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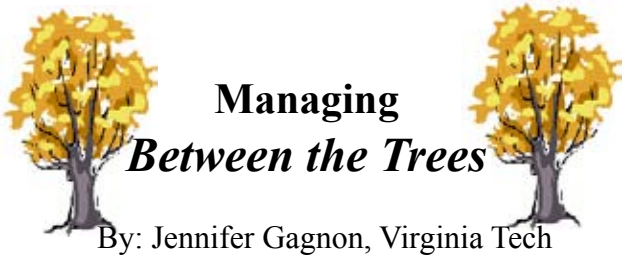

Managing *Between the Trees*

By: Jennifer Gagnon, Virginia Tech

I often hear some version of the questions "I would like to grow ginseng (shiitake mushrooms, goldenseal etc.). What do I need to know to get started? How can I find markets for my products?" Managing for non-timber forest products (NTFPs) can be both fun and profitable. NTFP's can be anything from pinecones to white pine tips to mushrooms. This occasional feature, Managing *Between the Trees*, will provide resources for learning about the management, harvesting and marketing of different types of NTFP's. Additional information can be obtained from the Virginia Tech Non-Timber Forest Products website: http://www.sfp.forprod.vt.edu.

Since I have recently acquired a hive, this quarter's featured NTFP will be honeybees. I'll be honest - honey production on a small scale is probably a break-even endeavor at best. Larger-scale operations can be more profitable. More and more folks are managing bees for honey, propylis, royal jelly and beeswax production, as well as for pollination. Bees are intelligent, interesting and complex creatures. For example, when a worker bee finds a source of nectar, she will return to the hive and perform a dance. This dance will communicate to the other bees the distance to, and type of, nectar. This is called nest mate recruitment, as the other bees will respond to the dance by joining in the nectar gathering. Nectar is an essential food source for bees, as it's the building block for honey. Pollen and water are other bee-essentials.

The U.S. has no native honeybees; the first honeybees were brought to the U.S. from Europe in 1622. The most common bees for honey production are the Italians, brought to the U.S. in 1859. They are valued for their high honey production and gentle nature. Africanized bees are in the southeastern U.S., and may be in some areas of Virginia. These bees are more aggressive and produce less honey than European bees. They can still be managed, but different tactics must be used.

There are a number of ways to get started keeping honeybees. I purchased all new hive components, including two 10-frame deeps (also called hive bodies or brood chambers – this is where the bees store their honey and pollen for the winter and where they raise their brood), a honey super (where the bees store our honey), a feeder (to fill with sugar water to start the colony and get them through the winter), and a 3-lb bee package (about 12,000 bees!). All together, this ran about $350.

You can also purchase an established hive or a nuc. An established hive is just that – a complete hive. Thoroughly inspect the hive for insect and disease problems before purchasing it (or have someone come with you who knows how to perform a hive inspection). And bear in mind when moving a hive, either move it no more than 2 meters OR more than 2 miles, to keep the bees from becoming disoriented. A nuc is a mini-hive of five established frames which can be moved into a larger 10 frame hive body.

Most hive losses occur during winter. Bees start raising brood in late January – February to prepare for the early nectar flows. Unfortunately, at this time of the year, honey stores in the hive are low (hives need at least 60 lbs of honey for the winter) and no new food is yet available, so starvation is a possibility. Feeding bees during this time period may help them survive until the first nectar flows of spring. If you opt to feed tour bees, prepare yourself to spend some money on sugar - a full hive will easily eat 12 cups of sugar water a day.

Honeybees are also vulnerable to many insects and diseases. Integrated pest management (IPM) and maintaining a healthy vigorous hive are the best ways to minimize problems (note – it is not using chemicals). Of course, as I'm learning, proper hive management is complex. Fortunately, it's also fun.

You can keep up with my beekeeping experiences (complete with color photos) by becoming a fan of the Virginia Forest Landowner Update on Facebook (http://www.facebook.com - search for Virginia Forest Landowner).

Interested in keeping bees? Visit these on-line resources:

- American Beekeeping Federation: http://www.abfnet.org
- Bee Culture Magazine: http://www.beeculture.com/
- Beekeepers Association of Northern Virginia: http://www.beekeepersnova.org/
- Honey Bees and Pollination: http://www.virginiafruit.ento.vt.edu/VAFS-bees.html
- Virginia's Farmer's Markets: http://www.vdacs.virginia.gov/vagrown/frmsmkts.shtml
- University of MN Extension: http://www.extension.umn.edu/distribution/horticulture/DG7554.html
- Virginia Beekeepers Association: http://www.virginiabeekeepers.org
- Virginia Department of Agriculture & Consumer Services: http://www.vdacs.virginia.gov
- Virginia Tech Beekeeper Site: http://www.apiculture.ento.vt.edu