

# Vineyard honeybees

Producers of honey. Pollinators of our food and flowers.

BY ALI BERLOW

PHOTOGRAPHS BY RANDI BAIRD



Felix Colon is a blossoming beekeeper, regularly assisting his father Tim, who not only keeps honeybees, but rears queens and removes swarms.

## Honeybees are in peril around the country, but the Island's own appear to be thriving.

Honey...sweet, sticky, mysterious. Seductive. The stuff of poets, prophets, and pharaohs. Egyptian hieroglyphics depict apiarists collecting honey for cooking, cosmetics, and mixing into ointments. Legend has it that honey is the elixir that Cupid dips his arrow into before aiming keenly at the desired one's heart. For most of us – love struck or otherwise – honey is the simple melting sweetness that swirls and dissolves into a steamy cup of tea. It's a glorious daub on a slice of still-warm-from-the-oven homemade bread, or the secret melodious note in a soup, stew, or sauce. However you enjoy this enigmatic liquid – whether it's in your food, your cosmetics, or in your medicine chest – it is alchemy. Honey is the exquisite consequence of the *Apis mellifera's* (the honeybee's) social order, pollen- and nectar-seeking, and the constant beat of its wings.

As worker honeybees alight from flower to flower collecting the nectar and pollen that will be brought back to the hive, the bees also transfer pollen from plant to plant, fertilizing them, which enables the plants to bear fruit. Bees pollinate, and this type of pollination is crucial in agriculture to produce healthy, prolific crops.

Here on the Vineyard, healthy bee pollinators mean bountiful harvests of Island-grown food and flowers. Blueberries, onions, broccoli, apples, cucumbers, tomatoes, corn, peas, rose hips, zucchini, melons, and squash are all greatly dependant on honeybees to pollinate them. The business of flowers is also significant in the Island economy. Just take a walk through the West Tisbury Farmer's Market



Tim Colon carefully removes a frame full of honey from one of his hives, as his son Felix supervises.

to find some of the most beautiful bouquets planted, picked, and created by Vineyard farmers.

Apiarists on the Vineyard range from people with one or two hives to the commercial honey harvester Neil Flynn of Katama Apiary. Loosely organized, the beekeepers of the Vineyard meet a few times a year to talk and share information about issues such as production and maintenance. Their meetings are interesting even if you don't keep bees, simply because bees are so fascinating. Besides, as one beekeeper put it, ask ten beekeepers the same question and you'll get at least ten different answers.

### The basics of beekeeping

Tim Colon is one of those Island beekeepers. Living in Vineyard Haven, Tim has been keeping honeybees as a hobby for the last six years. Though it's been in the last couple of years that he's turned it into a "hobby that pays for itself." A tall, quiet, contemplative fellow, Tim is now a burgeoning professional beekeeper in

the fields of swarm removal and rearing queens, though his real business, Wood and Canvas, is all about boats (equipment, service, sails). As modest as Tim is about his knowledge of beekeeping – from hive management to the puzzling die-offs known as Colony Collapse

Disorder – he's ever more respectful about what he doesn't know. Ask him a question, and he'll give you an answer only after he's had time enough to do the research.

Beyond the fifteen hives he maintains in Vineyard Haven, Tim manages



Back at his Vineyard Haven workshop, Tim cleans one of the frames.



By slicing off the wax on the outside of the frame, the honey is released.

colonies in Edgartown and Chilmark, strategically located near Morning Glory Farm and North Tabor Farm, respectively.

Inside the man-made beehives are frames, which contain cells. Honeybees live year-round in their hive, so they store honey and pollen in the cells of the frame in order to survive through winter. Beekeepers stack one or two sets of frames per hive (depending on the area's severity of winter) for bees to prepare and store their winter food, as well as an extra set of frames at the top of the hive, for surplus honey that the beekeeper will collect.

Simply put, there are three types of bees that support a colony: workers, drones, and the queen. The worker bees are the ones you're most likely to see in your gardens, in the fields. They go out to forage for nectar and pollen – pollinating along the way. And they'll defend themselves and the hive with their stingers. The pollen and nectar are carried back to the hive and deposited in the cells of the frame (comb); water is evaporated from the nectar by the beating of the bees' wings, which is what makes honey. As the cells get filled, the bees cap them with beeswax. A robust hive will have about 80,000 workers. There are hundreds, rather than thousands, of drones, which are the male honeybees that mate with

the queen – and her job is to lay more than a thousand eggs each day.

Most nectar is collected during the "flow" – when nectar moves in plants. Flow depends on the weather, and the weather determines how long flowers stay blooming. Once the flowers stop blooming, the flow is over. "You can see it," says Tim, "and then you know when you're going to be harvesting." On the Vineyard that happens in May or June and again in September or October, about two to three weeks after the flow from the fields of goldenrod ends.

Honey harvest is a family affair at Tim's house. His wife, Tricia Sirakovsky, and their five-year old son, Felix, both pitch in. The frames Tim removes from the top of the hive and brings into his workshop bulge with honey that undulates in color from deep oak to daffodil light yellow. The tool he uses to de-cap the frames is a hot flat knife that looks like a cake-decorating spatula. Slowly, Tim slices with an even hand so as not to gouge the delicate full comb the worker bees have toiled to create. The air is so sweet it makes your teeth hurt. Some random bees have followed Tim into his workshop, but as agitated as they appear, both the bees and Tim are focused on one thing – their honey.



The frames go into the extractor, where centrifugal force propels the honey out.



Honey flows out the tap of the extractor, where it's filtered through a screen.

Once Tim de-caps eight frames into a bucket (with a strainer to collect the honey), he secures each frame inside the automatic extractor, which spins them until the honey has all been jettisoned out by centrifugal force. Honey collects down the sides, filters through screening that will catch large bee body parts or chunks of wax, and then it's out the tap.

Felix is a beekeeper in his own right – donning his own full white coverall complete with helmet and face veil when needed. He steals a sticky taste of those honey-soaked natural beeswax caps to chew. Proud and curious, he asks questions while bossing his dad around. Tricia or Felix fill clear glass jars, each equaling 1.5 pounds of raw honey that they sell for \$12 a jar, or \$8 a pound, at North Tabor Farm's stand and off Felix's little red wagon at the end of Proprietor's Way.

Purists and true to Vineyard form, Tim and Tricia keep their raw honeys town-specific. They don't mix. Their three varieties reflect Vineyard Haven, Chilmark, and Edgartown. "Keeping local as local can be," is how Tricia puts it. The Edgartown and Vineyard Haven honeys tend to be lighter, a milder taste that Tim attributes primarily to locust trees. Whereas up in Chilmark, there's more beetbung (or tupelo), hence the honey

is darker, richer in color and taste.

It's said that eating raw honey can help those who suffer from allergies. In theory, the closer the honey, the better, because it contains small doses of pollen from nearby sources, which are thought to lessen one's sensitivities to the plants in the area where the bees work, where one lives.

### The power of pollination

In many respects though, honey is the bonus round of what honeybees really do for us. According to the American Beekeeping Federation, every third bite of what we eat is dependent on a honeybee to pollinate that food. A Cornell University study conducted in 2000 states that nationally, the value of bee pollination is \$14.7 billion annually.

Large-scale farming operations pay big bucks to professional beekeepers to lease their bees for a few days, a few weeks, a month – however long it takes for the pollinators to get their job done. And then the pros pack them up again and move on. Millions of bees are trucked to pollinate the next, and again the next, crop. And so it goes, zigzagging across the country like the Rolling Stones on tour.

The big news about honeybees is the plague referred to as Colony Collapse

Disorder (CCD). Diseases and pests like mites have swept through bee populations in the past. But CCD is different, devastating, and more confounding. Bees leave their hive and they never come back, and no one really knows why. A hive with CCD goes from being a robust colony with a large adult bee population to a nearly empty hive with the queen and brood abandoned in the span of a few weeks. And the honey that's left in the hive never gets robbed by any other bees. Usually a stronger hive will come in and steal a weaker hive's honey. But not in a colony that's been affected by CCD.

The theories about what causes CCD abound: Cell phone towers interfere with bees' ability to navigate and communicate; synthetic chemicals like pesticides and fertilizers have been over-utilized on plants that bees rely on; and pollen from genetically modified organisms is to blame. Or could it be the stress and/or cross contamination that can happen when bees are shipped back and forth across the country? Israeli acute paralysis virus, which has been in the news? A different virus? Mites? Climate change? Magnetic pole reversals? There is no clear answer. Yet what everyone does agree on is that CCD threatens bee populations around the country and the national food supply. It appears, however, Tim cautiously relates (knocking on wood), that

CCD does not seem to be affecting the honeybees on Martha's Vineyard. (So breathe a collective sigh of relief; yet no bee, as no man, is an island!)

A different way that hives lose population is by swarming. Unlike CCD, however, swarming is simply a sign that a colony needs to divide and establish a new colony in order to reach a healthy equilibrium and thrive. Though a bummer for the beekeeper because nearly half his bees fly away, it's a natural response. Bees swarm when conditions in their hive or colony become unsuitable, such as overcrowding, which could lead to bad ventilation, mites, or disease. It tends to happen in the spring, when flowers bloom and bee populations increase. The queen, along with half the hive, flies away to set up home in a cozy protected place like a soffit of your house, a wall of your garage, an old tree in your yard. The original colony is left to foster a new queen and hopefully thrive.

Tim gets the swarm removal calls, because according to him, exterminators are loath to kill honeybees because of their important roll as pollinators. Equipped with a gentle hose vacuum that suctions the bees directly into a bee box, Tim can, for a fee, safely and cleanly remove itinerant bees, which he then incorporates into his own collection. As menacing as a swarm appears – a loud,



Tim tends some hives for bees that pollinate the crops at North Tabor Farm in Chilmark.

buzzing, shape-changing, flying mass – the bees are actually relatively calm because they've gorged themselves prior to swarming. But don't wait too long before contacting Tim, because once bees have invested in building a comb, collecting nectar, and setting up a home, their removal can be a little more...umm...testy.

There's an old saying:

*A swarm of bees in May is worth a load of hay;*

*A swarm of bees in June is worth a silver spoon;*

*A swarm of bees in July isn't worth a fly.*

For a beekeeper, the earlier a swarm happens in the season, the better. Because in theory, they'll have a better chance of settling down, getting into honey collection to build up stores enough to make it through the winter. In New England, a colony needs anywhere from 50 to 125 pounds of honey for its food, in order to survive the cold months. A beekeeper should only take the excess. Consequently, this is why a lot of beekeepers do not harvest any honey on the fall flow.

Tim is also rearing queens on the Island, partly in reaction to the cross-country bee exploitation that happens in the big business of pollination and in the business of breeding queens. Currently, most beekeepers buy their queens from breeders in southern states like Georgia, Florida, or California. But that doesn't make sense to Tim. Why not raise a queen that's perfectly suited to the Yan-

kee climate and environment of Martha's Vineyard? Just this past year, Tim embarked on this queen bee venture. Larvae become queens in about twenty-seven days, but he expects it to take between four and five years to develop a strong genetic line. Then hopefully, he says, they'll be available for Island apiarists. As he looks down on starter hives that are home to his queenly brood, he says proudly, "Raising queens is an art."

Art aside, raising *Island* queens may become the imperative. ♦

### Recipes with honey

#### Honey-almond facial scrub with ripe avocado

This scrub includes honey to moisturize skin and tighten pores.

- 1 ripe avocado
- 1 teaspoon honey, preferably local
- 1 teaspoon almonds, finely chopped or ground (depending on whether you want a coarse or fine exfoliant)

1. Mash avocado, and mix in honey and almonds.
2. Clean face of any makeup or other adulterants, then apply mixture to your face.
3. Relax for 15 to 20 minutes, massaging gently as you please.
4. Rinse with lukewarm water and a gentle washcloth, and dry off with a towel.

#### Homemade bread with honey from the Colon-Sirakovsky family

- 2 teaspoons sugar
- 1 1/2 cups warm water (105 to 115 degrees)
- 2 tablespoons active dry yeast
- 4 cups whole-wheat flour
- 2 cups unbleached, all-purpose flour
- 1 tablespoon salt
- 1/2 cup honey
- 4 tablespoons butter (softened)
- 1 cup warm milk

1. Mix sugar and 1/2 cup water in a small mixing bowl. Sprinkle in yeast and stir lightly with a fork until dissolved. Let stand for 5 to 10 minutes until bubbly.

2. In mixing bowl, combine the flours, salt, honey, and butter. Mix until it resembles cornmeal. Pour the yeast mixture into the dry ingredients and mix. Mix the remaining cup of water with the milk and add to the bowl, stirring until a ball of dough forms and the liquid is incorporated into the dry ingredients. Depending on the conditions (humidity, temperature, and type of flour), the specified amount of liquid is not always needed.

3. Turn the dough out onto a clean, lightly floured surface and knead by hand for 8 to 10 minutes. (Oil your hands to keep the dough from sticking to them.) It may be necessary to knead in a little more all-purpose flour (no more than 1/4 cup at a time) to make the dough moderately stiff and elastic. Shape dough into a ball and place in a greased (or oiled) warm bowl, turning it around to grease the entire surface of the dough. Cover with a dampened towel and let dough rise in a warm, draft-free place (80 to 85 degrees) until doubled in bulk, 1 to 2 hours.

4. Punch dough down with your fist and pull the edges to the middle. Place dough on a clean, lightly floured surface. Cover with dampened towel and let rest for 10 minutes. Grease and flour two loaf pans. Cut dough into two balls, shape each one into a loaf, and put each into a pan. Cover with dampened towel and let rest again in a warm place until doubled in bulk, about 1 hour.

5. Preheat oven to 375 degrees. With a sharp knife or straight-edge blade, make three diagonal slashes across the tops of the loaves. Brush dough with milk. Bake for about 40 minutes, or until loaves sound hollow when tapped. Remove bread from the pans and cool on a rack.

### Plants that attract honeybees

alyssum	lamb's ears
anise hyssop	lavender
apple and crab apple	oregano
bee balm	penstemon
black-eyed Susans	phlox
borage	sage
butterfly bush	salvia
butterfly weed	sedum
catmint	sunflowers
chives	thyme
clover	verbena
cosmos	viburnum
crocuses	wild or old roses
dandelions	(not modern
dill	hybrids, which
goldenrod	produce less
joe-pye weed	pollen and nectar)



*Phlox paniculata*