

LIVESTOCK

Beekeeping



AUTHORS & INSTITUTIONS

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SECTIONS

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INTRODUCTION

Many people are interested in getting started with beekeeping as a way to spend time outdoors, participate in agriculture, dive into a new hobby or connect with a local community. However, before you buy honey bees and hive equipment, take time to learn about beekeeping and connect with a local beekeeping community.



While beekeeping can be fascinating and rewarding, it also has a steep learning curve. It's common for new beekeepers to struggle to keep colonies alive and healthy. It's also common for new beekeepers to underestimate the time, physical demands, and financial costs of getting started in beekeeping.



How To Get Started

The first and most important step in beekeeping is education. Take time to read, attend courses, gain hands-on experience, and get involved in beekeeping associations. Developing a solid understanding of honey bee biology and clarifying your purpose will help set you up for success.

If you decide to pursue beekeeping, you should consider suitable apiary locations, become familiar with Michigan and local regulations related to beekeeping, and address any potential concerns with neighbors.

With your budget in place, you'll be ready to order honey bees, hives, tools, and protective clothing. Be sure to have your equipment ready before your bees arrive.

After installing your new colonies, you will need to regularly inspect and care for them. Monitor colony health, address issues promptly, and continue learning through reading, conferences, and connecting with other beekeepers.





SECTION 1

Learn and Gain Experience

Primary Considerations

Knowledge and hands-on experience are essential for fostering and maintaining healthy, thriving honey bee colonies. As you learn and gain experience, you'll develop skills in inspecting honey bee colonies, applying best practices to keep colonies strong and troubleshooting common challenges. With time, you'll also learn how to treat colony health issues and enjoy the reward of harvesting honey while keeping your bees healthy and productive. Below are several resources to support you as you begin your beekeeping journey.

Is Beekeeping Right for Me? (<https://www.canr.msu.edu/courses/msu-is-beekeeping-right-for-me>) is a free online course from Michigan State University Extension that will guide you through the many considerations of getting started with beekeeping. This online course introduces you to beekeeping and suggests ways that you can help honey bees and all pollinators. It also covers the physical, time, and financial demands of beekeeping, so that you can make an informed decision before getting started. Testimonials from real beekeepers, past and current, are included in the course for you to learn from their experiences. The course is full of resources for you to support pollinator health, decide if beekeeping is a good fit for you, and identify steps to get started with beekeeping.

What we wished we'd known in the bee-gining

(<https://www.canr.msu.edu/news/what-we-wished-we-d-known-in-the-bee-gining>) is an online article describing what many beekeepers share they would have liked to know when starting beekeeping.



Process for Getting Started

Learn about beekeeping before you buy bees and equipment.

Join a local beekeeping community

Michigan has a statewide beekeeping organization, the [Michigan Beekeepers Association](#), and is home to about 30 [local beekeeping clubs](#). While each club is different, many offer monthly meetings with educational presentations and opportunities to network.

Check out educational opportunities from [Michigan State University Extension](#)

- Each year, MSU provides webinars, workshops and presentations to beekeeper audiences, which are listed on [MSU Extension's page of upcoming beekeeping & pollinators events](#).
- You can [sign up for MSU Extension's Beekeeping & Pollinators email digest](#) to receive emails about upcoming events and recent articles.
- You can visit [MSU Extension's Beekeeping & Pollinators videos](#) and [MSU Beekeeping's YouTube channel](#) to see videos and recordings of past webinars.
- MSU Extension posts online articles and other resources for beekeepers on the [MSU Extension beekeeping website](#).
- Key resources are listed in the online article, [Apiculture programs and resources from Michigan State University Extension](#).

Attend beekeeping schools and conferences



MSU Extension collaborates with the [Michigan Beekeepers Association](#) (MBA) to plan and host beekeeping conferences in the spring and fall. These conferences are attended by hundreds of beekeepers statewide, and they include speakers on a variety of topics ranging from honey bee health to using hive products. MBA sends emails to its contact list with newsletters and other announcements. [MBA members](#) are automatically added to the email list, and non-members who do not already receive emails from MBA can [sign up for MBA's email list](#).

Many [local beekeeping clubs](#) also host beekeeping schools, conferences and classes. Some of these educational events are intended for people getting started with beekeeping, while others also offer information on intermediate and advanced beekeeping topics.

Buy a veil and learn from other beekeepers

MSU strongly encourages people who are interested in beekeeping to spend their first year learning. Purchase a beekeeping veil or suit, join your local club to meet area beekeepers and spend a year getting in-hive experience before purchasing your own bees. You can volunteer to help other beekeepers in their apiaries. You may also be able to get in-hive experience through a beekeeping class or in-hive workshops offered by local beekeeping clubs and university extension.

Read at least one beginning beekeeping book to understand basic honey bee biology

Honey bees are complex creatures that respond to environmental changes. In order to manage them well, you have to have a grasp of basic biology and all of the beekeeping terms and jargon. While you will continue to read and learn about bees after you become a beekeeper, you should know the basics of their care before you start.



The [**Beekeeping in Northern Climates manual from the University of Minnesota Bee Lab**](#) is an excellent resource on a beekeeping system with a proven track record for beginning beekeepers in a climate similar to that of Michigan.



SECTION 2

Bee Health

Primary Considerations

It is important to be aware of common honey bee health issues. All honey bee colonies in Michigan are expected to have parasitic varroa mites and viruses. Honey bees can also be affected by fungal and bacterial diseases and other pests.



Process for Getting Started

Learn about varroa mites

Honey bees are experiencing an epidemic of varroa mites, which are deadly, parasitic mites. Many people who start beekeeping lose most or all of their colonies to this parasite every year. Varroa mites are present in all honey bee colonies in Michigan, and they spread diseases to honey bees. One of the biggest challenges to keeping honey bees healthy is learning how to monitor and manage varroa mites, and right now, successful beekeeping requires a good pest management plan. The [Honey Bee Health Coalition's Tools for Varroa Management guide](#) offers a comprehensive overview of varroa mite management options.

Learn about other honey bee health topics

In addition to learning about varroa mites, it is important to learn about honey bee nutrition, diseases and other colony health issues. Many beekeeping resources are listed on the [MSU Extension Beekeeping & Pollinators website](#) and [Michigan Pollinator Initiative's resources](#) for beekeepers. Key resources include:

- [Diagnostic tools for honey bee diseases online learning module](#)
- [2024 European foulbrood webinar recording](#)
- [Diagnostic labs and services for beekeepers](#)
- [Honey Bee Nutrition Guide from the Honey Bee Health Coalition](#)

Disclaimer: For a specific list of resources in the above description, view the Recommended Resources area of this section.



BEEKEEPING

COMMON QUESTIONS

01

How much care do honey bee colonies need?

Beekeepers should plan to inspect honey bee colonies to make sure the colonies have the appropriate amount of space in the hive, have sufficient food stores, are queenright, and are healthy. The frequency of inspections depends on the time of year. In the spring when colonies are quickly building up in population and collecting lots of nectar, new beekeepers may inspect the colonies every one to two weeks. Later in the summer when the colony build up slows down, beekeepers may find they do inspections every two to three weeks. Beekeepers usually harvest surplus honey in the fall and continue with regular inspections. Colony inspections in the winter are infrequent and are usually performed just to check the colony's food stores.

02

Where can I purchase honey bees and beekeeping equipment?

Since beekeeping has a steep learning curve, it's best to learn as much as you can before you purchase bees and equipment. MSU does not endorse specific vendors, but local beekeeping clubs may provide recommendations. Beekeeping clubs may also make bulk purchases of bees and equipment, or bee club members may sell bees to each other. It is also useful to visit the vendor room at beekeeping conferences so you can handle and try on beekeeping equipment and gear.

The [Northern Bee Network](#) is an online platform that allows beekeepers to buy and sell honey bees. Many beekeeping clubs also connect members who are buying and selling bees. MSU has short videos that explain [options for purchasing honey bees](#) and how to get started with [installing package colonies](#) and [installing nucleus \(nuc\) colonies](#).

03

How many honey bee colonies should I start with?

MSU recommends beekeepers begin with two or three honey bee colonies. Keeping just one colony can be difficult for the beekeeper to troubleshoot and resolve issues as they arise. Beekeepers often move brood or food frames between hives to address queen issues and other colony needs, and colonies in the same yard can be used to support each other.

New beekeepers should be aware that healthy colonies grow in population in the spring and summer. Beekeepers should be prepared to manage large honey bee colonies unless they make splits or do other hive manipulations. The [Michigan State University Beekeeping YouTube channel](#) has webinar recordings on managing growing colonies throughout the season and splitting on colonies.

04

How can I find a beekeeping mentor?

Traditionally, many people learned beekeeping by apprenticing with a mentor. A mentor who has years of experience successfully keeping bees alive can be a wonderful resource. Due to the large number of beginning beekeepers, however, many new beekeepers find they are not able to find a mentor. Often a good approach to working with a mentor is to offer to help the mentor in the bee yard by lifting, taking notes or whatever task needs to get done. If you aren't able to find a beekeeper mentor, you can get advice and guidance from MSU Extension programs and your local beekeeping club.

05

What are the rules and regulations for beekeeping in Michigan?

MSU helps beekeepers by consolidating beekeeping related rules, regulations and guidelines in the state in the [Michigan Beekeeping Rules and Regulations](#) document. In this document, you will find information related to beekeeping and the Michigan Right to Farm Act and [Generally Accepted Agricultural and Management Practices \(GAAMPs\)](#), organic beekeeping, transporting hives to and from Michigan, honey processing rules and regulations for selling honey in Michigan, and more!

Additional resources on beekeeping rules and regulations include:

- [Rules and regulations for selling honey in Michigan](#)
- [Producing a Value-Added Product on the Farm: Liquid Honey](#)
- [Generally accepted agricultural and management practices for honey bees](#)
- [What to do if you suspect your honey bee colonies are harmed by pesticides](#)
- [When do beekeepers in Michigan need pesticide certification and licenses?](#)
- [EPA issues advisory for substances used to control varroa mites in beehives](#)



RESOURCES & PARTNERS

Necessary Resources

NEW COLONIES

- **Northern Bee Network - online directory for selling and purchasing local bees** (<https://northernbeenetwork.org/>)
- **Beginning beekeeping: installing a nuc - video** (<https://www.youtube.com/watch?v=G2iDuLVQBfs>)
- **Beginning beekeeping: installing a package - video** (https://www.youtube.com/watch?v=_V0UCW8mLYo)
- **Hiving bees in rain and sleet - video** (<https://www.youtube.com/watch?v=Jm9j7ARfa3k>)
- **First year colonies: what to do when the bees arrive - webinar recording** (<https://www.youtube.com/watch?v=fbRAMhWRZ4U>)

Varroa mites and honey bee diseases

- **[Tools for varroa management from the Honey Bee Health Coalition - guide](#)**
- **[Diagnostic tools for honey bee diseases - online learning module](https://pollinators.msu.edu/sites/_pollinators/rise360/diagnostic-tools-for-honey-bee-diseases/index.html#/)**
(https://pollinators.msu.edu/sites/_pollinators/rise360/diagnostic-tools-for-honey-bee-diseases/index.html#/)
- **[European foulbrood office hours - webinar recording](https://www.youtube.com/watch?v=Fr4A_bbisRI)**
(https://www.youtube.com/watch?v=Fr4A_bbisRI)
- **[Diagnostic labs and services for beekeepers](https://www.canr.msu.edu/news/diagnostic-labs-and-services-for-beekeepers)**
(<https://www.canr.msu.edu/news/diagnostic-labs-and-services-for-beekeepers>)
- **[Honey Bee Health Coalition](https://honeybeehealthcoalition.org/)** (<https://honeybeehealthcoalition.org/>)
- **[Michigan honey bee veterinarians - contact list](https://www.canr.msu.edu/news/michigan-honey-bee-veterinarians-contact-list)**
(<https://www.canr.msu.edu/news/michigan-honey-bee-veterinarians-contact-list>)
- **[Find a bee vet from the Honey Bee Veterinary Consortium - contact list](https://hbvc.org/content.aspx?page_id=824&club_id=213546)** (https://hbvc.org/content.aspx?page_id=824&club_id=213546)

General beekeeping resources

- **[Apiculture programs and resources from MSU Extension](https://www.canr.msu.edu/news/apiculture-extension-update-from-michigan-state-university-extension)**
(<https://www.canr.msu.edu/news/apiculture-extension-update-from-michigan-state-university-extension>)
- **[Getting started with beekeeping in Michigan](https://www.canr.msu.edu/news/getting-started-with-beekeeping-in-michigan)**
(<https://www.canr.msu.edu/news/getting-started-with-beekeeping-in-michigan>)
- **[Is Beekeeping Right for Me? – online course](https://www.canr.msu.edu/courses/msu-is-beekeeping-right-for-me)**
(<https://www.canr.msu.edu/courses/msu-is-beekeeping-right-for-me>)
- **[What we wished we'd known in the bee-gining](https://www.canr.msu.edu/news/what-we-wished-we-d-known-in-the-bee-gining)**
(<https://www.canr.msu.edu/news/what-we-wished-we-d-known-in-the-bee-gining>)
- **[Ask Extension form for Michigan residents to ask beekeeping questions](https://pollinators.msu.edu/questions/)** (<https://pollinators.msu.edu/questions/>)
- **[List of Michigan beekeeping clubs from Michigan Beekeepers Association](https://www.michiganbees.org/Michigan-Bee-Clubs)** (<https://www.michiganbees.org/Michigan-Bee-Clubs>)
- **[Beekeeping in Northern Climates Manual from the University of Minnesota Bee Lab](https://beelab.umn.edu/manuals)** (<https://beelab.umn.edu/manuals>)
- **[Honey Bee Nutrition Guide from the Honey Bee Health Coalition](https://honeybeehealthcoalition.org/nutritionguide/)**
(<https://honeybeehealthcoalition.org/nutritionguide/>)
- **[Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish \(ELAP\) Program from the USDA Farm Service Agency](https://www.fsa.usda.gov/resources/programs/emergency-assistance-livestock-honeybees-farm-raised-fish-elap)**
(<https://www.fsa.usda.gov/resources/programs/emergency-assistance-livestock-honeybees-farm-raised-fish-elap>)

Websites, email newsletter and social media

- **[MSU Extension Beekeeping & Pollinators website](https://www.canr.msu.edu/pollination/index)**
(<https://www.canr.msu.edu/pollination/index>)
- **[Michigan Pollinator Initiative website](https://pollinators.msu.edu/)** (<https://pollinators.msu.edu/>)
- **[MSU Extension Beekeeping & Pollinators events](http://bit.ly/MSUpollinatorevents)**
(<http://bit.ly/MSUpollinatorevents>)
- **[MSU Extension Beekeeping & Pollinators email newsletter](http://bit.ly/MSUENews)**
(<http://bit.ly/MSUENews>)
- **[MSU Extension's Beekeeping & Pollinators Videos](https://www.canr.msu.edu/search?tag=pollinators%20and%20pollination&county=&contentTypeOption=VideoObject&siteContext=pollinators%20and%20pollination&tagUsage=&searchType=searchBar&hideHomePage=true#results)**
(<https://www.canr.msu.edu/search?tag=pollinators%20and%20pollination&county=&contentTypeOption=VideoObject&siteContext=pollinators%20and%20pollination&tagUsage=&searchType=searchBar&hideHomePage=true#results>)
- **[Michigan State University Beekeeping YouTube channel](https://www.youtube.com/channel/UCD7AYI-MRu_3mp3oRW1kVWw/videos)**
(https://www.youtube.com/channel/UCD7AYI-MRu_3mp3oRW1kVWw/videos)
- **[Michigan State University Beekeeping Facebook page](https://www.facebook.com/MSUHoneyBees/)**
(<https://www.facebook.com/MSUHoneyBees/>)
- **[Michigan Pollinator Initiative Facebook page](https://www.facebook.com/MichiganPollinatorInitiative/)**
(<https://www.facebook.com/MichiganPollinatorInitiative/>)

PARTNERS

- **[Michigan Beekeepers Association](https://www.michiganbees.org/)** (<https://www.michiganbees.org/>)
- **[Local beekeeping clubs in Michigan](https://www.michiganbees.org/Michigan-Bee-Clubs)**
(<https://www.michiganbees.org/Michigan-Bee-Clubs>)