How to Start Beekeeping: A guide for first time and aspiring beekeepers in S. AZ



SAZBA Meeting 2/16/23



The Basics that you need to start Beekeeping:

- Location
- •Equipment
- •Bees
- Knowledge

- Location should be:
 - Level
 - Well shaded
 - Out of high foot traffic areas
 - Away from captive animals
 - Have a consistent water source
 - Protected from bears, skunks, and ants
 - Have space to stand beside hive for inspections

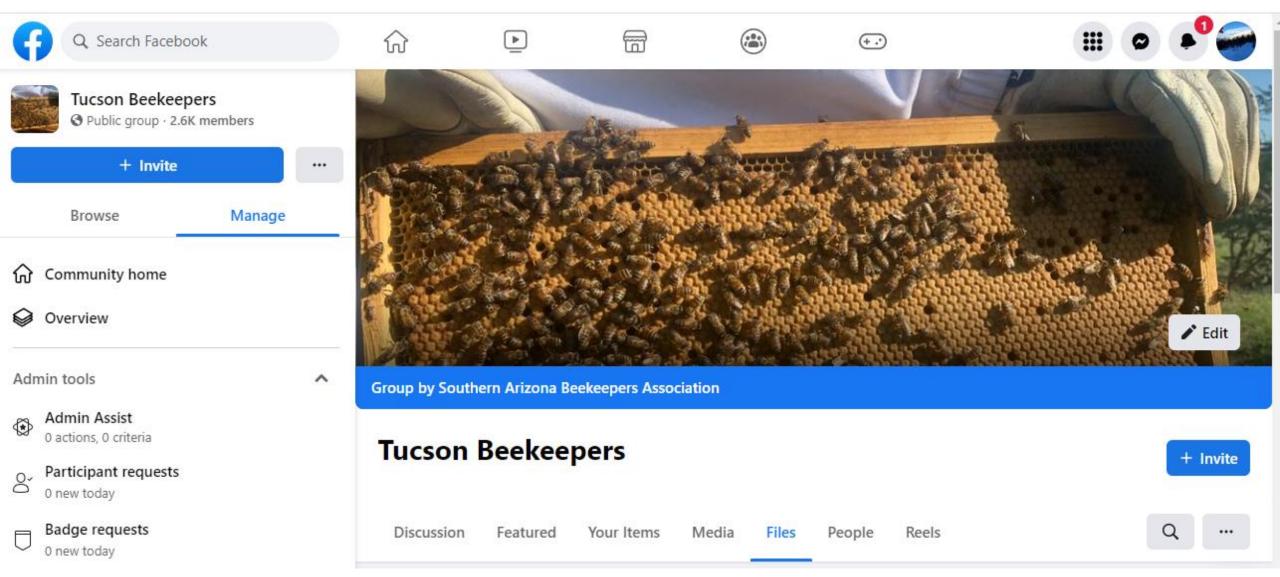


- From the Tucson City Codes:
- 3. Bees:

Number permitted: One hive, stand, box or other structure, natural or otherwise, containing bees is permitted for each 2,500 square ft of **LOT** area. Exception: Zones SR and IR (TCC 11.3(1)) where more than 1 hive is permitted.

Structures and facilities: If bees are kept within 30 ft of any exterior lot boundary line, a barrier must be erected that will prevent bees from flying through it. The barrier must be at least 5 ft high and consist of plant, hedge or any constructed material. The barrier must extend at least 30 ft beyond the **APIARY** in both directions. (TCC 11.3(1)).

Provision of water: Fresh, clean watering facilities for bees shall be provided on the premises. (TCC 11.3(1)).



Tucson Beekeepers		+ Invite	۰۰ ^۲
Introductions	Document	by Joaquin A. B. Munoz	
Tucson Honeybee Relocation Contacts 21520	Spreadsheet	April 21, 2015 at 8:29 PM by Joaquin A. B. Munoz	
Slovenian Beekeeping.pdf	PDF	January 11, 2019 at 11:01 PM by David Harrod	
TBA523Notes.docx	Document	June 1, 2015 at 6:26 PM by Joaquin A. B. Munoz	
CITY OF TUCSON BIRDS AND BEES august 1	PDF	August 4, 2015 at 10:02 PM by Jaime M. de Zubeldia	
2018VitaCALENDAR8MB.pdf	PDF	March 1, 2018 at 10:31 AM by David Harrod	
PIMA COUNTY birds and bees August 15.pdf	PDF	August 4, 2015 at 10:05 PM by Jaime M. de Zubeldia	
Marana_Birds and the Bees AUgust 15I R2.pdf	PDF	August 4, 2015 at 10:04 PM by Jaime M. de Zubeldia	
SAHUARITA birds and bees.pdf	PDF	August 4, 2015 at 10:04 PM by Jaime M. de Zubeldia	
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- Hive Components
- Smoker
- Hive tool
- Suit/protective clothing



- Hive Components (Langstroth)
 - Hive Bodies (deep, medium, brood chamber, super)
 - 8 vs 10 frame
 - Lids and Bottom boards
 - Frames
 - Feeders

• Other types of bee hives (top bar, long lang, ect.)

 Langstroth 10 frame deep hive bodies are the most popular choice for most beekeepers (a lot of advice you find online will be based on this equipment set up)

 8 Frame or medium hive bodies can be used to reduce the amount of weight being lifted during inspections

• A strong colony will need at least 2 deep brood boxes and 1 super during honey production



• Smoker

 Used to calm bees for a hive inspection and to move bees as needed





- Hive tool
 - Used to manipulate and pry frames during inspections



- Suit/ Protective clothing
 - Full Suit vs Jacket vs Veil
 - Different veil styles
 - Gloves
 - Light colors only

• Purchase a Package or Nuc





- Package of Bees
 - Comes with a caged queen and 3 lbs of bees
 - Can be shipped so available for purchase from national suppliers
 - Colony starts with no comb or resources so takes them a while to get going once installed
 - More affordable than a nuc



- Nucleus colony "Nuc"
 - Comes with an accepted and laying queen
 - Has drawn comb, resources, and brood
 - Grow faster and less chance of failure than package
 - Only available locally for pick up
 - Typically only fit deep Langstroth equipment



• Purchase a Package or Nuc





• Swarm collection or Cut-outs





- Swarm collection or Cut-outs
 - Not recommended for beginners to acquire bees through swarms or cut outs in S. Arizona due to prevalence of Africanized bees
 - Feral bees in our area will likely be aggressive/territorial and swarmy which makes them hard to manage and unsuitable for urban areas
 - It can be hard to tell the temperament of a colony by how they behave during collection and rehoming. Sometimes bees that act very sweet as a swarm end up very mean once established in a hive.

<u>Knowledge</u>

- Beekeeping is a complex undertaking that will require a lot of learning
- Beekeeping practices are diverse and many are set in their ways or strongly opinionated about the "right" way to do things
- Beekeeping is regional, what works well in Oregon or North Carolina won't necessarily work in Arizona, and vice versa.
- Not all beekeeping information you find online is good/useful. Don't take what one site or person says as gospel. Get multiple opinions and ask experienced local beekeepers when you can.

<u>Knowledge</u>



ScientificBeekeeping.com

Beekeeping Through the Eyes of a Biologist

- Scientificbeekeeping.com Randy Oliver
 - <u>https://scientificbeekeeping.com/first-year-care-for-your-nuc/</u>
- University of Guelph You tube Page
- SAZBA Meetings
- Other local meetings and classes





Introduction to the Honey Bee Research Centre

47,238 views • 6 years ago

Welcome to the Honey Bee Research Centre's YouTube channel! We hope you enjoy our videos.

Frequently asked questions: https://hbrc.ca/faq/

Warnings about Keeping Bees...

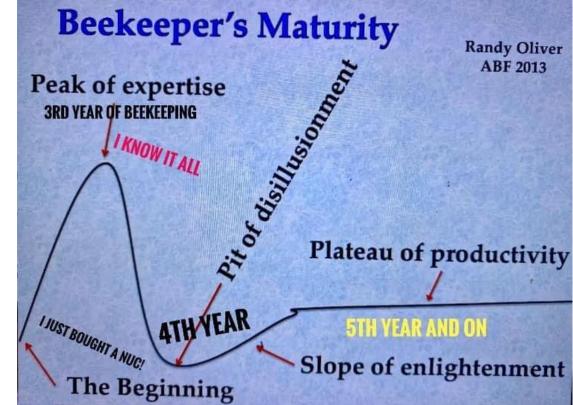
- Beekeeping is animal husbandry and should not be taken lightly or half-heartedly. It is cruel and potentially dangerous to neglect to manage your bees properly.
- Beekeeping is not intuitive, easy, or hands off. You will have to do and learn a lot over the course of many years before you will be a competent beekeeper

Warnings about Keeping Bees...

- In Southern Arizona hives left unmanaged will die off or end up "Africanized" with feral genetics.
- Unmanaged hives that die from parasites or disease will spread their infection to other nearby beehives. Beehavers can kill more than just their own bees with neglect.

Warnings about Keeping Bees...

 The internet is a useful resource to learn about beekeeping, but beware not all info/advice you find on the internet is good or relevant to our climate.



Your main jobs as a beekeeper:

- Provide a safe and secure home for your bees to live in (keep humans, bears, skunks, and ants from attacking/messing with your bees)
- Monitor your bees for Varroa mite infestation and treat them as needed
- Provide food for your bees as needed
- Add space or take away space from the hive as needed to accommodate changing colony size
- Keep your hives from swarming



- Confidently conduct inspections of the hive
- Be able to spot eggs and all stages of developing brood
- Feed your bees sugar water
- Test for mites (and treat if needed)
- Get bees to draw good comb on frames
- Get your Hive(s) to survive their first winter

- Confidently conduct inspections of the hive
 - Inspect a colony once every 2 weeks from February to July. Cut inspections down to once per 3-4 weeks from July-November. Don't inspect (or do so minimally) during November-Jan.
 - When inspecting a hive you want to look for signs the queen is present and doing well and that the bees have ample space and resources to take care of themselves
 - You want to take note of the trajectory of the colony (has population gotten bigger since last inspection, are they drawing out new comb on frames, ect)
 - You want to look for signs of swarm preparation

• Be able to spot eggs and all stages of developing brood

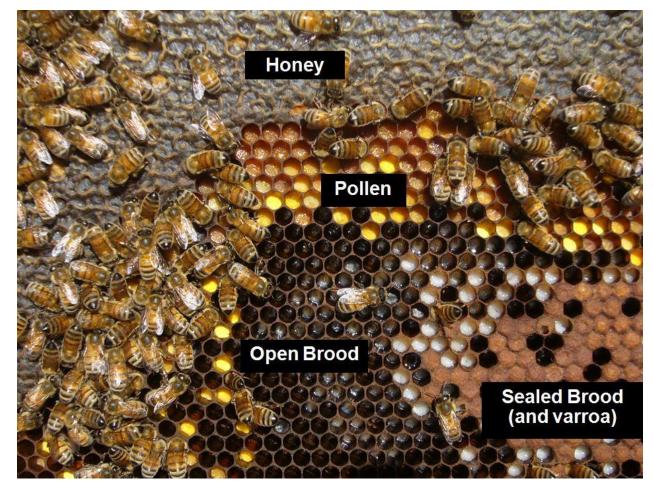


Image from Scientific beekeeping.com

• Be able to spot eggs and all stages of developing brood



Image from Scientific beekeeping.com

- Confidently conduct inspections of the hive
- Be able to spot eggs and all stages of developing brood
- Feed your bees sugar water*
- Test for mites (and treat if needed)*
- Get bees to draw good comb on frames*
- Get your Hive(s) to survive their first winter*

*Come to other meetings to learn more about these topics

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Thank you for Listening!

Questions?

Experiences from first year Beekeepers: Fran & Geoff



