

Beekeeping Best Practices



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Expanded by Kathy Hossler

Hive Location

- Ideally have a SE orientation with no ground moisture and more than 6 hours of sunlight daily.
- No flight obstructions, unless you are using them to direct flight away from high traffic areas.
- Make sure the hives are more than 6 inches off the ground and have ventilation. Provide a windbreak in back.
- Access by vehicle is important, as is nearby storage for hive equipment & tools.
- Inform neighbors, especially those with swimming pools.
- <https://www.keepingbackyardbees.com/8-proper-beehive-placement-tips/>



Watering Station

- Provide a water source less than 100 feet from hive.
- Prevent drowning by providing landing sites.
- If you do not provide a water source they may end up at neighbors pool or birdbath.





Feeding

- In Spring colonies should be fed a 1:1 sugar solution to stimulate worker production prior to the nectar flow.
- In Fall they should receive a 2:1 solution to ensure they have enough reserves for the winter.
- All newly established colonies should be fed throughout the summer, ***do not harvest honey from them.***

Hive Density

- The number of hives any area can support will vary, and depends on what foraging is available.
- *If you try to support too many, bees will not be able to collect enough resources.*
- A good rule of thumb is 2 in urban areas and up to six in ½ acre suburban lots.



Photo Credit Roseann Harkins

Working the Hive

- Try not to open the hive if the temperature is less than 60°F.
- Ideally there should be little wind, and it should be partly sunny, between 10:00 AM and 4:00 PM when the majority of foragers are out and about.
- <https://www.keepingbackyardbees.com/right-conditions-for-inspections/>



Inspection Schedules

- After installation – first inspection should occur to ensure queen has begun to lay.
- Routine inspections to monitor the reproductive status of colony to prevent swarms, and check for pests, parasites and diseases.
- Inspections should occur every 10 - 14 days.
- All inspections should have a purpose!





Apiary Hygiene

Reduce the risk of disease transmission and robbing.

- Clean hive tools between uses to reduce chance of disease moving from one colony to another.
- Don't leave honey/wax outside hives to prevent robbing.
- Wash bee suit on a regular basis
- Rotate out old comb. Replace every 3 – 5 years.

Integrated Pest Management

- Use a variety of techniques to keep pests under control. May include physical aspects such as traps and screened bottom boards; biological methods such as nematodes and drone comb removal, chemical such as approved miticides, and antibiotics.
- Regular inspections for hive beetles, mites and diseases.
- Rotate chemical control methods to reduce resistance.
- Testing for Varroa: <https://pollinators.msu.edu/resources/beekeepers/varroa-mite-monitoring1/>
- <https://www.clemson.edu/extension/beekeepers/fact-sheets-publications/pest-management-publication.html>

Varroa Management Resources

- <https://honeybeehealthcoalition.org/varroa/>



Apiary Security

- Protect colony from intruders, both human and animal with signage and fencing.
- Use barriers to direct movement of foragers away from high traffic areas.
- Monitor the temperament of your colonies, and requeen overly defensive hives.



Colony Registration

- In Delaware the law requires you to register your hives annually.
- www.de.gov/honeybees
- Information about that and other bee laws:
<https://delcode.delaware.gov/title3/c075/index.shtml>



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Colony Protection

- Establish No-spray zones with groundskeepers.
- Sign up for DDA Beecheck (aka Driftwatch). <https://driftwatch.org/>
- Sign up for DNREC Mosquito Spray Notifications.
<http://www.dnrec.delaware.gov/fw/mosquito/Pages/MC-SZNS.aspx>



Hive Journal and Hive Records

- Maintain accurate records of every inspection to ensure that you are able to track the health of your bees.
- <https://carolinahoneybees.com/bee-hive-record-keeping/>
- Keep an Equipment Inventory List including supplier, model, and cost.



Beekeeping Association Membership

- Local beekeeping associations provide assistance with classes, mentors, information relevant to your location.
- Additional information available through BeeCulture, American Beekeeping Journal or other magazines; beginning beekeeper course/textbooks, online courses and webinars.



Additional Considerations

- Natural Beekeeping Methods
 - <https://www.beeculture.com/certified-naturally-grown/>
- Hive Products & Disposition: honey, beeswax, propolis
 - <https://www.keepingbackyardbees.com/marketing-hive-products/>
- Weather Station & Phenology Observations

Get to know your State Apiarist!



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Additional Web Resources

- Pennsylvania State University Honey Bee Information: www.ento.psu.edu/extension/bees and www.beekeeping101.psu.edu
- Penn State University free PDF “A Field Guide to Honey Bees and Their Maladies”: <http://extension.psu.edu/publications/agrs-116>
- Bee Informed Partnership: www.beeinformed.org
- Mid Atlantic Apiculture Research and Extension Consortium (MAAREC): <https://agdev.anr.udel.edu/maarec/>
- Eastern Apiculture Society (EAS): www.easternapiculture.org
- University of Minnesota Bee Lab: www/beelab.umn.edu
- <https://u.osu.edu/beelab/courses>
- **There are lots of other great resources out there!!!**