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Millers' Homestead in Washington State Where Natural Honey Flows

MILLERS HOMESTEAD
HONEY

by CECIL HICKS

Every winter across the United States more and more people of all ages are flocking to beginning beekeeping classes in large numbers. Instructors for these classes are experienced regional beekeepers who pass along their beekeeping knowledge and skills. People taking these classes are usually either interested in learning more about the world of honey bees, or have a desire to purchase a hive or two for backyard pollinating of flowers and vegetable gardens, so they can extract their own locally raised honey.

One of these experienced beekeeper/instructors in eastern Washington state is Jim Miller who lives near the town of Medical Lake (pop. 3,000). Since 1995 he has been keeping honey bees. He and his wife, Jenine, reside on a rural 10-acre setting a few miles west of the city of Spokane (pop. 300,000).

Jim is a certified master beekeeper and member of the Washington State Beekeepers Association (WSBA). For the past eleven years he has been teaching basic beekeeping. Currently he is member of the local West Plains Beekeepers Association. He is also a former member of the Inland Empire Beekeepers Association. The teaching area encompasses eastern Washington, northern Idaho and western Montana.

Since 1999 he and Jenine, who holds a journeyman's beekeeping status, have teamed up to teach introductory beekeeping classes for beginners.

Together the couple manages a small-scale sideline beekeeping business, which they term a mom and pop operation, named Millers Homestead. They currently have 30 hives. Over the years their hive totals have ranged from a low of one to a high of 64.

Jim, who retired two years ago as a me-

chanical engineer, recalls that when he was working fulltime it was just too much of a struggle trying to maintain 60 plus hives. He realizes now that he didn't maintain them properly and most of them died off, so he cut back at that time to only two hives and has since built back up to his current number of hives.

Jenine, a retired computer program analyst, was raised in the western region of Washington State around the city of Tacoma. The Millers have six grown children and 13 grandchildren, but there are no second-generation beekeepers in the family.

Their children are spread out across the nation from Washington State in the West to the state of Iowa in the Midwest.

Jenine helps with all aspects of the bee operations except for the actually handling of the bees. She helps assemble woodenware, does the bookkeeping, handles the web site at www.millerhomestead.com and assembles internet orders, helps with marketing and sales and assists anywhere as needed. Besides selling honey out of their home, they sell honey along with other honey and wax products (including lip and hand balm that Jenine makes) at two craft



Visitors to Millers Homestead are reminded by this sign that they are entering property owned by a beekeeper.



This view from the Millers' back porch near Medical Lake, Washington, shows their home beeyard set in a meadow surrounded by pine trees.

shows in the spring, two in the summer and four in the fall.

Their current honey prices are: small bear \$3.25, quart \$9.00, ½ gallon \$17.20, gallon \$33.40, and four gallon bucket (48 lbs.) \$125.00. Besides wildflower blossoms, their bees forage mainly on alfalfa, star thistle and buckwheat growing in the area.

In his last career position Jim worked as a consultant for an engineering firm specializing in heating, ventilation, air conditioning and plumbing and this job kept him on the road quite often covering a territory that included eastern Washington and Oregon, along with northern Idaho and western Montana.

Born and raised in Pennsylvania, Jim remained in that state as an adult and worked a couple decades as a state policeman from which he retired. He later moved west to Wyoming where he ran a hydraulic diesel business with his dad. In 1984, after their business went belly up during an economic recession at that time, he decided to further his education by moving to Seattle where he earned a mechanical engineering degree from Seattle University.

While earning a college degree, he met Jenine and they married in 1985. With a degree in hand they moved in 1994 to their current home in eastern Washington.

After building a house and an outbuilding on their property, they planted 200 fruit trees. Jim said, "After planting the trees we decided we needed some honey bees for pollination so they bought two hives."

Then, in the winter of 1995 the area was blanketed with upwards of two feet of snow that lingered on the ground for months. In the spring, when the snow finally melted, they discovered that mice had burrowed underneath the snow and stripped all their fruit trees of bark from the ground to about the two foot level on the trunks. All of their fruit trees died. Jim explained that while their fruit trees went the way of the dodo bird (extinct), the bees remained.

As he gained more beekeeping experience and knowledge over the years, he eventually found himself progressing away from the use of chemicals to keep his hives healthy and instead leaned toward using

more natural beekeeping methods. Last year Millers Homestead received a Certified Naturally Grown (CNG) status, which means he practices natural beekeeping methods free of synthetic chemicals in his bee apiaries.

Some of his initial instruction on natural beekeeping he gleaned from an overseas beekeeping observation/teaching trip he took in 2005 and again in 2006 to the Republic of Georgia (formerly part of the Soviet Union, which is located near the Black Sea and the neighboring country of Turkey). His trip was sponsored by the U.S. Department of Agriculture which paid for his air travel expenses.

In Georgia, Jim had an opportunity to teach American beekeeping methods at four different locations and study some of the beekeeping methods used in that country. He stayed for a month in 2005 and for two weeks in 2006.

Jim recalled, "It was a great opportunity to learn new methods of beekeeping and see how a few beekeepers that were probably



Jim Miller stands among his woodenware in a storage room in his bee house.

only earning about \$100 a week in income were making a living." He said they couldn't afford to purchase chemicals to treat their Caucasian bees so they largely relied on some natural recipes for treatment instead.

On his first field trip to a bee yard with a Georgia beekeeper (which included a language interpreter tagging along) who managed about five hundred hives, Jim pulled his bee suit from a carryall bag and the beekeeper was almost insulted. He learned that the beekeeper never wore a bee suit when working his hives and he rarely got stung. Jim said in all the time he visited with several different beekeepers nobody wore bee suits. He said he only got stung twice on his hands during the entire time that included both yearly visits. He found the Caucasian bees to be non-aggressive with gentle traits and they were good workers. He noted that even in 40 degree weather with a drizzling rain the bees were out foraging.

Most of the apiaries Jim visited in Georgia consisted of an average of 400 to 500 hives. While the beekeepers used Langstroth-style bee boxes with frames, they only used a single deep brood box set up off the ground and didn't use supers. Instead, during the honey flow season they pulled full frames from the sides of the box and then inserted an empty frame immediately. He noted this method was more labor intensive than with supers as the hives required monitoring and inspection frequently.

Jim said much of the honey produced by the Georgia beekeepers he met was sold in the neighboring country of Turkey where their customers liked a strong dark honey mainly produced from the flowering blossoms of chestnut. Their bees would also produce a lighter honey from black locust trees.

He explained that he paid a lot of attention to how the Georgia beekeepers killed mites and foulbrood in their hives. One beekeeper he befriended told him he didn't have mites and foulbrood problems as he used a drink solution in his hives that included cooking down pine boughs, straining the mixture, adding it to apple cider and then placing it in a Pepsi bottle feeder in the hive. Jim said he was skeptical about this beekeeper's comments that this solution would kill mites and foulbrood until he inspected the man's hives and found them to be very healthy.

The man also said he placed bracken fern stem fans on top of his hives. While the bees didn't eat the bracken fern, its odor drove the mites from the hive. One of the last things this beekeeper would do when closing off his hives for the winter was to sprinkle dried and crushed eucalyptus leaves inside the top lid. The eucalyptus odor would also drive mites from the hive. Jim said the Georgia beekeepers he met didn't place any winter food on the hive, instead they relied on the honey already stored. He added that Western Georgia, the region where he visited, has warm weather similar to Western Washington.

While in Georgia he helped establish a

beekeeping class as part of the curriculum for a vo-tech school. The students were able to set bees in a neighboring apricot orchard. Once the bees were established in the orchard and completed the pollination, the apricot yield was great and the local residences were delighted.

Jim said although it was the visit to Georgia that started him down the path of seeking out more natural treatments to keep his own hives healthy, he wanted to keep abreast of what's happening around the world with bee research, so he belongs to the International Bee Research Association based out of England and reads all current scientific bee research papers on a regular basis.

A few years ago Jim also decided he needed to learn more about the health of his own bees so he turned a section of his bee house into a lab and purchased a compound and dissecting microscope. Periodically (usually in the month of April and again in November) he'll take samplings of at least 100 bees from a few of his colonies to determine if they were carrying various spores and mites, plus establishing their weight and pH level. He uses a haemocytometer for testing the *Nosema* spore count in a sampling. Jim also provides this laboratory bee health testing service for other beekeepers and makes suggestions on how to eliminate any problems.

After his Georgian trip Jim decided to experiment with using various essential oils to keep his bees healthy. He admits that he hasn't used any chemicals on his bees for about five years now and he's had good results with his hives having only lost two hives in the past year.

For example, he said last spring he found, after sample testing, that one of his hives had a high *Nosema* spore count of 8.4 million, while less than 1 million would be more of an acceptable IPM spore count. Of course, the best *Nosema* spore count for a beekeeper would be zero. Following the test sample, he fed the bees a medication food patty that he called his vitamin pill. It consisted of a mixture of thyme, lemon grass, orange, peppermint essential oil, drivert sugar and vegetable oil. When tested again in the Fall they had recovered to a spore count of 5.85 million. The spore count continued to drop though the summer and eventually dropped to less than 1,000,000.

He realizes that some of the natural beekeeping methods he uses and passes along to beginners, who plan on becoming hobbyists, or small scale sideliners with just a few hives, might not be the best arrangement for large-scale commercial operations, as they are more labor intensive requiring more beeyard visits and inspections.

Jim stated, "There's no correct way to being a beekeeper." Over the years he's taught students with a wide range of ages and backgrounds that are "all over the board" including some youngsters who couldn't read or write and others who are retired and wishing to learn a new skill. He claims the one thing they all have in common is their enthusiasm and interest in



The Millers' bee house holds a woodenware room, extraction room, lab and classroom, plus Jenine's sewing room.

learning about honey bees.

The Millers keep their bees yarded at three different apiaries. One on their property, another yarded a few miles away on an 80 acre certified organic farm that is surrounded by a larger farm that grows some 3,000 acres of timothy hay. The third apiary is on private property at the Finch Arboretum preserve in the city of Spokane. Their hives remain at these sites year round—they are not moved.

Each year during the months of February and March the Millers keep busy teaching at least three different basic urban beekeeping classes for beginners. While Jim teaches the classes, Jenine is on hand to assist, as well as take sales orders for honey, bee packages, or for beekeeping equipment and supplies.

These classes are geared for students to enable them to pass a beekeeping apprentice certificate exam issued by WSBA. For city of Spokane residents, passage of this exam

meets an ordinance requirement for beekeepers to have some basic skills and knowledge so they can raise bees within the city limits.

During February, classes meet on Saturdays at the University of Idaho Extension Office in Coeur d'Alene, which is located just a few miles over the state line in the panhandle region of northern Idaho.

In March beginning beekeeping classes are held on Friday nights at the Millers Homestead, near Medical Lake, Washington, which is sponsored by the Spokane Falls Community College's Extended Learning Center. Also during the month of March they teach additional beekeeping classes that are held on Saturday's at the Pizza Factory building in Medical Lake.

While all of their current beekeeping classes are limited to no more than 30 people at one time, Jim said he taught a large beekeeping class for the Washington State



Jim keeps three hives at his home apiary



Bees from Miller's Homestead provide Grade A natural honey for regional customers.

Extension Office that had as many as 150 people in it. Jim recalled, "That was just too large. It works out a lot better instead with having several different smaller classes."

Jim admits that he's not teaching to make money as most of the income from fees the students pay for taking classes goes back into the purchase of beekeeping booklets and handouts, plus coffee, snacks and treats for instructional breaks. The booklets include an IEL's (Institute For Extended Learning) Basic Urban Beekeeping Class, along with a *Handbook for Natural Beekeeping* from the Apiary Standards of Certified Naturally Grown (CNG).

Jim said he enjoys the comradeship and discussions he has with his students and the interest they show in learning about beekeeping. He recalls that once two brothers, aged 15 and 13, were taking his class. Their mother informed him that she didn't have the funds to purchase the woodenware and bees. After thinking it over, he told them he would go ahead and provide the woodenware and the bees, but they would have to

give him half of their honey for the next two years. "Their eyes lit up like a million dollars when we worked out the deal."

Jim said from January to the end of April their phone probably rings at least a half dozen times a day with future students (inquiring about taking a class) and/or former students calling with beekeeping questions or problems. Also, they receive orders for beekeeping equipment and package bees, which in 2012 arrived at their home on April 14 for distribution. When packages arrive each spring, people drive to Miller's Homestead to pick up their bees from a three-state-wide area, including eastern Washington, northern Idaho and western Montana.

In the past he once had one lady come all the way from Billings, Montana (a distance of 550 miles one way) to pick up her bees. She told him that the previous year she'd ordered bees that were shipped through the U.S. Postal System and they were all dead upon arrival. She said this time she wanted to make sure she got "live" bees.

Jim said he recently received a call from a woman who was wondering about what she should do as she had bees coming and there was still three feet of snow at her place where she wanted to set the hives. He chuckled a little when retelling the story and said, "I told her she'd better get out a shovel and start clearing the area."

In late March of 2012, Jim had about a dozen people, none of whom had taken his introductory beekeeping class, calling from a town about 100 miles away ordering package bees. It seems the local co-op farm store there had started stocking beekeeping equipment for sale. He was concerned that these folks had no previous knowledge of beekeeping so he called the manager of the store and made arrangements to drive up on a Saturday to give a short introductory class on beekeeping for the folks who purchased their bee boxes and equipment. Jim explained, "I want people be successful and at least have a little basic knowledge of what to do when their bees arrive."

In the classroom he speaks in a quiet and confident voice passing along beekeeping tips and knowledge and explains how he keeps his bees. Jim said, "When it's all said and done I try not to tell my students what

they have to do once they start keeping their own bees as it's their decision on how they want to raise them. Although I raise my bees naturally, there's no correct way to be a beekeeper."

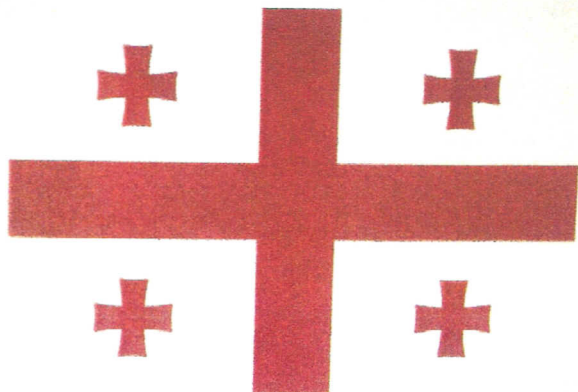
During an evening class on March 30, 2012 at Miller's Homestead, Jim was explaining to his students how he winter feeds his hives a food supplement. He demonstrated by removing the lid from a hive and then laid a large sheet of paper on top. He next poured out a mixture of the following onto the paper: 5 to 7 pounds of drivert sugar, mega bee, mineral salts and essential oils. He said you then add a spacer and replace the top and periodically check to see if they need more food. In all he said that it takes about 60 pounds of a combination of food supplements and honey to get a colony safely through the winter.

The Miller's bee shop is 24 feet by 70 feet and it holds a woodenware and bee equipment supply storage room, a hot room (which is kept between 100 and 110 degrees when full honey supers are stored in it), an extraction/office room (which is kept at 85 degrees when extracting), a bee lab and a classroom. The classroom is actually Jenine's hobby sewing room that holds her sewing machines and a large arm quilt-making machine. During the beginning beekeeping class months, Jenine's sewing area is taken over by chairs, tables, overhead video equipment, beekeeping posters and bee equipment displays.

Jim designed and built their bee shop in several additions as funds became available. He tells the story about when he constructed the first section of the shop. The foundation was poured and he was working on the walls when Jenine came in and looked around and stated, "Where are you going to put my sewing room?" In the end about ¼ of the available space in the extracting room turned into her sewing nook.

The months of August and September are a busy honey extraction season for the Millers. Not only do they extract their own honey using two 9/18 Mann Lake extractors along with a Cowen Handyman Uncapper, but they do contract honey extracting for area beekeepers.

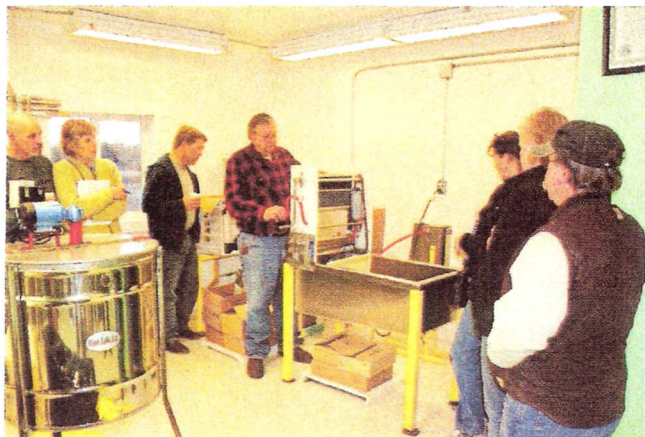
Booked a year ahead of time, last year



(l) Republic of Georgia flag. Jim tells his students about his beekeeping/teaching trip to the Republic of Georgia in 2005 and 2006. (r) Numerous honey and honeybee posters are displayed in the classroom during Jim's beekeeping classes.



(l) Jim mixes a food supplement in front of his class and goes on to demonstrate how he feeds the mixture in his hives. (r) In his extraction room, Jim explains to a class of students how his honey extractor and uncapper works.



they had 55 regional beekeepers bring in their honey. The Millers scheduled a time and date for extraction and the beekeeper is required to stay and help supervise and lift the full supers. Jim also expects the honey supers to be free of bees. He learned this lesson early on. "We're not interested in having bees flying around our extraction room." The beekeepers also bring their own containers. The Millers charge by the pound for this service and they get to keep the cappings. Before they built their honey house, extrac-

tion was done in the garage.

His beekeeping equipment includes a Ford one-ton flatbed bee truck, a farm tractor set up with a forklift—if needed. When pulling honey supers the Millers work as a team. At their yards, Jim hauls a super to the flatbed and hands it to Jenine (who is up on the back of the truck) and she stacks it.

Jim has also written a handbook for beginning beekeepers which he says is basically a book on how he takes care of his bees. It is titled "The Handbook for the Bee-loving

Beekeeper." His goal is to have it out by September of 2012. It is currently going through the final pre-publishing stages including proofreading and editing and being reviewed by several beekeepers, an entomologist, an historian author/writer before going to a printer.

There's a motto that perhaps best sums up the Millers' philosophy on the beekeeping lifestyle they've chosen to lead that reads: "Enjoy your day and love your life because life is a journey to be savored."