

Interactive Dashboard of Bee Colonies

Problem:

Can we visualize how the percentage of U.S. bee colonies affected by Varroa mites has changed over time, and identify trends by state and year?

Python, Pandas, Plotly, Dash

Data Pipeline & Visualization

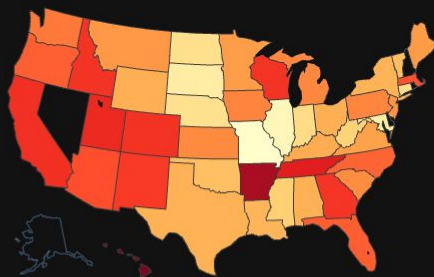
- Collected publicly available USDA data on bee colonies across U.S. states (2015–2018)
- Cleaned and grouped raw data using Pandas
- Engineered a dynamic filtering system for state, year, and cause of impact
- Created color-coded choropleth maps to display mite impact percentages by state
- Built an interactive web dashboard with dropdowns and hoverable tooltips
- Enabled real-time user exploration of trends across states and time

Interactive Dashboard of Bee Colony Health Impacted by Varroa Mites

Select Year

2015

The year chosen by the user was: 2015



% of Bee Colonies



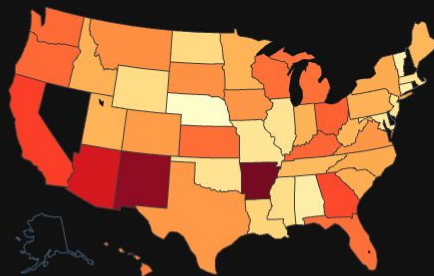
Interactive Dashboard of Bee Colony Health Impacted by Varroa Mites

Select Year

2016



The year chosen by the user was: 2016



% of Bee Colonies



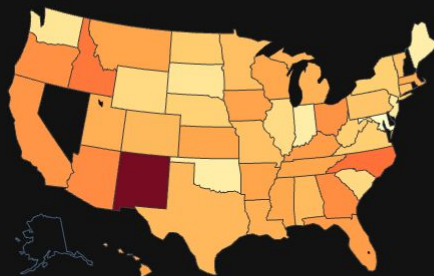
Interactive Dashboard of Bee Colony Health Impacted by Varroa Mites

Select Year

2017



The year chosen by the user was: 2017



% of Bee Colonies



Interactive Dashboard of Bee Colony Health Impacted by Varroa Mites

Select Year

2018

The year chosen by the user was: 2018

