

Cleveland County Beekeepers Association Meeting

February 25, 2019 Meeting

- Led by Emanuel Hunt
- Opening Prayer by Steve Gibson
- Possible outreach project with Shelby Parks & Rec in Holly Oak Park. Put a hive or 2 in their community garden. Buy the nuc(s) from Ray Maxwell, get most, if not all, of the supplies (hive bodies, frames, etc) donated by members and have the hives be maintained by Emanuel Hunt and other volunteers. Motion to vote by Steve, unanimously approved by everyone.
- Per Steve, Ray Maxwell previously suggested putting 2-3 hives behind the co-op center and that has been approved.
- Anyone who wants to volunteer to help with projects please contact Emanuel Hunt (HuntE745@clevelandcc.edu or (704) 487-5280 – home #.
- **Steve Gibson started the topic of the meeting – Climate Change & Pollinators**
 - Examples Steve presented; Journal of AOB plants sugar concentration in 2 species of plants showed that the sugar concentration in nectar increased in 1 species but decreased in another species. Is this because of climate change?
 - A May 2016 Yale Publication of goldenrod pollen showed a steady decrease (30%) in the protein analysis from 1960-2014
 - NASA Honeybee Project in Maryland show that timing of the spring nectar flows have undergone changes each year- ½ day earlier and since 1970 about 1 month earlier.
 - NASA Presents an observation, some cases of plants and pollinators “out of sync”
 - Michigan State University; earlier springs, less stable weather results in bees not being able to forage on normal sources (for example us in Cleveland Co for the past 2 weeks with all the rain)
 - Observations reported in Science Magazine- “As temps rise the southern limits of many North American and European bumble bees species’ ranges are moving north by as much as 300km in some cases but the northern edges of ranges are staying in place resulting in an overall contradiction of species habitat.
 - A Regional Example of Greenhouse Gas Emissions Mitigation, Adoption of Continuous No Till Planting by Field Crop Producers (Soybeans, Corn, Wheat, etc).
 - One of the top mitigation efforts in the US
 - Has greatly reduced/stopped erosion
- **Speaker- Dr Jack Scheff- professor with UNCC Dept of Geology & Earth Sciences**
 - Agriculture and climate change in general, weather/climate change/atmosphere
 - No till is great, keeps CO2 in the ground and out of the air

- The Yale study that Steve mentioned earlier- the plants like that there is more CO2 in the air because they absorb/eat that with their leaves- more food for the leaves which makes bigger leaves/flowers but also means less nitrogen in the roots which also means decreased protein levels (think more carbs/fats but less protein).
- There is increased CO2 in the air because of the industrial revolution that began in the 1950s and more cars/combustion engines out there.
- Heat impact to crops;
As the worlds population increases so does the need for more food. The developing world is getting richer which means they can afford more food, more meat in particular. Livestock need to be fed so the demand for more meat= demand for more livestock= demand for more land/money needed to grow the livestock.
Global food crop demands are set to double by 2050 so we need to figure out ways to increase food growth/production. We can double to area of farmland or double the harvest per unit area of farmland (the crop yield) (using fertilizer).
- Why are warmer growing season so bad for crop productions?
 - 1) The crops need more water if it's warmer
 - 2) Many crop species simply do much worse at higher temps- their basic biology (reproduction, flowering, etc) is affected.

- **Emanuel Hunt closed the meeting**

-Attempting to come up with some way to utilize the amount of knowledgeable beekeepers we have access to within this group. The new beekeepers need to have a way to ask questions and get answers in a timely manner- other than the once a month meeting. The ideas were;

* to email someone (Emanuel Hunt said he would field questions via his email and he would try to reach out and get the answers from some of our more experienced beekeepers- his email address is HuntE745@clevelandcc.edu) but the answers will not be immediate.

*Create some type of online discussion board where people within our group could post questions and get answers from other members. Everyone agrees it's a great idea just not sure of the logistics on how to create/maintain such a thing. We need a volunteer, or a few volunteers, to work on creating/maintaining the website or discussion board.

The March meeting will be a field day- the date is to be announced weather dependent.