

# Additional Information for Ohio 4-H Beekeeping Projects (641)

By Mike Doseck

*Welcome to the Ohio 4-H beekeeping project! Whether you are new to beekeeping or are experienced with your own hive, this flyer is intended to provide information to increase your success.*

This notice is meant to make you aware of new developments and ideas related to beekeeping. It is not intended to be your only source of information to current practices and studies. For that you still will have to do some research on your own. Staying informed from year to year is necessary because all insects, just like other members of the animal kingdom, are subject to the influences of nature. As nature presents new challenges, animals develop defense mechanisms. Some of the challenges facing the honey bee and you the beekeeper are the result of where bees live, what is available for their nutrition (their habitat), and pests that are harmful to their existence.

## Equipment

As you know, personal protective gear, a smoker, and a hive tool are essential. Your list of gear and tools is very important, but without bees and woodenware—the frames, boxes, and covers that make an apiary—it is useless. Your mentor, a fellow beekeeper, or a local beekeeping club can help you choose all your equipment. Many times equipment can be purchased from a local dealer or builder. You can even build a lot of the woodenware yourself. If you plan to build your own equipment, plans are available online from sites such as [beesource.com](http://beesource.com). Another option is to order from a beekeeping supply catalog. Just remember that shipping is extra and sometimes costs as much as the equipment.

Proper care of your equipment will give you many years of use. Tight joints and well-coated exteriors are important because they eliminate drafts and moisture. Painting with a good quality, exterior paint that has been returned to the store can be an economical source of paint. The paint does not have to be white; any earth tone is a good choice.

## Obtaining Bees

Getting your bees can sometimes be challenging. Order your bees early. Waiting too long can mean the supply of bees is gone. Getting your bees from a reputable source



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and knowing where they come from helps avoid getting bees not accustomed to our climate. It also avoids getting pests with your bees.

Bees can be purchased as nucs (short for nucleus hive), splits from a local hive, swarms, or as packages. Nucs are a great choice because they include all the components of a hive with a laying queen, brood, drawn foundation, honey, and pollen. Splits and swarms are economical, but it takes time to draw comb, store honey and pollen, and lay eggs. Finally, buying package bees should be a last resort. Most package bees coming from the south contain mites and are not adjusted to a northern climate. If buying package bees, you should requeen as soon as possible and monitor closely for Varroa mites.

### **Caring for Bees**

Being a good beekeeper comes from experience and from working with another beekeeper. Honey bees, just like other animals, require food, shelter, and care. To start with, inspect your hive on a weekly basis. Be gentle, work from behind the hive, don't bang around on the hive, and don't make excessive noise. Go into the hive with a purpose and be aware of any pests, unusual odors, and sounds.

Recording every inspection provides a valuable record that you will likely refer to later. Things to record include the date and if there is a queen present. Also, is there a brood, queen cells, honey, and pollen? Note the presence of any mites and pests. If your hive requires any treatments, a record of the method of treatment should be included. At a later inspection, record the result of the treatment.

Be aware of the seasonal changes that occur in the hive. Each of the four seasons means different hive activity, including egg laying by the queen, gathering nectar and pollen by the workers, the existence of drones, keeping the hive warm or cool, and more of fewer bees in the hive. Each season has its stress by pests, and you should watch and prepare for them.

Finally, because Varroa mite is among the most challenging problems for beekeepers, it is worth mentioning monitoring methods. Learning to do a sugar roll or ether roll and taking a mite count can mean keeping a healthy hive or losing a hive. OSBA has information about an Apiary Diagnostic Kit and ADK Manual ([ohiostatebeekeepers.org/apiary-diagnostic-kit](http://ohiostatebeekeepers.org/apiary-diagnostic-kit)), both of which are valuable tools to make or purchase.

### **Suggested Resources** (from *Beekeeping Project and Record Book*, page 7)

Many good sources of information about beekeeping exist. You may be interested in using the beekeeping project books offered online by Purdue Extension, not as project books but for the information they provide.

Carroll, Natalie, and Greg Hunt. Understanding the Honey Bee (4-H Beekeeping, Division I). Purdue Extension. [extension.purdue.edu/extmedia/4H/4-H-571-W.pdf](https://extension.purdue.edu/extmedia/4H/4-H-571-W.pdf)

Carroll, Natalie, and Greg Hunt. Working with Honey Bees (4-H Beekeeping, Division II). Purdue Extension. [extension.purdue.edu/extmedia/4H/4-H-586-W.pdf](https://extension.purdue.edu/extmedia/4H/4-H-586-W.pdf)

Hunt, Greg, and Natalie Carroll. Advanced Beekeeping Methods (4-H Beekeeping, Division III). Purdue Extension. [extension.purdue.edu/extmedia/4H/4-H-593-W.pdf](https://extension.purdue.edu/extmedia/4H/4-H-593-W.pdf)

Also, the Ohio State Beekeepers Association, which is a valuable resource, offers videos, documents, and other support at no cost: [ohiostatebeekeepers.org](https://ohiostatebeekeepers.org)