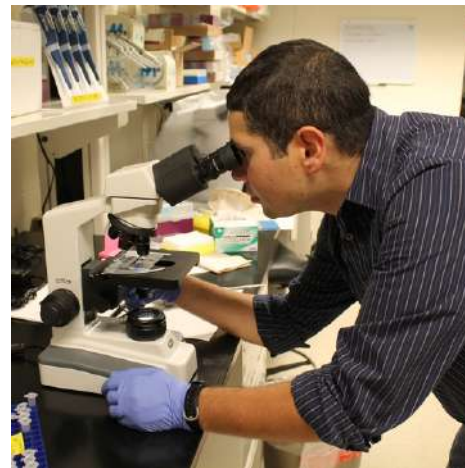


NYS Beekeeper Tech Team

Research & extension updates from 2017





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[Location](#)

GOVERNOR
ANDREW M. CUOMO

PRESSROOM

SCHEDULE

LEGISLATION

ABOUT

CONTACT

APRIL 23, 2015 | Albany, NY

Governor Cuomo Announces Taskforce to Develop Pollinator Protection Plan to Protect New York's Agricultural Economy

AGRICULTURE

Tech Team Members



Emma Mullen
Senior Lead



Mary Kate Wheeler
Agricultural Economist



Scott McArt
Scientific Advisor



Paul Cappy
NY State Apiculturist

Objectives

1. Improve honey bee health
2. Reduce colony losses
3. Increase profitability and viability of beekeeping businesses

We study and promote best practices for beekeeping. We integrate scientific knowledge and data from individual operations to empower beekeepers to address management challenges.



Structure

- 34 beekeepers across 22 counties
 - 8 hobbyists
 - 13 sideliners
 - 13 commercial
- Colony health inspections 2x/year
- Parasites, pathogens, pesticides
- Annual management survey (n=28)
- Individual colony health reports
- Annual summary report
- Annual beekeeper meetings
- Financial Analysis & Business Benchmarking (FABB) program



2017 Tech Team Findings

Highlights from the 2017 NYS Beekeeper Tech Team Report



1. Beekeepers make an important contribution to our state's agricultural economy

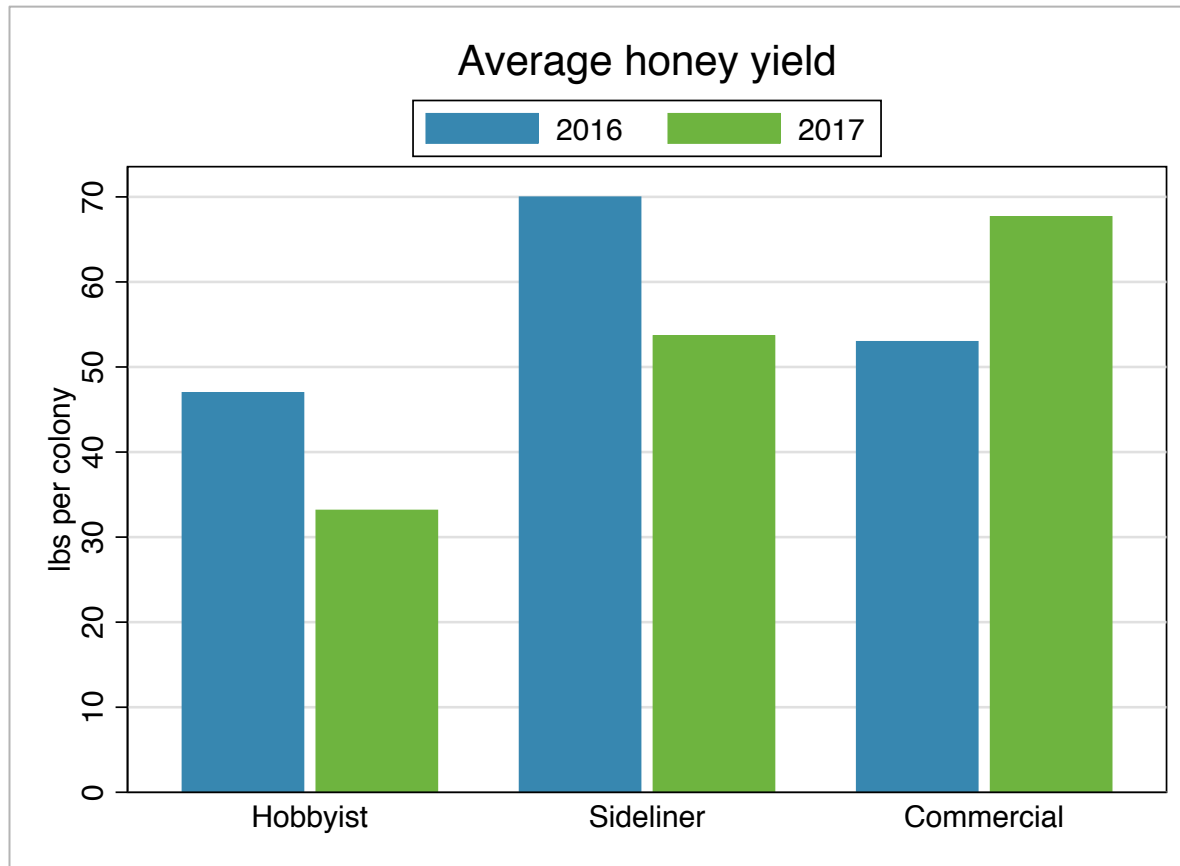
The 28 survey respondents managed a total of 16,000 colonies.

20% of the estimated 80,000 colonies in New York State.

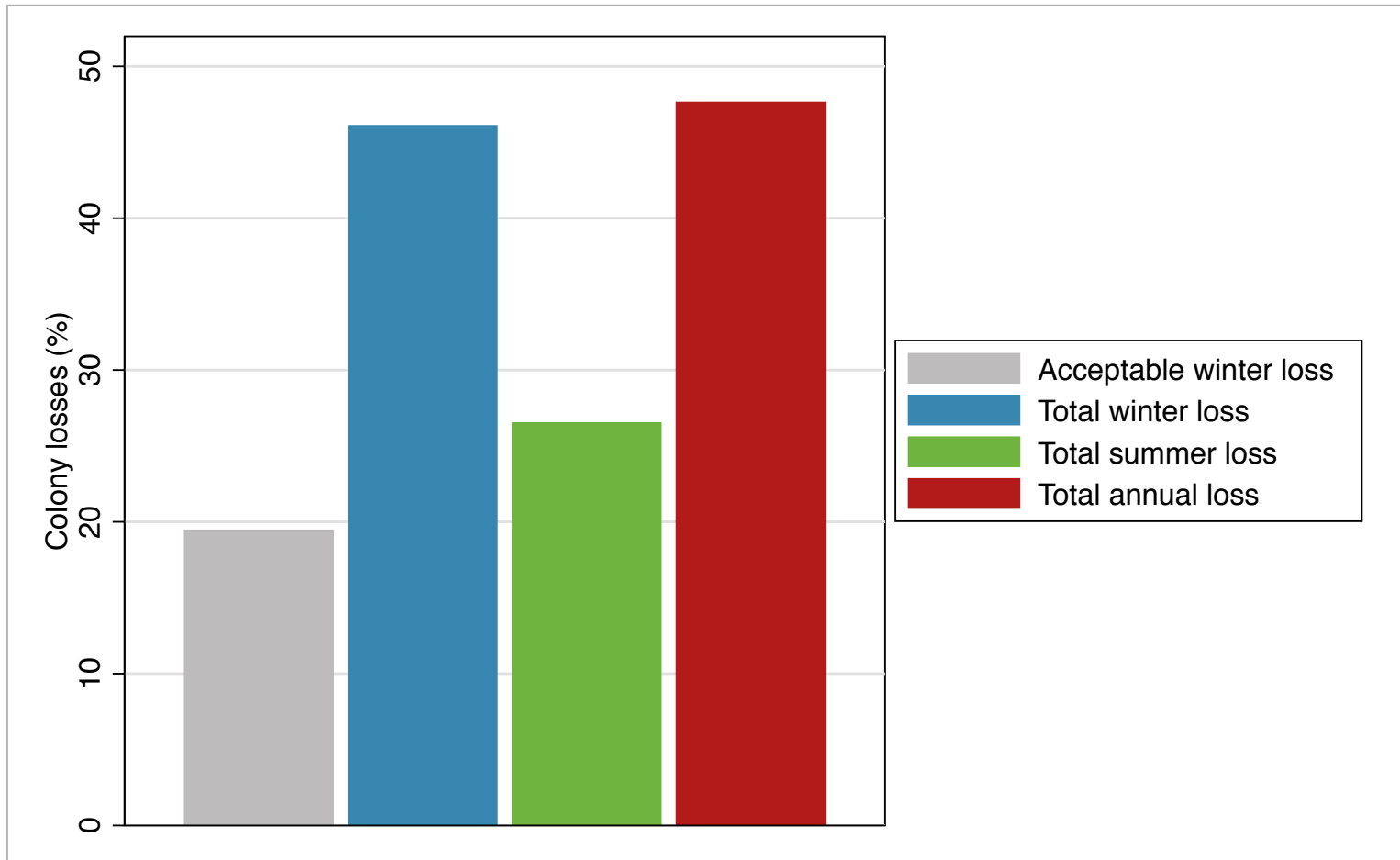
The total value of 2017 honey production exceeded \$2.5 million.

Including other products and pollination services, total value of production exceeded \$3.8 million.

2. NYS producers saw yields decline in 2017



3. Winter and summer colony loss rates were unsustainable



4. Beekeepers perceive *Varroa* mites to be a serious threat to colony health

Primary Cause of Winter Loss	% of Beekeepers
<i>Varroa</i> mites	61%
Viruses	29%
<i>Nosema</i>	18%
Queen failure	18%
Adverse weather	14%
2016 drought	11%
Pesticide exposure	11%
Inadequate nutrition	11%

5. Unchecked *Varroa* populations and associated viral diseases likely contributed to high winter losses

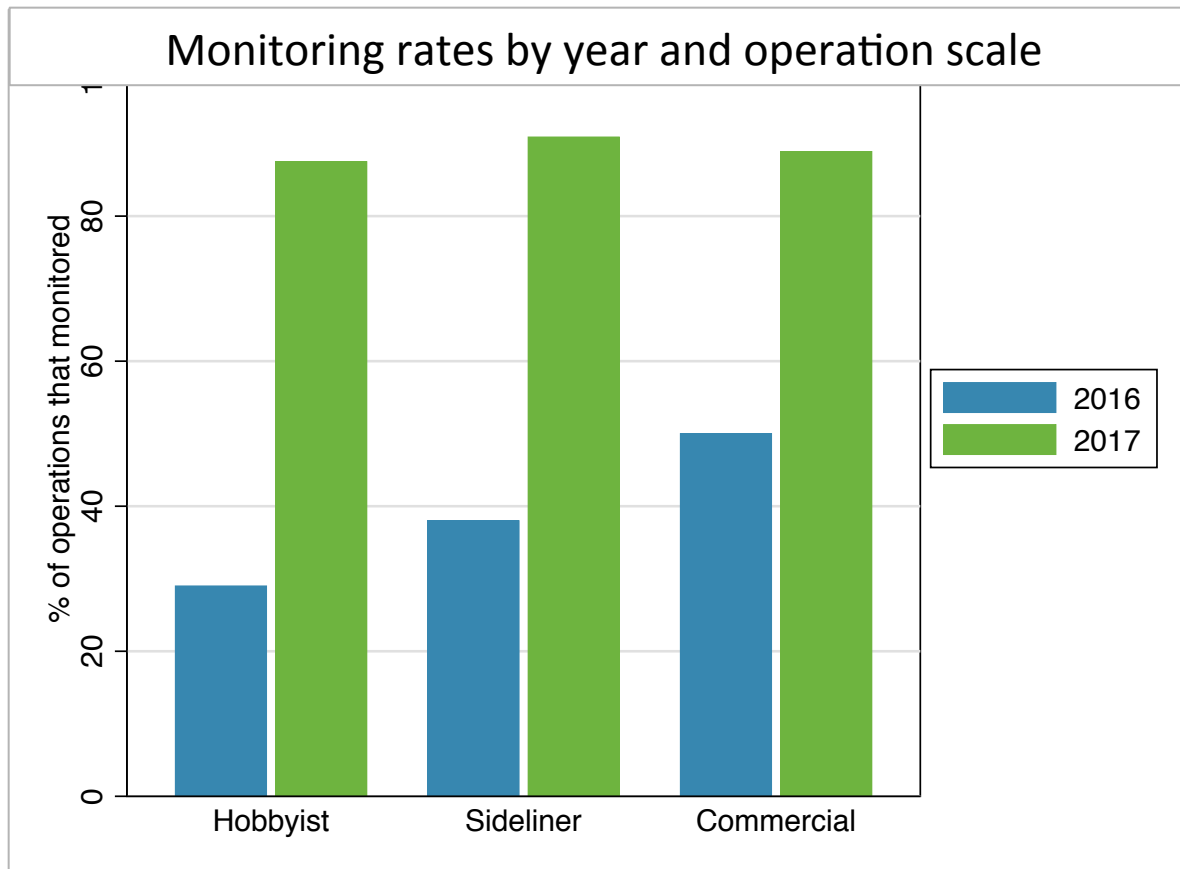
Average mite count of 6.3 mites per 100 bees in September 2016

62% of colonies were above the treatment threshold

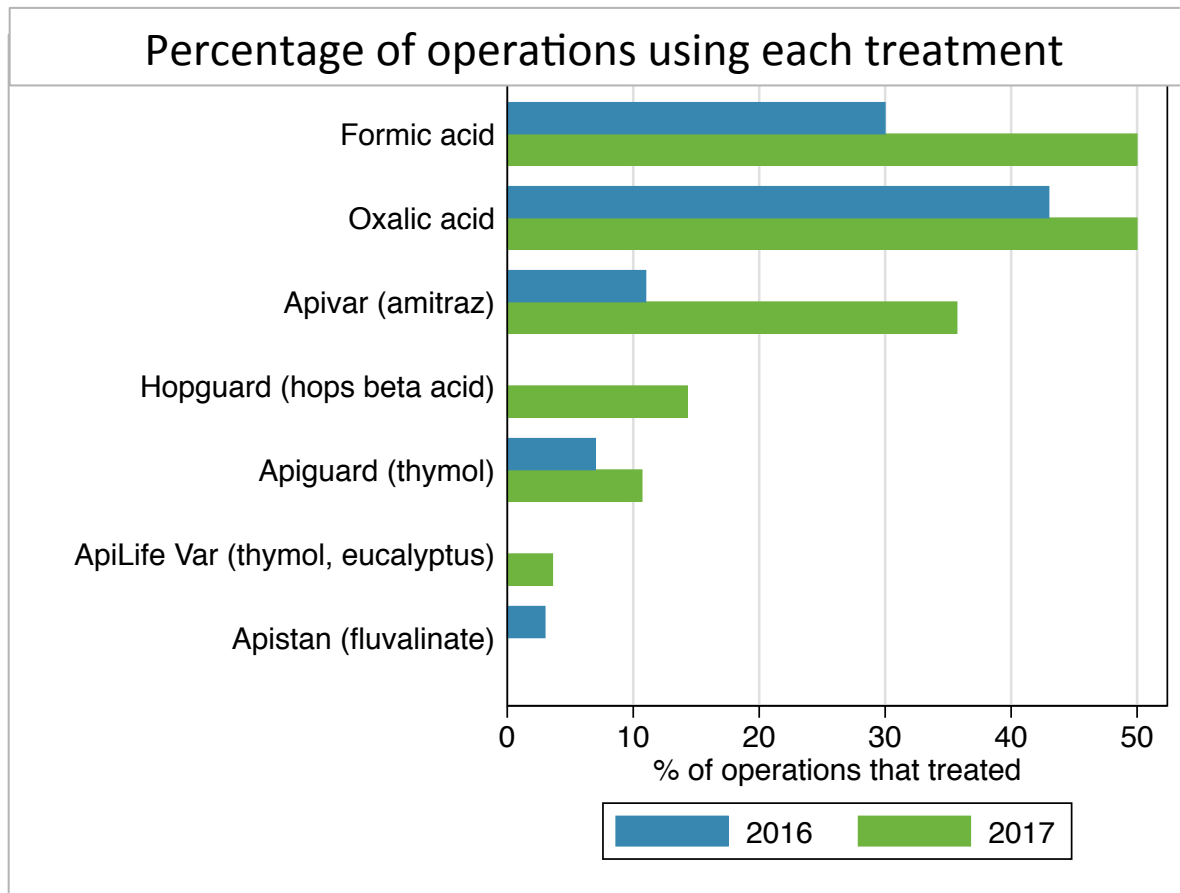
21% of colonies had symptoms of Parasitic Mite Syndrome (PMS)



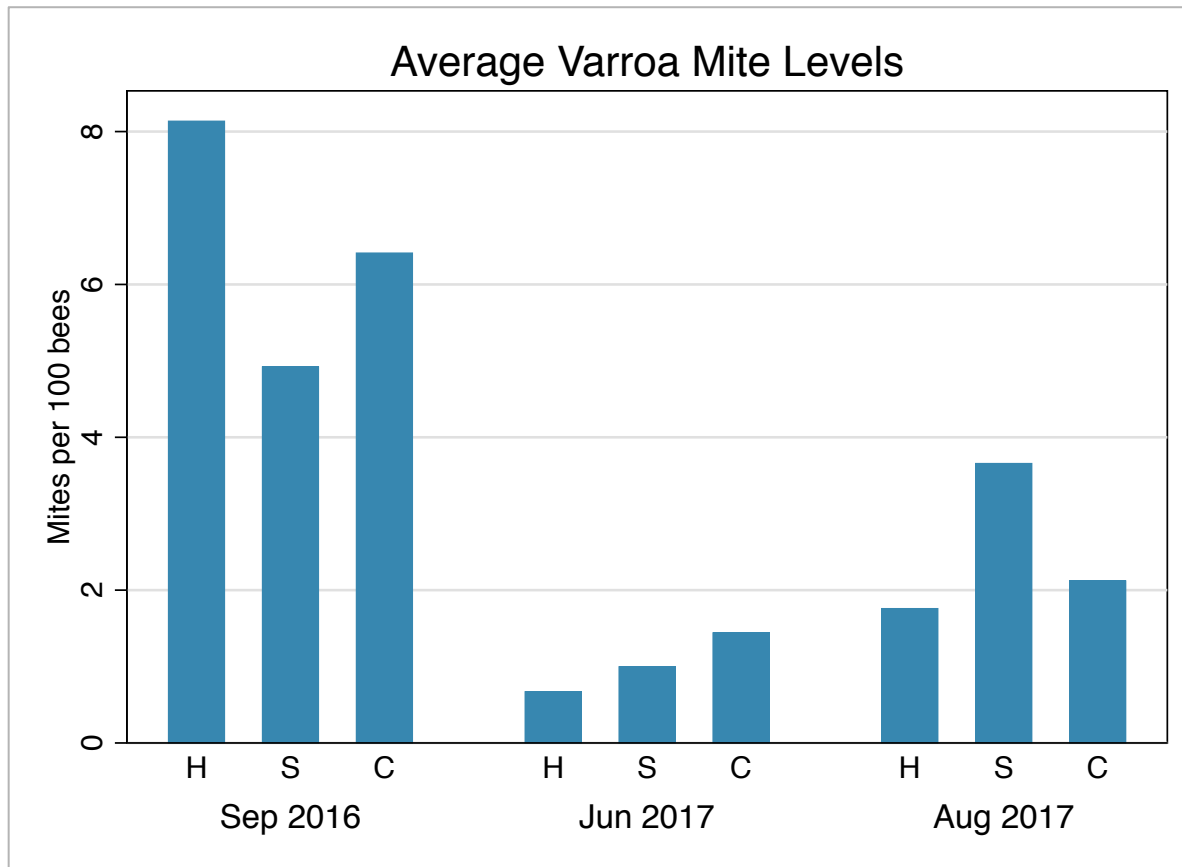
6. Beekeepers monitored more frequently and treated more aggressively for *Varroa* in 2017



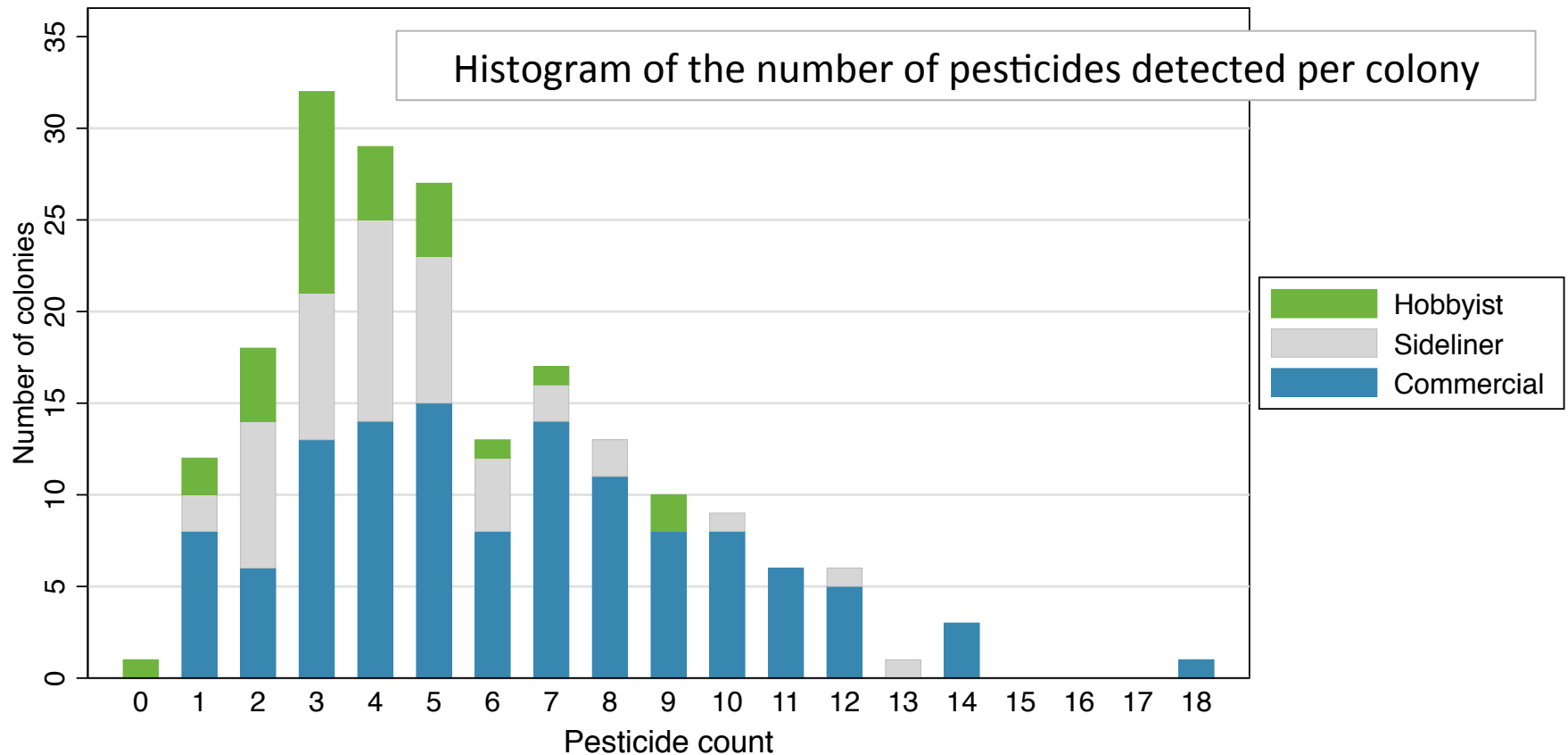
6. Beekeepers monitored more frequently and treated more aggressively for *Varroa* in 2017



7. *Varroa* populations were controlled more effectively in June and August 2017



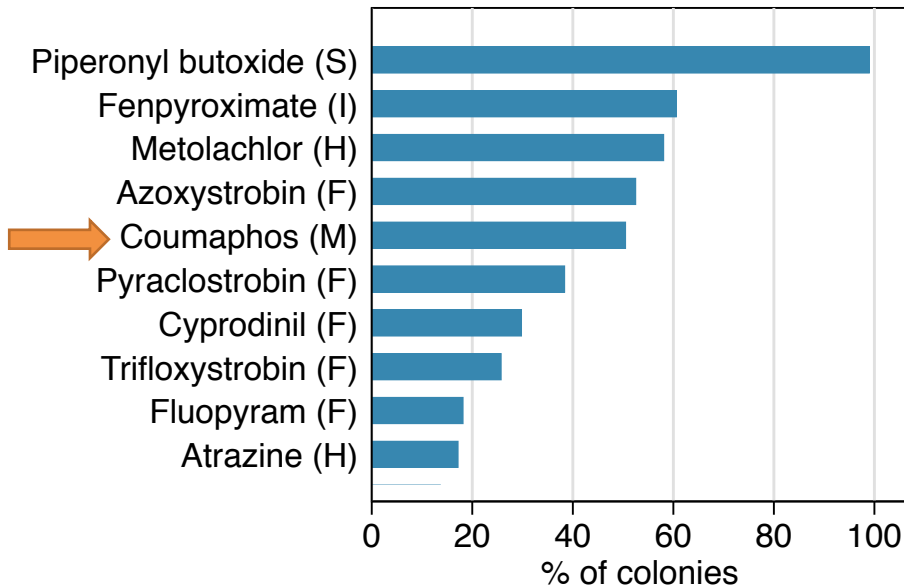
8. Honey bees are exposed to numerous agrochemicals, yet acute pesticide kills are rare



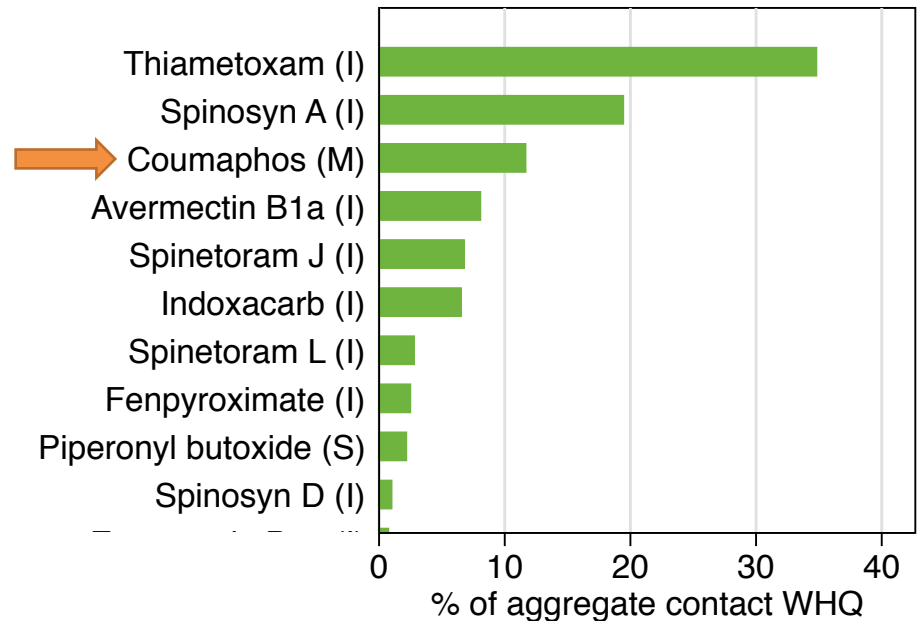
9. The more common pesticides tend to be less toxic, except coumaphos

Top 10 most common vs. most risky pesticides

Pesticide Prevalence



Relative Pesticide Risk



Next Steps

- Publish 2017 report:
pollinator.cals.cornell.edu
- NYS *Varroa* Survey – get involved!
- Financial Analysis & Business Benchmarking (FABB) program findings
- Pesticide analysis of honey samples



Questions?



Mary Kate Wheeler
mkw87@cornell.edu