



Bee populations are threatened by three key issues

Varroa Mites

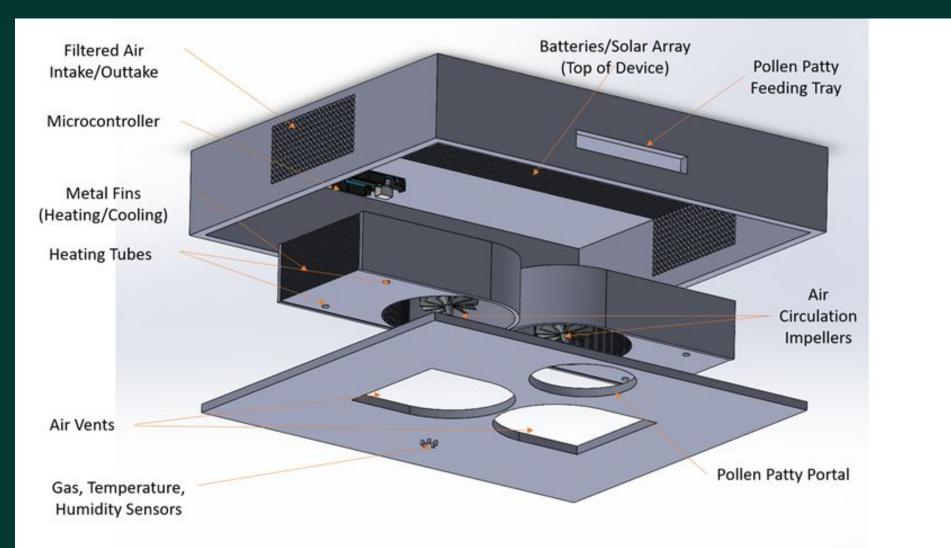
- Infects bees
- Labour intensive detection
- Labour intensive treatment

Climate Change

- Changes agricultural cycles
- Creates harsher climates
 Causes genetic

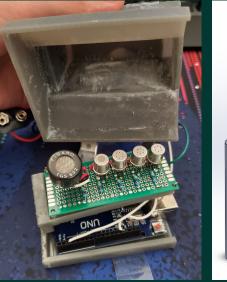
Pesticides

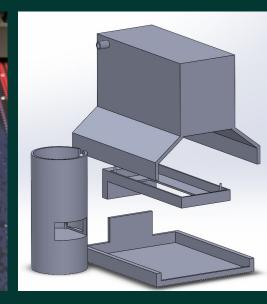
- Affects bee health
- defects



Varroa Mite Detection System

- Air pump
- Gas sensor array detects gas composition
- K-Nearest Neighbors Machine Learning predictor





Varroa Mite Deployment System

- Further develop the varroa mite detection system to validate the hypothesis that utilizing gas is a viable method for detection
- Collect more data with key partners to develop a more robust machine learning algorithm

Product Design Improvement

- Improve aesthetics, ergonomics, design PCBs, and improve manufacturability
- Develop a more robust climate control system
- Integrate electronic poser system for more independent use

Deeper App Integration & Business

- Work on developing app so hive can be controlled completely remotely
- Obtain more alpha and beta testers after MVP is developed
- Secure key partnerships such as potential customers or experts to advise on development