

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 in the Denver Urban Gardens (DUG) network.

Background: Urban beekeeping introduces more beneficial pollinators into gardens, thus increasing crop yield and providing more local fresh 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 artificial 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 large-scale environmental issue.

Process: If gardeners in your community garden want to host honeybees, 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 they are 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 most from beekeeping:

1. Preliminary Inquiries

If you are interested in hosting a beehive in your community garden, please follow these steps:

 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 8-12). If not, you may still be able to have a beehive, but you may need to apply for a zoning variance (an exception to the standard zoning rules). DUG will help you navigate that process. If you have questions or need help interpreting your local policies, contact Shannon at DUG (303-292-9900) or your local planning department.

- Together, you and DUG will discuss the issue with the property owner where your garden is located in order to get approval to host a hive.
- DUG will 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.
- You must obtain unanimous consensus from all the gardeners at your garden in favor of hosting a beehive.
- 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 guidelines 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 8 of this document. Your local ordinance may have requirements on how many hives are allowed, where the hives should be placed, etc. 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 guidelines:

Number of Hives

Many ordinances allow more than one beehive 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

Most cities recommend placing hives at least 5 feet from the side and rear of property lines (see the Local Requirements chart to see what your city requires). DUG further encourages gardeners to place hives in inconspicuous locations as far as possible from sidewalks and other public areas, exceeding the 5-foot requirement whenever possible.

Barriers

Make sure your community garden has a hedge or fence at least six feet high between the beehive and the property line, to keep bees in the garden and away from neighbors.

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 8, 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.

*Although DUG has done our best to compile accurate local policy information, information can change over time and therefore older documents may not be accurate or all-inclusive. If you are thinking of beekeeping in your garden, it is a good idea to call your city or county planning department in order to receive the most updated and comprehensive information possible.

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 those affected

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 (100% consensus is <u>required</u>)
- 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. If this is the case, you can still be involved in community beekeeping by volunteering or sponsoring beekeeping in other DUG gardens. Call DUG to discuss your options.

Avoid aggressive bees, yet prepare for stings and allergies

When starting a hive, choose a race of bees bred for gentleness (see the *Resources* starting on page 5 section for more information). If your initially gentle bees start to become aggressive, you can re-queen your hive (see the *Resources* section for more information), 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 for which to be prepared. 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.

Sweetness

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 neighbors and unanimous support of the gardeners, 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. You can also decide whether to buy a hive 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 guidelines:

- All beekeeping <u>must</u> be 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.
- 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.
- 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:
 http://www.backyardhive.com/caring for bees in a top bar hive/classes
 /natural beekeeping classes colorado/

 DeLaney Community Farm: https://dug.org/delaney-events/

Hudson Gardens:

http://www.hudsongardens.org/explore-learn-/community-beekeeping/beekeeping-classes/upcoming-classes

 Dakota Bees (Wheat Ridge): http://dakotabees.com/Bee Classes.html

- Denver Beekeepers Association hive inspection workshop: http://www.denverbee.org/hive-inspection-workshop.html
- Denver Urban Homesteading Meetup Group: http://www.meetup.com/Greater-Denver-Urban- Homesteaders/events/past/?scroll=true#past
- Univ. of Montana online certification: http://www.umt.edu/sell/programs/bee/default.php
- Honey Bee Online Studies: http://www.hobos.de/en

Books

- 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)

Websites

- Organic beekeeping Yahoo! group: http://groups.yahoo.com/group/organicbeekeepers
- Topbar hive Yahoo! group: http://pets.groups.yahoo.com/group/TopHive
- 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.)
- http://www.pollinator.org/PDFs/ColoradoPlateau.rx2.pdf
 (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.)
- Hudson Gardens provides a resource page that lists books, organizations, and suppliers: http://www.hudsongardens.org/explore-learn-/community-beekeeping/beekeeping-resources

Mentors

Call DUG or contact Marygael Meister at the Denver Beekeepers Association (303-482-6362, www.denverbee.org) 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: http://www.denverbee.org/contacts-for-swarm-pickup.html
- Bees-on-the-Net: http://www.bees-on-the-net.com/colorado-swarm-removal/

Re-queening a hive

For an overview, see http://www.somersetbeekeepers.org.uk/requeen.html

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. It is a good idea to call your local planning department to verify your area's requirements. Please also reference Denver Urban Gardens' beekeeping guidelines, located on page 2.

City	Ordinance Summary	Further Information
Arvada	Number of Hives:	https://static.arvada.org/do
7117000	-One-quarter acre or less: Two (2) colonies.	cs/Community Agriculture
	-Between one-quarter acre and one-half acre:	Guide 2012-1-
	Four (4) colonies.	201212171255.pdf
	-Between one-half and one acre: Six (6) colonies.	•
	-More than one acre: Eight (8) colonies.	Information about
	Placement: No hive box shall be located within	beekeeping is located on
	twenty-five (25) feet from any adjoining property	page 6.
	line. No hive box should be located in any front	
	setback.	
	Barriers: Not discussed in ordinance, please refer	
	to DUG guidelines.	
	Storage: Not discussed in ordinance, please refer	
	to DUG guidelines.	
	Permit Required: No	
Aurora	Number of Hives:	http://www.beesource.com/
	-One-quarter acre or less: Two (2) colonies.	resources/elements-of-
	-Between one-quarter acre and one-half acre: Four	beekeeping/laws-related-
	(4) colonies.	to-bees-and-
	-Between one-half and one acre. Six (6) colonies.	beekeeping/aurora-
	-More than one acre. Eight (8) colonies.	colorado-beekeeping-
	Placement: All hives shall be located at least five	ordinance/
	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.	
Commoras	Permit Required: No	Commorae City Currently
Commerce	Beekeeping regulations in Adams County vary	Commerce City Currently
City	depending on zone district type.	has no beekeeping policy, therefore this information
	Number of Hives:	
	Agricultural zone (A-1, A-2, A-3):	references the policies set

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	Less than one-half acre: no bees permitted	by Adams County.
	Between one-half acre and five acres: five	
	(5) colonies	http://www.broomfield.org/
	Residential estate zone (RE):	http://www.broomfield.org/ DocumentCenter/View/156
	Less than one acre: no bees permitted	1 DOCUMENTO THE PROPERTY OF TH
	Between one and five acres: five (5) colonies	Information about
	under special use permit	Information about
	Single family residential zone (R-1-A, R-1-C):	beekeeping is located on
	Less than one acre: no bees permitted	page IV-47 through IV-52
	Between one and five acres: five (5) colonies	
	under special use permit	
	Duplex zone (R2) and mobile home zone (MH): No bees permitted	For zoning information
	·	For zoning information, see:
	Multi-family zone (R-3, R-4):	
	No bees permitted Commercial zone (C-0, C-1, C-2, C-3, C-4, C-5, I-	https://co-
	1, I-2, I-3):	adamscounty.civicplus.com /DocumentCenter/Home/Vi
	Less than one acre: no bees permitted	ew/432
	Between one and five acres: five (5) colonies	<u> </u>
	Placement: Not discussed in ordinance, please	
	refer to DUG guidelines.	
	Barriers: Not discussed in ordinance, please refer	
	to DUG guidelines.	
	Storage: Not discussed in ordinance, please refer	
	to DUG guidelines.	
	Permit Required: Yes	
Denver	Number of Hives: Two (2) hives per zone lot.	http://www.denverbee.org/
	Placement: Hives must be in rear 1/3 of zone lot	ordinance.html
	with a 5 foot setback from side and rear zone lot	
	lines.	Information about
	Barriers: Hives must be screened so that the bees	beekeeping located on
	must surmount a 6 foot barrier, which may be	page 2.
	vegetative, before leaving the property.	
	Storage: No outdoor storage of any bee	
	paraphernalia or hive materials not being used as	
	a part of a hive.	
	Permit Required: No	
Edgewater	Beekeeping is prohibited in Edgewater, except for	https://www2.municode.co
	with a license in single-family detached dwellings.	m/library/co/edgewater/cod
		es/municipal_code
		Information about
		Information about
		beekeeping located in section 7-6-80 and 7-6-81
		of the code.
		or the code.

Englewood Golden	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: mailto:Webmaster@englewoodgov.org 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	http://cityofenglewood.org/fi lestorage/1441/1468/2265/ 1487/1586/2003_Hlth_Cod e_Chap_4_Animals.pdf http://www.cityofgolden.net /city-services/chickens- small-animal-permits/
	to DUG guidelines. <u>Storage</u> : Not discussed in ordinance, please refer to DUG guidelines. <u>Permit Required</u> : Yes	
Lakewood	Permitted in residential zone districts (R-1-43, R-1-18, R-1-12, R-1-9, R-1-6, R-2) 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	file:///Users/dug/Downloads /Urban%20Ag%20- %20Apiaries.pdf For zoning information, consult: http://www.lakewood.org/Pl anning/Development_Regu lations/Zoning_Ordinance. aspx Permit application:
	to DUG guidelines. Permit Required: Yes, except in the case of R-1-43 zone districts	file:///Users/dug/Downloads /SmallAnimalPermitZRChe cklist-2015-04-10-RE.pdf
Littleton	Number of Hives: -Less than one-half acre: four (4) coloniesBetween one-half acre and one acre: six (6) coloniesOne acre or larger: eight (8) coloniesOn property in which all hives are at least 200 feet from all property lines: no limit on colonies. Placement: Hives must be at least five (5) feet from adjoining property, and back of hive must face nearest adjoining property Barriers: If colony is within 25 feet of adjoining property, there must be a six foot high flyway barrier, made of solid wall or fence parallel to the property line and extending 10 feet beyond the	http://www.highlandbeekee pingclub.org/hlbkc/wp- content/uploads/2014/02/Li ttleton-Beekeeping- Ordinance-2009.pdf Zoning information: https://www.littletongov.org /index.aspx?page=560

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	colony in each direction Storage: Hive materials must be disposed of in a sealed container or placed within a building or other bee-proof enclosure NOTE: hives must have removable combs Permit Required: No	
Lone Tree	Beekeeping is NOT permitted except in planned development districts that allow agricultural uses. In the case of planned development districts, see DUG guidelines for all other requirements (number of hives, placement, barriers, storage).	http://www.cityoflonetree.c om/common/pages/Display File.aspx?itemId=1802664 For zoning information (to see where planned development districts are located), consult: http://www.cityoflonetree.c om/government/departmen ts_and_divisions/planning/ zoning
Louisville	Beekeeping is permitted EXCEPT within residential high-density districts. 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 acre and one acre: six (6) colonies One acre or larger: eight (8) colonies If all hives are at least 200 feet from property lines, there is no limit on the number of colonies Placement: Minimum 10 foot setback from side and rear property lines. No hives permitted within front yard setback. Barriers: Not discussed in ordinance, please refer to DUG guidelines. Storage: Not discussed in ordinance, please refer to DUG guidelines. Permit Required: No	https://www2.municode.co m/library/co/louisville/codes /code_of_ordinances?node Id=TIT6AN_CH6.24BE#! Information about beekeeping is located at section 6.24 For zoning information (to see where residential high density districts are located), consult: http://www.louisvilleco.gov/ home/showdocument?id=4 30
Sheridan	Number of Hives: Arapahoe County only allows beekeeping on land of one acre or more. Placement: Not discussed in ordinance, please refer to DUG guidelines. Barriers: Not discussed in ordinance, please refer to DUG guidelines. Storage: Not discussed in ordinance, please refer to DUG guidelines. Permit Required: No	(Sheridan currently has no beekeeping policy, therefore this information references the policies set by Arapahoe County.)

Thornton	Number of Hives:	https://www2.municode.co
	-One-quarter acre or less: Two (2) coloniesBetween one-quarter acre and one-half acre: Four	m/library/co/thornton/codes/code of ordinances?node
	(4) colonies.	Id=CO CH6AN ARTIIBE
	-Between one-half and one acre: Six (6) colonies.	<u> 33_01.07.114_7.11411115E</u>
	-More than one acre: Eight (8) colonies.	
	Placement: Hives shall be kept in the rear yard,	Permit application:
	and shall be set back at least 5 feet from the rear	https://www.cityofthornton.
	and side property lines. All bee colonies shall be	net/government/citydevelo
	kept in hives that can be opened for inspection. Barriers: All hives located on the ground level	pment/Documents/develop ment-services/building-
	within 25 feet of any property line require a flyaway	inspection/forms/beekeepin
	barrier of at least 6 feet in height. Barriers must be	g permit application.pdf
	located within 5 feet of the hive, and extend at	<u></u>
	least 10 feet on either side.	
	NOTE: All community garden hives must be	
	surrounded by a fence on all sides to secure the	
	hive from access by unauthorized persons	
	Storage: Upon their removal from the hive, bee comb and similar materials shall promptly be	
	disposed of in a sealed container or placed within a	
	building or other bee-proof enclosure.	
	Permit Required: Yes	
Westminster	Beekeeping is only permitted on single-family	http://www.ci.westminster.c
	residential lots in Westminster, therefore it is not an	o.us/CityGovernment/Com
	option for community gardens at this time.	munityDevelopment/Planni
		ngDivision/ChickensandBe es
		<u> </u>
Wheat Ridge	Number of Hives: Not discussed in ordinance,	http://www.ci.wheatridge.co
	please refer to DUG guidelines.	.us/DocumentCenter/Home
	Placement: Beehives cannot be placed in front	/View/2457
	lots, and must be placed at least 15 feet from all side and rear property lines.	Information about
	NOTE: Beehive structures must be enclosed within	beekeeping is located on
	a fences area or fenced yard.	page 10.
	Barriers: Not discussed in ordinance, please refer	
	to DUG guidelines.	
	Storage: Not discussed in ordinance, please refer	
	to DUG guidelines.	
	Permit Required: No	