April meeting minutes were accepted by motion and second and vote of members in attendance.

**Secretary Report:** several items were left behind at Bee School. The coat has been claimed and the other items are on the side table

**Vice President Report:**

**Treasurer’s Report:** Cheryl Housden reported that the next Bee School will be held on July 14. So far the speakers that are lined up are Doc Andrew Watson and Lincoln Mettler. April’s Bee School was a success.

**Regional Representative’s Report:** Mysti Jacob attended a meeting with Ralph Rodia and we should have him come and speak about backyard beekeeping best practices.

**OSU Liaison’s Report:**

**Old Business**

**New Business**

**Let’s Talk Bees**

Ellen Topitzhofer of “Bee Informed Partnership” spoke about how to keep a healthy hive. She has extensive experience in commercial beekeeping. The most important factors in a healthy hive are: 1)- Low Varroa mite levels, 2)- Ample clean and varied nutrition (forage) and 3)- A good, prolific queen.

The most common things she hears from beginning beekeepers are, “I don’t have mites”, “I don’t see any mites” and “I don’t have issues with mites”. Mites are hard to see on bees because they tend to hide under bee body segments. It is important to know your enemy.

1. **Varroa as a problem:** Varroa was introduced into this country only in 1987. The impacts on bee colonies are reduced longevity, reduced body weight, suppressed immune system and vectoring for several viruses and diseases. Poor nutrition exacerabtes these conditions.
2. **Varroa biology:** A varroa mite can travel on a bee body for a week to a week and a half until they find a larval cell getting ready to pupate. They (pregnant females) then lodge themselves in the larval cell and prepare to reproduce. After the eggs she lays hatch, the offspring incestuously reproduce as many times as they can before the bee emerges from its cell. This is why drone brood is 12X more attractive than worker brood (longer time in the capped cell)

3. **Identify mites:** You can see mites if you get them to drop off bee bodies, so monitoring for mites can be easily done. Deformed Wing Virus is a pretty clear indicator of mite infestation. You can inspect brood and remove bridge comb. Mites can be seen on the white pupal bodies of the bees if you remove pupae with forceps or tweezers. If you see a crusty white blob on the side of a brood cell, it is likely mite feces. Parasitic Mite Syndrome (evidenced by larvae starting to liquefy) is a sign of a heavily mite-infested colony.

4. **Sampling techniques:** Be standardized (have a sampling plan) with a consistent methodology to compare results from sample to sample. All methods require 300 bees (1/2 cup of bees) to be a valid sample. The most common methodologies are 1)- Alcohol wash, 2)- Powdered sugar sprinkle and 3)- CO2 shake. Pick a method and use it every time. The idea is to monitor the trend of mites from month to month. The best times to monitor are 1)- during the spring build-up, before honey supers go on the hives. 1% (3 mites per 300 bees) is the recommended treatment threshold for spring counts, 2)- before the supers come off in the fall. 3% is the recommended treatment threshold at this time, 3)- anytime you won’t have access to your hives for over a month. Sample both before and after you treat so you can assess the efficacy of any treatment.

5. **Treatment:** When using any treatment, honor the label. You are using chemicals and even the most innocuous can be harmful if used incorrectly. Most of them have recommended temperature ranges in which they are effective and not harmful. Ellen recommended only the following “organic” chemicals as treatment choices:
   a. MAQS or Formic Pro: formic acid, can be used with honey supers on
   b. Hopguard II: hop oil, can be used with honey supers on
   c. Apiguard or Api Life Var: thymol, don’t use with honey supers on
   d. Oxalic acid dribble: used during brood break because it only kills phoretic mites (not those in pupal cells)

It is important to sample for mites after treating to make sure your treatment worked. It is also important to vary the treatments used so mites don’t become resistant to your preferred treatment.

Transmission of mites is horizontal. A varroa mite on a bee can be transmitted to other colonies. Your neighbor’s bee colonies are easily affected by the mites in your colonies.

The Honey Bee Health Coalition [https://honeybeehealthcoalition.org/](https://honeybeehealthcoalition.org/) has excellent information about varroa management.

**Meeting adjourned at 9:10 pm**