

# Beekeeping in Denver Urban Gardens Community Gardens

**Policy:** Denver Urban Gardens strongly supports beekeeping and believes community gardens provide excellent locations for hives.

**Scope:** This policy applies to all gardeners growing in community gardens managed by Denver Urban Gardens.

# Background

Urban beekeeping introduces more beneficial pollinators in gardens, thus increasing crop yield and providing more local whole food for residents. Honeybees, on which we rely for the pollination of a large proportion of our food, are dying in large numbers due to colony collapse disorder (CCD). The causes of CCD are not fully understood, but it may be the result of a perfect storm of stresses on the honeybee, including mites and parasites, pesticides that interfere with the bees' navigation skills, and the unnatural conditions in which many commercial hives are kept. Small-scale urban beekeeping allows bees to live in more natural conditions, so each new hive will help to protect this vital part of our ecosystem. Just as each community garden makes a small but significant contribution to the health, diversity, and sustainability of our food system, keeping a beehive is a way for a small group of people to make a difference on an important and relevant environmental issue.

## Process

If gardeners in your community garden want to host honey bees, you have two options: DUG encourages you to either arrange with a local beekeeper to place and maintain a hive or two in the garden, or start a hive to be maintained by the gardeners themselves if already experienced with beekeeping.

For community gardens that are considering beekeeping, DUG has developed the following guidelines for complying with local ordinances, maintaining good relations within the garden and the surrounding neighborhood, and creating and maintaining the hive. Please follow these five steps to ensure that your community will benefit the most from beekeeping:

### 1. Call Denver Urban Gardens

If you are interested in hosting a beehive in your community garden, please call DUG (303·292·9900). DUG staff will:

- Determine if your local beekeeping ordinance allows beekeeping in your garden. The ordinances may or may not allow beekeeping in certain zone districts (see the local requirements chart and accompanying links on pages 6-9). If it is not, you may still be able to have a beehive, but you may need to apply for a zoning variance. DUG will help you navigate that process.
- Discuss the issue with the property owner where your garden is located in order to get approval to host a hive.

• Meet with you to determine if your community garden is an appropriate site for a beehive and help you decide the best place to put the hive in the community garden.

The community garden should designate one gardener or a group of gardeners to manage the beehive in your community garden. They will be responsible for making sure the hive is maintained properly and removing the hive if necessary. DUG can help you choose someone who fits this description.

#### 2. Know DUG's beekeeping recommendations and your local requirements

The policy developed by DUG establishes a few rules for beehives, mainly designed to minimize accidental contact between bees and neighbors. Please review these, as well as the summary of your local ordinance listed in the chart beginning on page 6 of this document. Following your local ordinance will ensure that your beehive is allowable, and being mindful of the DUG recommendations will aid in maintaining positive relationships inside and outside the boundaries of your community garden.

#### **DUG recommendations:**

#### Number of Hives

Many ordinances allow more than one been per zone lot. However, DUG believes it is prudent not to start with more than two hives in any community garden. This is designed to ensure the success and safety of the first hives before the installation of additional hives.

#### Placement of Hives

It is recommended by most cities to place hives at least 5 feet from the side and rear of property lines. DUG further encourages gardeners to place hives in inconspicuous locations as far as away from sidewalks and other public areas as possible, exceeding the 5-foot requirement whenever necessary.

#### Barriers

Make sure your community garden has a hedge or fence at least six feet high between the beehive and the property line.

#### Storage of Equipment

All beekeeping equipment, especially empty hive parts that may attract pests, should be kept in the community toolbox or shed.

#### Local Requirements Chart:

The Local Requirements Chart, beginning on page 6, provides basic beekeeping requirements, though it is not exhaustive. For further details see the link for your local ordinance in the column on the far right of the chart.

## 3. Be a good neighbor

In addition to the legal requirements of the ordinance, DUG believes that beehives will be more successful in community gardens if some additional steps are taken to keep everyone happy—the gardeners, the neighbors, and the bees.

#### Gain consensus amongst affected people

Before installing a hive in a community garden, make sure you have:

- Worked with DUG to get permission from the property owner
- Obtained the consent of ALL gardeners in the community garden
- Notified nearby neighbors

Some gardeners or neighbors may be resistant to the idea of a beehive in the community garden. In this case, try to arrange a meeting with them to discuss their concerns and provide information. Explain that many bees visit the community garden and neighborhood already, and that honeybees rarely sting while they are out foraging. It may also help to inform them about the safeguards that are recommended, and of your efforts to reduce the chance of accidental contact between bees and people. If unanimous support is unattainable amongst the gardeners, your community garden may not be a good place for a hive.

#### Avoid aggressive bees, yet prepare for stings and allergies

When starting a hive, choose a race of bees bred for gentleness (see the *Resources* section for more information). If your initially gentle bees start to become aggressive, you can re-queen your hive, which can reintroduce more friendly stock.

Honeybees generally sting only to defend their hive. They rarely sting when out foraging. Thus, gardeners are unlikely to be stung, unless they are working with the bees directly in the hive. However, contact between bees and community members is something to be prepared for. For most people, stings produce a mild reaction, causing some pain and localized mild to moderate swelling. Benadryl can provide relief for these symptoms.

A very small number of people have a dangerous allergy to bee stings, and can go into anaphylactic shock if stung. In such cases, an EpiPen can provide a life-saving dose of epinephrine. EpiPens are available by prescription only, and are dangerous if used improperly, so they should not be left unattended in a community garden. The best course is to identify any gardeners or neighbors with a severe allergy and encourage them to obtain an EpiPen, if they do not already have one, and carry it with them while at or near the garden.

#### Bees need water too!

Keep a source of water (e.g. a large bowl with some floating sticks for the bees to land on) within 20 feet of the hive. Bees need water, and providing them with a source makes them less likely to visit in the neighbors' kiddy pools and birdbaths.

#### <u>Sweetness</u>

Consider sharing some of the honey from the hive with your neighbors. They will be more likely to support you if they can see how they benefit from the hive.

#### Maintaining a Healthy Hive

A beehive that is not properly maintained can become a nuisance. DUG reserves the right to require the gardeners or local beekeeper responsible for a hive to remove it from the community garden if necessary.

## 4. Starting a beehive

Once you are in compliance with DUG's recommendations and your local policies, and have the support of the gardeners and neighbors, you're ready to start beekeeping! This is the time to decide what type of hive to have—two possibilities include the traditional white-box Langstroth hive and the top bar hive—and whether to buy one or build it yourself. To begin learning about beekeeping, take a class and read up on natural beekeeping. The *Resources* section lists local beekeeping classes, helpful books, and websites where you can learn more about organic beekeeping, download free plans to build a top bar hive, and find the supplies and equipment you will need.

The most important thing you need, of course, are bees! New beekeepers can obtain bees in several ways:

- Capture a swarm. When homeowners notice a swarm of bees on their property, they often call local beekeepers to come and collect them. You can communicate with the Denver Beekeepers Association swarm list by contacting local beekeepers and volunteers. See *Resources* section for more information.
- Obtain a split from an existing hive. A local beekeeper who is ready to split a hive, which usually occurs in the beginning of the warm season, may be willing to share some bees.
- Buy a package of bees with a queen. See the *Resources* section for local suppliers.

# 5. Maintaining a beehive

Once your hive is up and running, it needs occasional maintenance. See the Resources section for books and websites. A few more suggestions:

- Replenish the bees' source of water regularly.
- Plant plenty of bee-friendly plants in your community garden plot and in common areas of the garden. For a list of good plants for Colorado that attract bees, see the Resources section.
- Go organic! As with vegetable gardening, beekeeping in DUG community gardens should follow organic practices, and the use of chemical medications and treatments in beehives is prohibited. For information on organic beekeeping methods, see the Resources section.
- Sometimes, a large number of bees in a hive will leave to look for a place to start a new colony. This is a swarm. When bees swarm, they often cluster on a nearby bush or tree branch while scout bees look for a good location for a permanent home. The huge number of bees clustered together makes an impressive sight, but bees are usually not aggressive while in a swarm, so it is not a cause for alarm. However, if possible the swarm should be captured and placed in a managed hive, so the bees do not move into a wall or attic of a nearby house. If your bees swarm, call DUG or a beekeeper that collects swarms. You can find a contact list of volunteers who will remove or pick up a swarm on the Denver Beekeepers Association website (http://www.denverbee.org/contacts-for-swarm-pickup.html).

## **Beekeeping Resources**

Denver Urban Gardens 303·292·9900 www.dug.org

Classes & Education

Backyard Hive in Eldorado Springs (www.backyardhive.com) DeLaney Community Farm (http://dug.org/about-delaney/) Denver Beekeepers Association (http://www.denverbee.org) Denver Urban Homesteading (http://www.denverurbanhomesteading.com/beekiping.htm) Honey Bee Online Studies (http://www.hobos.de/en)

<u>Books</u>

The Appropriate Beehive: An Introduction to Topbar Beekeeping (Marty Hadison) The Art & Adventure of Beekeeping (Ormond Abei) The Barefoot Beekeeper (P. J. Chandler) The Complete Idiot's Guide to Urban Homesteading (Sundari Elizabeth Kraft) Natural Beekeeping: Organic Approaches to Modern Apiculture (Ross Conrad)

#### <u>Websites</u>

Organic beekeeping Yahoo! group: <u>http://groups.yahoo.com/group/organicbeekeepers</u> Topbar hive Yahoo! group: <u>http://pets.groups.yahoo.com/group/TopHive</u> www.biobees.com (This site has an active discussion forum on topbar beekeeping.)

http://www.wasatchbeekeepers.com/top-bar-hive-plans-david-bench/ (This site provides plans for top bar beehive construction.)

<u>http://www.pollinator.org/PDFs/ColoradoPlateau.rx2.pdf</u> (List of pollinator plants appropriate for Colorado begins on page 16.)

http://www.hobos.de/en (HOBOS [HOney Bee Online Studies] is an interactive teaching concept that allows, students, parents, teachers and community members to delve into a real honeybee colony via the Internet. A specially conceived beehive is equipped with sensors, measuring devices and several cameras, as well as a thermographic camera. All data are accessible online and are stored on a long-term basis.)

#### Mentors

Call DUG or contact Marygael Meister at the Denver Beekeepers Association (<u>marygael@gmail.com</u>, <u>www.denverbee.org</u>) to get paired with an experienced beekeeper to help you.

#### Obtaining bees

You can order a package of bees from Denver Beekeepers Association (www.denverbee.org).

#### Removing swarms

If your bees swarm, contact a beekeeper to collect them: Denver Beekeepers Association: <u>http://www.denverbee.org/contacts-for-swarm-pickup.html</u> Bees-on-the-Net: <u>http://www.bees-on-the-net.com/colorado-beekeepers.html#</u>

# Local Requirements Chart

The Local Requirements Chart provides basic beekeeping requirements, yet it is not exhaustive. Please review this chart, and see the link to your local ordinance in the column on the far right for further details. Please also reference Denver Urban Gardens' beekeeping recommendations, located on page 2.

City	Ordinance Summary	Further Information
Arvada	Number of Hives: -One-quarter acre or less. Two (2) colonies. -Between one-quarter acre and one-half acre. Four (4) colonies. -Between one-half and one acre. Six (6) colonies. -More than one acre. Eight (8) colonies.Placement: No hive box shall be located within twenty-five (25) feet from any adjoining property line. No hive box should be located in any front setback. Barriers: Not discussed in ordinance, please refer to DUG recommendations.Storage: Not discussed in ordinance, please refer to DUG recommendations.Permit required: No	http://static.arvada.org/docs/C ommunity_Agriculture_Guide_ 2012-1-201211271038.pdf Information about beekeeping is located on page 6.
Aurora	Number of Hives:-One-quarter acre or less: Two (2) coloniesBetween one-quarter acre and one-half acre: Four (4) coloniesBetween one-half and one acre. Six (6) coloniesMore than one acre. Eight (8) colonies.Placement: All hives shall be located at least five feet from any adjoining property with the back of the hive facing the nearest adjoining property.Barriers: All hives require a barrier at least six feet tall consisting of a solid wall or fence parallel to the property line and extending ten feet beyond the colony in each direction.Storage: Upon their removal from the hive, bee comb or other materials that might encourage robbing must be disposed of in a sealed container or placed within a building or other bee-proof enclosure.Permit Required: No	http://www.beesource.com/re sources/elements-of- beekeeping/laws-related-to- bees-and-beekeeping/aurora- colorado-beekeeping- ordinance/
Commerce City	Number of Hives: Beehives are not allowable on properties ofless than .5 acres. However, properties between .5 acres and 5acres are allowed to have up to 20 colonies.Placement: Not discussed in ordinance, please refer to DUGrecommendations.Barriers: Not discussed in ordinance, please refer to DUGrecommendations.Storage: Not discussed in ordinance, please refer to DUGrecommendations.Storage: Not discussed in ordinance, please refer to DUGrecommendations.Storage: Not discussed in ordinance, please refer to DUGrecommendations.Permit Required: No	http://www.adcogov.org/Docu mentCenter/Home/View/492 Information about beekeeping is located on page 4-244. Commerce City Currently has no beekeeping policy, therefore this information references the policies set by Adams County.

Edgewater	Number of Hives: Two (2) hives per zone lot.Placement: Hives must be in rear 1/3 of zone lot with a 5 footsetback from side and rear zone lot lines.Barriers: Hives must be screened so that the bees mustsurmount a 6 foot barrier, which may be vegetative, beforeleaving the property.Storage: No outdoor storage of any bee paraphernalia or hivematerials not being used as a part of a hive.Permit Required: NoBeekeeping is prohibited in Edgewater.	http://www.denvergov.org/Por tals/646/documents/DZC/Full CodePDF/DZC_010713.pdf Information about beekeeping located on page 11.8-4.
		ewaterpdf.html Information about beekeeping located in section 7-6-80 of the code.
Englewood	With the implementation of Englewood's first community garden in 2010, it was decided that beekeeping would be prohibited, due to the risk of stings and allergies. For further questions, email the Englewood Webmaster at: <u>mailto:Webmaster@englewoodgov.org</u>	
Golden	Number of Hives:Golden evaluates each application on a case- by-case basis.Placement:All hives shall be located at least five feet from any adjoining property with the back of the hive facing the nearest adjoining property.Barriers:Not discussed in ordinance, please refer to DUG recommendations.Storage:Not discussed in ordinance, please refer to DUG recommendations.Permit Required:Yes	http://sitetools.cityofgolden.net /CodePrint.asp?CodeID=841 Information about beekeeping is topic 7. Special use permit info: http://www.cityofgolden.net/cit y-services/chickens-small- animal-permits/
Lakewood	Number of Hives:Allowed one (1) hive per 6,000 square feet lot area.Placement:Locate hives in side or rear yard, and meet minimum setbacks for accessory structures.Barriers:All hives located on the ground level within 25 feet of any property line require a flyaway barrier of at least 6 feet in height. Barriers must be located within 5 feet of the hive, and extend at least 2 feet on either side.Storage:Not discussed in ordinance, please refer to DUG recommendations.Permit Required:Yes	http://www.lakewood.org/zoni ng/ Information about beekeeping is found under "UrbanAgricultureBrochureApi aries(Bees)" link in the upper right corner in the "What's Happening" box.

Littleton	Number of Hives: Two (2) hives are allowed on a lot of a	http://jeffco.us/planning-and-
	minimum of 4,000 square feet. For each additional 4,000 square	zoning/regulations/zoning-
	feet, one (1) hive is permitted.	resolution/
	Placement: Hives shall meet all setback requirements, unless	Find section 05 Accessory
	screened from neighbors' views by a minimum 5-foot high	Uses under the Individual
	closed fence.	Sections of the Zoning
	Barriers: Not discussed in ordinance, please refer to DUG	Resolution. Information about
	recommendations.	beekeeping is located on page
	Storage: Not discussed in ordinance, please refer to DUG	3.
	recommendations.	
	Permit Required: Yes	(Littleton currently has no
		beekeeping policy, therefore
		this information references
		the policies set by Jefferson
		County.)
Sheridan	Number of Hives: Arapahoe County only allows beekeeping on	(Sheridan currently has no
	land of one acre or more.	beekeeping policy, therefore this information references the
	Placement: Not discussed in ordinance, please refer to DUG recommendations.	policies set by Arapahoe
		County.)
	Barriers: Not discussed in ordinance, please refer to DUG recommendations.	County.)
	Storage: Not discussed in ordinance, please refer to DUG	
	recommendations.	
	Permit Required: No	
Thornton	Number of Hives:	http://www.cityofthornton.net/
	-One-quarter acre or less. Two (2) colonies. -Between one-quarter acre and one-half acre. Four (4) colonies.	Departments/CityManager/City Clerk/CityRecords/Documents
	-Between one-half and one acre. Six (6) colonies.	/Folder 08/Ordinance 3189
	-More than one acre. Eight (8) colonies.	CD2012-022 Amending
	Placement: Hives shall be kept in the rear yard, and shall be set	Section 6-21 Animals
	back at least 5 feet from the rear and side property lines. All bee	Prohibited and Enacting Article
	colonies shall be kept in hives that can be opened for inspection.	III Regulating Beekeeping.pdf
	Barriers: All hives located on the ground level within 25 feet of	<u></u>
	any property line require a flyaway barrier of at least 6 feet in	Permit application:
	height. Barriers must be located within 5 feet of the hive, and	http://www.cityofthornton.net/
	extend at least 10 feet on either side.	Departments/CityDevelopment
	NOTE: All community garden hives must be surrounded by a	/Development/Documents/BUI
	fence on all sides to secure the hive from access by unauthorized	LDING
	persons	INSPECTION/Forms_Bldg/201
	Storage: Upon their removal from the hive, bee comb and similar	2/Beekeeping_permit_applicati
	materials shall promptly be disposed of in a sealed container or	<u>on.pdf</u>
	placed within a building or other bee-proof enclosure.	
	Permit Required: Yes	

Westminster	Beekeeping is prohibited in Westminster.	For further information, use Access Westminster: <u>http://www.ci.westminster.co.</u> us/ContactUs.aspx
Wheat Ridge	Number of Hives: Not discussed in ordinance, please refer toDUG recommendations.Placement: Beehives cannot be placed in front lots, and must beplaced at least 15 feet from all side and rear property lines.NOTE: Beehive structures must be enclosed within a fences areaor fenced yard.Barriers: Not discussed in ordinance, please refer to DUGrecommendations.Storage: Not discussed in ordinance, please refer to DUGrecommendations.Permit Required: No	http://www.ci.wheatridge.co.u s/DocumentCenter/Home/Vie w/2457 Information about beekeeping is located on page 10.