



The Managed Mentoring Program on Getting Started in Beekeeping.

# Managed Mentoring



# Managed Mentoring

Honeybees – what is available, what to buy

Lesson | Sourcing and Selecting Honeybees



# What is Covered in this Lesson

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Origin and Races of Bees

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Traits of Bees

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Purchase Drivers

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Physically Obtaining Bees

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What to Buy

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Where to Buy

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When to Buy

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## Origins of honeybees in the United States

### ■ Honeybees in America

- Honeybees are not native to America.
  - *They were brought over by the settlers.*
  - *As such, it was established that honeybees came from specific places and as a result they are commonly referred to by a country-of-origin label.*
    - It is customary to refer to bees as “Italian”, “Russian”, “Carniolian” (from the Carnica region of Europe).
- Bees offered for sale often use these, or other common labels when advertised.



# Differing Race of Bees

- **European prevails in the U.S.**
  - The Latin name for European Honeybees is *Apis Mellifera*.
    - *Within the Apis Mellifera family are the following*
      - The most popular bees in the US:
        - *Apis Mellifera Liguistica* (Italian)
        - *Apis Mellifera Carnica* (Carniolan)
        - *Apis Mellifera Caucasica* (Caucasian, Russian)
        - *Apis Mellifera Mellifera* (German, European dark, English)
  - There are also hybrids that combine races and exhibit some defining trait:
    - *Examples include:*
      - Buckfast (hybrid of many races), Cordovan (cream color), etc.



# Exploring the traits of races

## ■ Traits of bees

- There are professed traits to different races
  - *These are historical observations and/or traits that have been bred into specific bees.*
- The traits of bees are generally applied
  - *Examples of traits include:*
    - How gentle they are to work
    - How much honey is produced in comparison with other races
    - How much propolis is produced
    - Whether the bees are prone to swarm more
    - Whether they build up quickly
    - Whether they use resources in excess
    - How suitable they are to overwintering
    - Their ability to deal with disease and pests



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## Focus on Varroa

- **Varroa Destructor**
  - This is the first key mention of Varroa in the program.
    - *As time passes on, one thing that is evident is addressing the problems of Varroa impacts are addressed at every level.*
  - Varroa Related Traits
    - *There has been work with breeding honeybees to make them more effective against Varroa mites*
      - Two of the more well-known traits include
        - Bees that exhibit Varroa Sensitive Hygiene(VSH)
          - This means the workers will take proactive action against varroa mites in the cells.
        - Ankle Biter
          - Discovered by Perdu University, these bees are known to chew off the leg parts of Varroa mites.
        - New Versions....
          - Periodically new lines emerge beyond these two





# Perspective on Traits

- **Desirable, *but somewhat nebulous***
  - Your mileage may vary with purchases and sourcing
    - *The availability of bees with confirmed traits is limited and not widespread*
      - There are pockets of known places to purchase but supplies are very limited
    - *The claims of traits in the marketplace are often anecdotal*
      - The only way to get true confirmation is with bees that are either tested or specifically bred with rigor – which is not common.
      - Rearing bees is a complicated business, especially when it comes to selection and replication of desirable traits.
    - *It requires critical mass for the traits to persist*
      - Each situation varies as to the success of establishing long-term traits in any operation





# Race, Traits, Localization, other factors

## ■ What are the most important factors when seeking to buy bees?

- There are a number of ways to go
  - *Practically, two drivers win out:*
    - Availability to specific bees for sale by trait or race
    - Availability for cost and convenience
  - *It is personal preference as to what compels you to select where you buy your bees*
    - Most new beekeepers, typically make a choice on some factor that appeals to them
    - Or they buy because of a local recommendation or exposure.
  - *Some beekeepers emphatically hold out for more*
    - They select a purchase on trait, race, and other facets



# What kind of bee is endorsed?

## Insights

### ■ Reality

- Your mileage varies, but most reputable bee suppliers provide perfectly suitable bees.
  - *There is no way to look at a bee and tell its quality*
  - *Unless it is instrumentally inseminated, it is a mutt*
  - *Bees are resilient and when managed well will almost always be fit for purpose*
    - This is not to say that some are actually better.
    - It is more to say that even average bees will typically suffice.
- To be thorough we will review some background
  - *Starting with some typical bees that are sold and their characteristics.*



# Buying bees based on Race

## *A word about Race*

- **Using Italian bees as an example**
  - “Italian” bees are the most conventional bees.
    - *Generally, the marketplace takes liberties with bee labels. Italian bees are typically not pure Italian...*
    - If they look like Italian bees, and act like Italian bees, then they are sold as Italian bees.
      - The truth is there is a certain look that is prescribed to an Italian bee. That look, coupled with professed traits compels bee providers to label what they sell as “Italian”.
    - The same can be true of the other labels/races being sold.
  - *Some do actually confirm scientifically what the origin species and sell pure stock.*
    - Mostly what you will find, even with some bees that are sold as pure, is that unless someone is controlling the breeding with rigor, the bees are going to be a mix of genetics.



# Race/Trait Overviews

## *Description and Traits of Italian Bees*

- **Generalized description of Italian Bees**
  - **Appearance:** Golden yellow with black and dark brown bands on the abdomen
  - **Disposition:** Gentle, Calm on comb
  - **Behavior Traits:** Prone to rob other hives, Store excess honey, use more stores
  - **Honey Production:** Prolific Honey producers
  - **Build Up:** Large build up, quickly, sometimes wasteful
  - **Overwintering:** Adequate, professed to use stores more than others
  - **Swarming:** Moderate swarm impulses



## Race/Trait Overviews

### *Description and Traits of Carniolian Bees*

- **Generalized description of Carniolian Bees**
  - **Appearance:** Deep yellow to black with dark brown, gray or even black stripes on abdomen
  - **Disposition:** Gentle, Calm on comb
  - **Behavior Traits:** Not prone to robbing, will fly in more adverse weather conditions
  - **Honey Production:** Sufficient honey producers
  - **Build Up:** Slow conservative build up, lower use of reserves
  - **Overwintering:** Overwinter in smaller clusters, good choice for colder climates
  - **Swarming:** Grow fast in spring and prolific to swarming



# Race/Trait Overviews

## *Description and Traits of Russian Bees*

- **Generalized description of Russian Bees**
  - **Appearance:** Deep yellow and/or dark brown and black tones – but vary in color
  - **Disposition:** Descriptions vary, sometimes described as more assertive
  - **Behavior Traits:** Sought out for Varroa resistance
  - **Honey Production:** Sufficient honey producers
  - **Build Up:** Slow build up, lag in slowing during dearth
  - **Overwintering:** Well adapted to overwintering
  - **Swarming:** Moderate to high swarm tendencies

It could be noted that Russian bees are not a specific race. They are typically a blend of bees, but often are attributed to the Caucasian race: *Apis Mellifera Caucasica* | The Russian Honey bee Breeding Association (RHBA) does not certify a stock, line or individual bee as Russian. <http://www.russianbreeder.org>



# What kind of bee

## Insights

- **A simplification of buying bees to make it easier for you**
  - Yes, there are races of bees. Yes, there are bees selected for traits. Yes, bees come in different colors.
    - *The emphasis of what you 'should buy' does not match up with the more common ways bees are purchased.*
  - Factors in the purchase
    - *Timing, Cost, Availability, Shipping, Format of purchase (Nuc, Package) etc.*
    - *Origin zone – remote or local*





# Sourcing is an input to selection

- **How you come by the bees..**
  - Bees can be:
    - *Purchased and shipped to you through the mail*
    - *Purchased and picked up at a provider or reseller*
    - *Purchased and delivered to you at your location*
    - *Captured in a swarm and brought home*
  - Sometimes what you buy is preceded by the method by which you come by your bees



# Sourcing is an input to selection

## □ Local vs. Distant

- *Local bees are more than just proximity Local bees originate from the region and do not require trucking or shipping.*
  - Local bees have the advantage of being acclimatized to the region
  - Bees reared in more temperate states are not attuned to the weather conditions and will have to adapt over time
  - They can get by, but bees reared locally are perceived to perform better under the conditions.
    - Another way of saying this is bees reared in the warm south are known not to perform as optimally as bee reared in the region.
- *A final thought to stem concerns.*
  - Not being able to buy locally does not equate to avoiding bees provided from other regions. If you can source bees locally, then do it.
    - If you cannot; recognize that bees from the south are sourced widely every spring and constitute much of the stock in service throughout the region.



# New Jersey

## □ Purchasing Direct

- *Regional and Local Sales*

- New Jersey has a mix of regional and local options
  - Some drive long distances to source bees and others obtain them in their local community. It all depends on what you choose, and what is offered for sale in your location as this varies around the state.
- State and Local Association Listings
  - Consider research for bee purchases by looking at the New Jersey Beekeepers Association Website.
  - Also consider consulting with your local association about possible options in the area



# New Jersey

## □ Mail Order

- *Another Consideration - Mail Order*

- It is possible to order bees and have them shipped.
- This is often done by sourcing bees from suppliers who advertise in Trade Magazines
  - Consider looking at the ads in Bee Culture and American Bee Journal.

- *Beekeeping Suppliers*

- You can also consider offerings from large suppliers that sell both supplies and bees. Some large bee suppliers advertise honeybee sales (nucs and packages)



# Order Early. Quantities are Limited

## □ Bees are in high demand

- *There is a high demand every spring for bees.*
  - As such, it is prudent to be very proactive in placing orders for bees.
    - Local bees are often short in supply and high in demand. They may go for a premium
    - This is especially true for any specialty lines of bees are in limited supply and may be scarce, as well as available in limited supplies.
  - It is likely that you will be asked to provide a deposit to hold your order.
- *Costs*
  - Costs climb every season. The going rate also have wide ranges in asking prices. 2023 costs are projected to be: \$150+ for packages, \$180+ for Nucs



# Closing Comments

- **Customary Close**
  - Where we stand, where we are going...
    - *This lesson closes out the backstory of how to be an informed buyer of bees to start your operation.*
    - *Our next topic moves to some insights about the differences between starting with Nucs vs. Packages; pros and cons:*
      - Being informed **about Packages and Nucs**
      - Learning the important concept that **Beekeeping is Local**
      - The background of **Choosing a Style** of beekeeping
      - The obligation to be **Be a Good Neighbor**



# Q&A

- **What Questions did we not anticipate?**
  - If you have feedback, you can leave a constructive comment; but be nice.
  - You could also send an email to [comments@managedmentoring.com](mailto:comments@managedmentoring.com)
    - *Please refer to this video in the subject so we know what the reference is.*

