

(Janet Wallace photos)

by Janet Wallace

It is raining when I arrive at the home of beekeepers Ann and Paul Vautour on Cape Breton Road, outside of Moncton, New Brunswick. So we wait to tour the bee yard where Ann, the owner of Miel Evangeline Honey, keeps 63 hives and her husband, Paul, manages an additional 135 hives through his business Acadien Apiaries.

When the sun finally comes out, Ann takes me on a tour. We are both wearing bee suits but don't feel the need to pull up the nets to cover our faces. A few bees are buzzing around each of the hives nestled under the trees.

"You get a great honey flow when the sun starts shining after some rain," she says. "This means the flowers are producing a lot of nectar. The reason the bees aren't at the hives is because they're busy collecting nectar."

Nectar from flowers is the raw ingredient of honey; it is a sweet liquid composed mostly of sucrose. The bees collect this liquid and add enzymes to it. By the time the bee returns to the hive, much of the sucrose has been converted to glucose and fructose. The bee deposits the crop into a cell where, after some of



Ann Vautour, owner of Miel Evangeline Honey, carefully displays a frame of her honeybees. She collects honey at various times throughout the year, producing honey with distinct tastes.



Ann Vautour scrapes off wax caps sealing honey in the cells of the honeycomb.

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the water has evaporated, it ends up as honey.

Vautour puts a handful of dried pine needles into her smoker, lights it, and we head over to the hives. "There are many different types of workers," she says. "The field bees collect nectar, the nurse bees feed the larvae, and the housekeepers keep the hive clean of dead bees and other mess."

She shows me two boxes of frames that look the same to me - but the top one is the honey super, and the one below is the brood chamber. A "queen excluder" is inserted beneath the honey super. This is like a screen with openings large enough for the workers to get through but too small for the queen and drones. This way, the queen can't lay eggs in the honey super. Instead, the cells will contain only honey, which is one of the main reasons I'm visiting the Vautours.

Vautour is one of the few honey makers in the Maritimes who pays close attention to the distinct flavors of her honey. Many beekeepers just extract honey from a hive when its supers are full. She, however, takes an extra step, drawing out honey at certain points throughout the year when the diet of her bees change – and so too does the flavor of the honey.

For Vautour, selecting honey is like choosing a fine wine. Just as the vintage reflects the growing conditions experienced in the vineyard, honey is an expression of the flowers available to foraging bees. The composition of a spring bouquet of wildflowers differs from an autumn bouquet, and this leads to distinct seasonal flavors in the honey.

Vautour's method is a more laborintensive process, however, as she must collect the honey more often than other beekeepers. Inside her home, she shows me how much work it takes. First she removes the wax caps from the hexagonal cells that make up the honeycomb. To get at the honey inside, she uses a tool like a wide metal comb to scrape off the caps. "It's all work. . . everything is work," she says.

The next step is to put the frames



Through Miel Evangeline Honey, Ann Vautour mainly markets four types of honey: early summer, late summer, blueberry, and strawberry honey.

Sweet tips

Doing it yourself

"Most people buy a package with a gueen or 'nuc' (nucleus colony) to start," Ann Vautour says. "The equipment costs about \$250 to start a full hive. That would include two boxes, the cover, and the bottom board."

That price does not include the equipment used to collect honey. However, she points out that some new beekeepers are working together and sharing an extractor. It is not essential to have all of the equipment she owns. She adds, "If you have more than a few hives, want to sell honey, or if you just want to get wax-free honey the easiest way, most people want a heating tank and extractor."

Beekeeping is not something you can learn easily from a book (or magazine article). Instead, you need to watch someone working with the bees. To learn how to raise bees. Vautour recommends that people join a beekeeping group. such as the New Brunswick Beekeepers Association.

After honey is extracted, all that is left of the honeycomb is a slurry of broken-up wax covered in honey. Ann Vautour pours this onto a tray outside. Within a few minutes, the tray is covered with honeybees and wasps. "They'll clean up all the honey," she says, "leaving the wax behind." Half an hour later, we go back to the tray. There are now only a few wasps hovering over the little bits of dirty wax.



To purify the wax, Vautour starts by melting

the wax outside in a simple glass-covered box, similar to a cold frame used to start early seedlings for the garden. The wax is put into water and melted.

The golden wax floats to the top. It cools and hardens. You will find, sticking to the bottom of the wax, a layer of black scum containing dead bees and who knows what else. The scum is scraped off and the wax is melted again. The Vautours put the wax in a pot on a propane cooker. After repeating the melting and scraping process several times, they end up with blocks of clean wax, which can be used to make candles.

Pasteurization

"Pasteurized honey involves heating extracted honey to move it through fine filters," Ann Vautour says. The process removes fine particles of wax, but some of the beneficial substances, such as pollen and propolis, are also lost in the process. The more industrial process gives commercial honey a longer

"That said," she adds, "honey doesn't go bad. It simply crystallizes. When that happens, it will return to liquid after being heated. Just put the jar into a bowl of warm water."

Vautour learned a method to store honey for the long-term without crystallization -freezing. Although it seems counterintuitive, honey can freeze and thaw without forming any crystals. She recommends that people never store honey in the fridge. "That leads to crystallization right away," she says.

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in the stainless steel extractor. Using centrifugal force, the extractor spins the honey out of the frames. The honey collects at the bottom of the extractor and Vautour strains it



Ann Vautour pours honey into a stainless steel extractor.

through a fine sieve and pours it into a bottling tank heated to 120 degrees F. The heat makes the honey more viscous and easier to bottle, but does not pasteurize it.

FRUITS OF LABOR

Now it's time to taste the fruits of her labor. Vautour leads us to her dining room table where she puts out several jars of honey. Her main varieties are early summer, late summer, blueberry, and strawberry honey. As is plain to see and taste, the type of flower affects several qualities of honey - how it crystallizes, its color, and, most importantly, its flavor. The finished product ranges in color from light yellow to deep gold to a deep chocolate brown.

The early summer honey is a light color with a delicate taste. This is produced when the bees are visiting mostly vetch and clover flowers, along with some dandelions. The fall honey is made from the nectar of goldenrod and asters. It is darker and tends to crystallize quickly.

Borage honey is an unusual treat. I've grown borage for years and think of it as the plant I can hear before I see it. Throughout its long blooming period, borage plants are surrounded by buzzing bees. The dark brown honey has a lovely thick taste, almost malt-like.

Unfortunately, Vautour no longer

produces this honey. A large field of borage, the oils from which were marketed as nutritional supplements, had been planted around Drummondville, Quebec, by researchers who were considering borage as an option for crop rotation with potatoes. Vautour had access to honey from bees that pollinated the borage, but the project has finished and the crop is no longer grown there.

Of those I taste, my favorite is the blueberry honey. It has a stronger flavor than the early summer or strawberry honey, although it does not taste like blueberries.

It's not only about the honey, however. Vautour says there are many benefits to beekeeping, even if you are just keeping a couple of hives – but it can take a lot of work, she stresses. "There are all kinds of avenues," she says. "You can keep bees for the honey, the pollen, propolis, or wax." Propolis is the material bees make from tree and bud resin. They use it to strengthen the honeycomb and seal cracks in the hives. Once collected and purified, a laborious process according to Vautour, it has medicinal uses.

As well, some gardeners and people with fruit trees are keeping bees simply to pollinate their plants. Others are keeping bees because they have heard about the global crisis in bee populations and want to do what they can to help the bees, and the environment at large. Although the main reason Vautour keeps bees is for the honey they produce, she also enjoys the bees for their own sake. "Bees are



After Ann Vautour collects wax from the honeycomb she melts it in a solar powered rig - a glass covered box sitting out in the sun.

fascinating creatures," she says. "No other creature is so smart. The hive is totally organized. It's amazing."

For those who want to taste for themselves. Vautour markets her honey under the label Miel Evangeline Honey and sells it in both 375- and 750-gram glass jars and in 7-lb and 30-lb plastic buckets.

(Janet Wallace is an organic gardener in New Horton, New Brunswick, and the editor of The Canadian Organic *Grower.*)

Healing

Many people use honey, often in herbal tea, to treat sore throats. Used externally, says Ann Vautour, "Honey is good for burns and for sores that don't heal."

Apitherapy refers to the medicinal use of bee stings, most commonly used to treat muscle pain from arthritis or MS. Apitherapy is much more gentle than sticking your hand in a hive of angry bees. Instead, Vautour says, "You simply pick up a bee, hold its posterior at the appropriate place, and let it sting you. It will pump its venom into the joint." She "applied" several stings to the joints of her hands two years ago and found the symptoms of her arthritis cleared up dramatically. Propolis is used to treat sore throats and ulcers. and to stimulate the immune system.

Cooking

"Cooking with honey is awesome," says Ann Vautour. She uses honev in salad dressings and smoothies, on baked ham and roast chicken, and in banana bread. "The key," she adds, "is to substitute two thirds a cup of honey to one cup of sugar."

She adds, "If you warm honey when you mix it into a punch or salad dressing, it will stay in solution."