

## Beginning Beekeeping Course - 2020

**Objective:** To create an interest in beekeeping and provide information needed for a person to become a keeper of honey bees, a beekeeper.

Session	Date	Subject	Instructor(s)
1	Jan 21	<b>Introduction to Beekeeping<sup>1</sup></b>	Ira Poston Paul Jollay
		<ul style="list-style-type: none"> <li>▪ Review Course Outline</li> <li>▪ Benefits of Beekeeping               <ul style="list-style-type: none"> <li>▪ Pollination (honey bees contribute \$15 billion/yr. to US Agric.)</li> <li>▪ Products of the hive (honey, wax, propolis, pollen, royal jelly and bees)</li> </ul> </li> <li>▪ History of Beekeeping</li> <li>▪ References, books, publications, organizations: ACB, NCSBA, EAS, etc.</li> </ul>	
2	Jan 28	<b>Bees as Social Insects</b>	Geoff Leister
		<ul style="list-style-type: none"> <li>▪ Other insects, bumble bees, hornets, wasps, etc.</li> <li>▪ Anatomy of the honey bee</li> <li>▪ Development of various caste (charts)</li> <li>▪ Relationships - which ones do what</li> <li>▪ Pheromones</li> <li>▪ Progression of duties</li> <li>▪ Different races of honey bees</li> <li>▪ Means of communicating (performing a dance on the combs)</li> </ul>	
3	Feb 4	<b>Equipment of Beekeeping</b>	Zivon Price Sheyenne Michelizzi
		<ul style="list-style-type: none"> <li>▪ Protective gear, veil, coveralls and gloves</li> <li>▪ Smoker</li> <li>▪ Hive tool and frame grips (if desired)</li> <li>▪ Hive moving frame</li> <li>▪ Hive straps or staples</li> <li>▪ Basic hive components</li> <li>▪ Bee space and critical dimensions</li> <li>▪ Woodenware</li> <li>▪ Bottom board, hive body, queen excluder, honey super, inner cover and lid</li> <li>▪ Assembly</li> </ul>	
4	Feb 11	<b>Equipment of Beekeeping (continued)</b>	Zivon Price Sheyenne Michelizzi
		<ul style="list-style-type: none"> <li>▪ Frames (different designs of bottom and top bars)</li> <li>▪ Assembly</li> <li>▪ Foundation</li> <li>▪ Purpose</li> <li>▪ Various sizes and designs</li> <li>▪ Installation methods</li> </ul>	

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5	Feb 18	<b>Starting a Honey Bee Hive</b>	Mike Ross
		<ul style="list-style-type: none"> <li>▪ Locating the hive <ul style="list-style-type: none"> <li>▪ Considerations - Location of water, direction to face the hive, sunlight, windbreak, away from sidewalks and playgrounds</li> </ul> </li> <li>▪ Ways to start a hive <ul style="list-style-type: none"> <li>▪ Package bees, nucs, splits (dividing a colony), swarms and removals from a tree or house or buy existing colony from another beekeeper</li> </ul> </li> <li>▪ Feeding the new colony using several different type feeders Checking hives after installing bees</li> <li>▪ Expanding your bees by dividing a colony or by starting a few nucs Moving a hive (necessary when buying an existing colony) <ul style="list-style-type: none"> <li>▪ Considerations - When moving short distance, when moving long distance, extra equipment needed and preparations to be made by the beekeeper</li> </ul> </li> </ul>	
6	Feb 25	<b>Medicating Bees</b>	Don Hopkins
		<ul style="list-style-type: none"> <li>▪ Diseases <ul style="list-style-type: none"> <li>▪ European foulbrood, American foulbrood, chalkbrood, sacbrood &amp; nosema</li> </ul> </li> <li>▪ Mites <ul style="list-style-type: none"> <li>▪ Varroa</li> <li>▪ Tracheal</li> </ul> </li> <li>▪ Viruses</li> <li>▪ Small Hive Beetles</li> <li>▪ Wax Moth</li> </ul>	
7	Mar 3	<b>Introducing a New Queen</b>	Mike Ross
		<ul style="list-style-type: none"> <li>▪ Requeen existing colony, split or swarm <ul style="list-style-type: none"> <li>▪ Finding old queen</li> </ul> </li> <li>▪ Different methods of introducing new queen</li> <li>▪ Advantages of young queen- less likely to swarm, builds up faster in spring and raises brood later in the fall</li> </ul>	
8	Mar 10	<b>Nectar Sources of North Carolina</b>	Geoff Leister
		<ul style="list-style-type: none"> <li>▪ Flowering Nectar Plants <ul style="list-style-type: none"> <li>▪ Plant Features</li> <li>▪ Period of nectar flow in different areas</li> </ul> </li> </ul>	
9	Mar 17	<b>Primary Management Phases</b>	Paul Jollay
		<ul style="list-style-type: none"> <li>▪ Fall Management in preparation for winter</li> <li>▪ After all surplus honey has been removed</li> <li>▪ Treat for diseases and mites</li> <li>▪ Check for honey stores (feeding may be required) Make sure colony has a good queen</li> <li>▪ Use entrance reducer to keep mice out, provide both top ventilation and a windbreak for each hive</li> <li>▪ Second Spring Management Preparations for honey flow</li> <li>▪ Check brood to verify that colony is healthy and expanding</li> <li>▪ If you treat, treat early for diseases and mites Try and control swarming during spring buildup</li> <li>▪ Remove entrance reducers, install queen excluders and supers</li> <li>▪ After the honey flow <ul style="list-style-type: none"> <li>▪ Removing honey</li> <li>▪ Removing bees from supers by brushing, using one-way bee escape, chemical repellents and a bee blower</li> <li>▪ Processing the honey- liquid, comb, chunk and section</li> </ul> </li> <li>▪ Rendering the wax (from the capping's)</li> </ul>	

Session	Date	Subject	Instructor(s)
10	Mar 24	<b>Course Review &amp; Exam</b>	Ira Poston Paul Jollay
		Ten Commandments of Beekeeping 1. Use only standard beekeeping equipment 2. Be considerate of non-beekeeping neighbors 3. Requeen 4. Control disease and parasites 5. Maximize colony population before the main nectar flow 6. Super colonies according to their need 7. Take pride in honey and other hive products 8. Protect your beekeeping equipment 9. Help your bees through winter 10. Join and participate in a beekeeping association	
11	Apr 4	<b>Field Day (4 hours at an apiary in the local area)<sup>2</sup></b>	Don Hopkins Mike Ross Paul Jollay Ira Poston
		<ul style="list-style-type: none"> <li>▪ Light smoker and inspect a hive (first by an instructor and then by one or more of the students)</li> <li>▪ Check for disease, check brood pattern and find the queen Identify a drone</li> <li>▪ Identify eggs, young larvae, sealed worker brood, sealed drone brood, pollen and honey</li> <li>▪ Show how to: <ul style="list-style-type: none"> <li>▪ Check for Varroa mites</li> <li>▪ Install a package of bees (students will help shake the bees) Start a nuc</li> <li>▪ Show steps necessary in preparation for honey flow - add a queen excluder, add two or more supers, remove entrance reducer</li> <li>▪ Demonstrate getting a hive ready for winter - includes checking a hive for honey stores, feeding by several different methods, removing the queen excluder, providing upward ventilation and adding an entrance reducer</li> </ul> </li> </ul>	

<sup>1</sup>All evening class sessions will be held at the Ag Extension Office, 209 N. Graham Hopedale Rd in Burlington. The classes will run from 6:30 PM to 8:30 PM on the dates shown above.

**Directions:** If you live in the Burlington area, you most likely won't need directions to the Ag Building (It's just down the street from Western Steakhouse); however, if you are coming from out of town one simple way to get to the Ag Building is to get off 1-85/1-40 at exit 145 and head toward downtown Burlington. This street is Maple Avenue. Stay on Maple Avenue through the center of Burlington and then you will turn right on Church Street. Follow Church Street until you get to Graham Hopedale Rd, turn left, the Ag Building is the first building on the right.

<sup>2</sup>Each student should bring a veil and any other protective equipment they feel comfortable with while working bees. The smoker and hive tool will be provided. The location and starting time will be given during the class. Please note the Field Day will be on a Saturday. Rain date for the Field Day will be April 11th (also a Saturday).

The telephone numbers of your local instructors are as follows:

Don Hopkins – 336-376-8250	Paul Jollay – 336-213-0912	Ira Poston – 336-314-0499
	Mike Ross – 336-584-8652	