comprehensive annual count of wild bee populations.

During our visit to St. John, we met local beekeepers and arranged to sell their unique honeys on our website with proceeds going towards training and building local capacity. However, after Irma, the entire industry was wiped out.

Save the Bees, Inc.'s mission is to empower people as citizen scientists to save wild bees from extinction. We oversee the Big Bee Count and facilitate distribution of survey tools and biosecurity measures to protect bees against harmful pests and help regulators make better decisions about land use. We are a 501(c)(3) non-profit, non-partisan charitable organization and 80% of our spending is directed to scientific research, development, and education.

Figure 2



Jasmine Adolphe (left), President of Save the Bees. Inc. conducting research on key issues at the USDA-ARS Pollinating Insects Research Unit, Department of Biology, UMC, in Logan Utah. Photo includes Dr. Terry Griswold (center) and Dr. Diana-Cox Foster (right).

Save the Bees, Inc. collaborates with Dr. Terry Griswold and Dr. Diane-Cox Foster of the US Department of Agriculture (USDA), Animal Research Service (ARS), Pollinating Insects Research Unit, Department of Biology, UMC, in Logan Utah. USDA/ARS is contributing technical expertise for the project.