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Managed Pollinator CAP

Coordinated Agricultural Project

A National Research and Extension Initiative
to Reverse Pollinator Decline



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10th ANNUAL NAPPC INTERNATIONAL CONFERENCE AGENDA

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**U.S. Department of Agriculture
Washington, DC**

**NAPPC
TEN
2010**

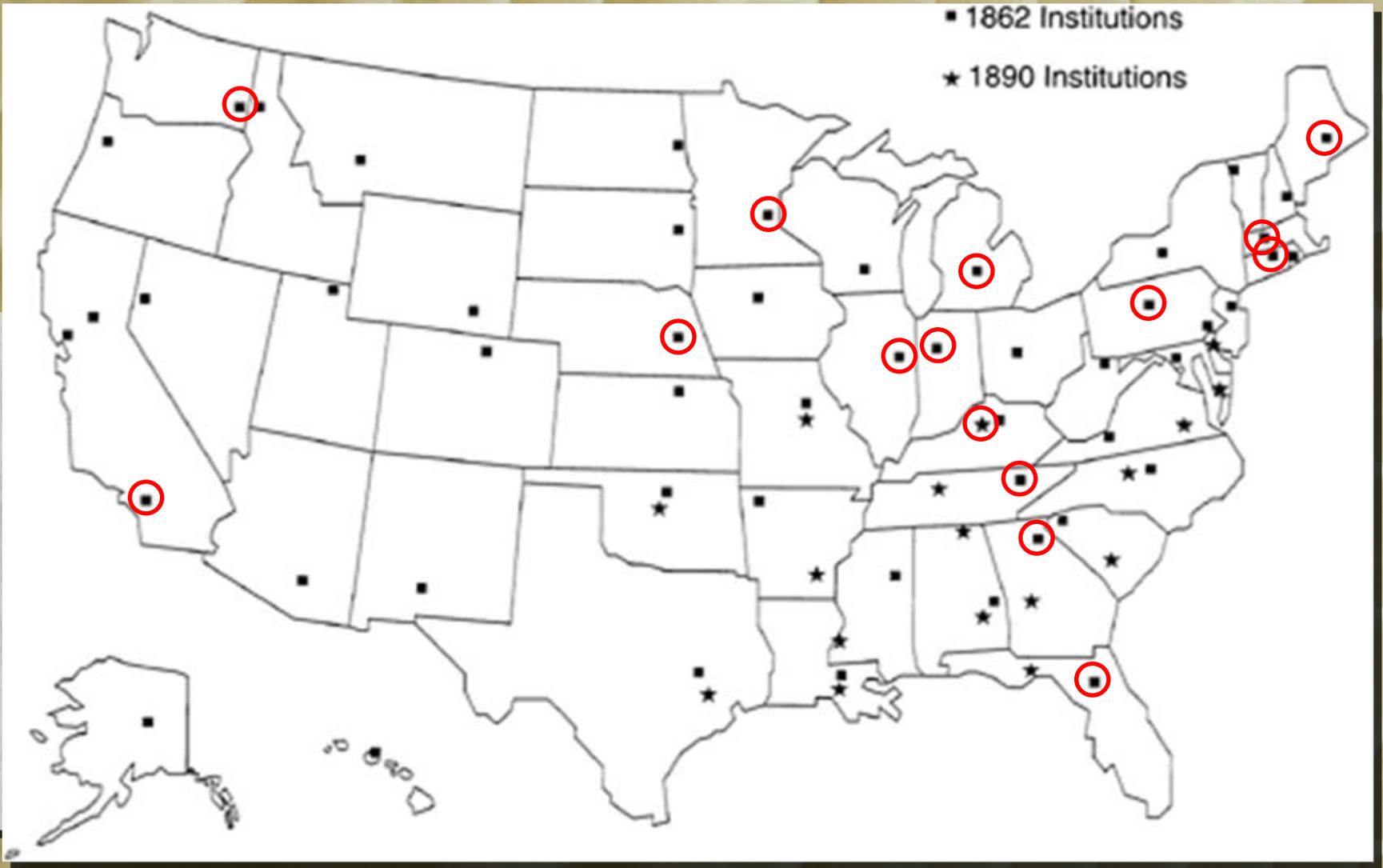
Protection of Managed Bees CAP

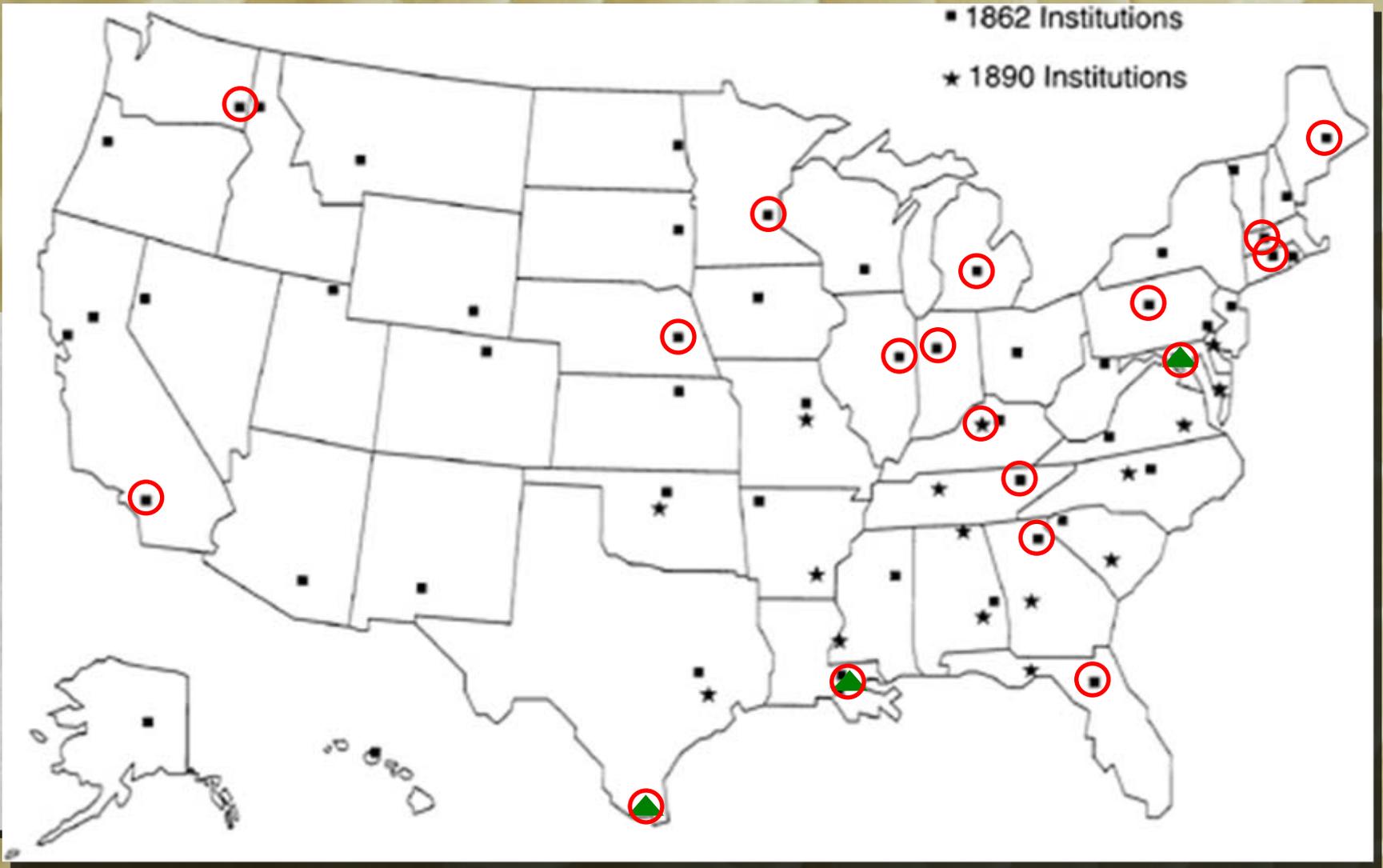
- 17 institutions
- 14 land-grants, one 1890 school, 2 ARS labs
- 21 collaborators
- 7.3 research FTEs
- 4.5 extension FTEs
- Trained and published in epidemiology, virology, pathology, ecology, toxicology, bee biology, apiculture, and IPM



“Our long-term goal is to restore large and diverse populations of managed bee pollinators across the United States to sustain natural and agricultural plant communities.”





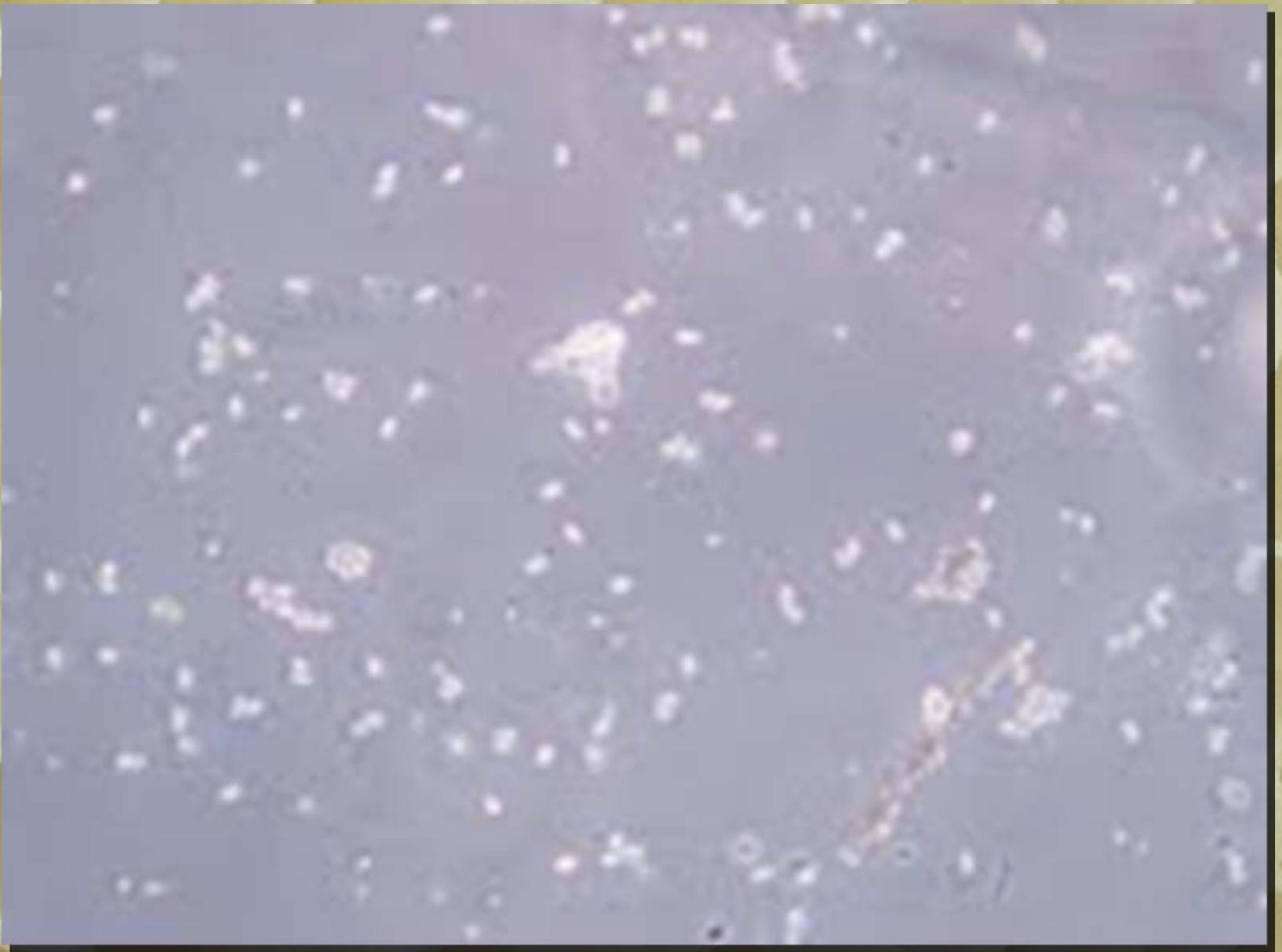


4 goals

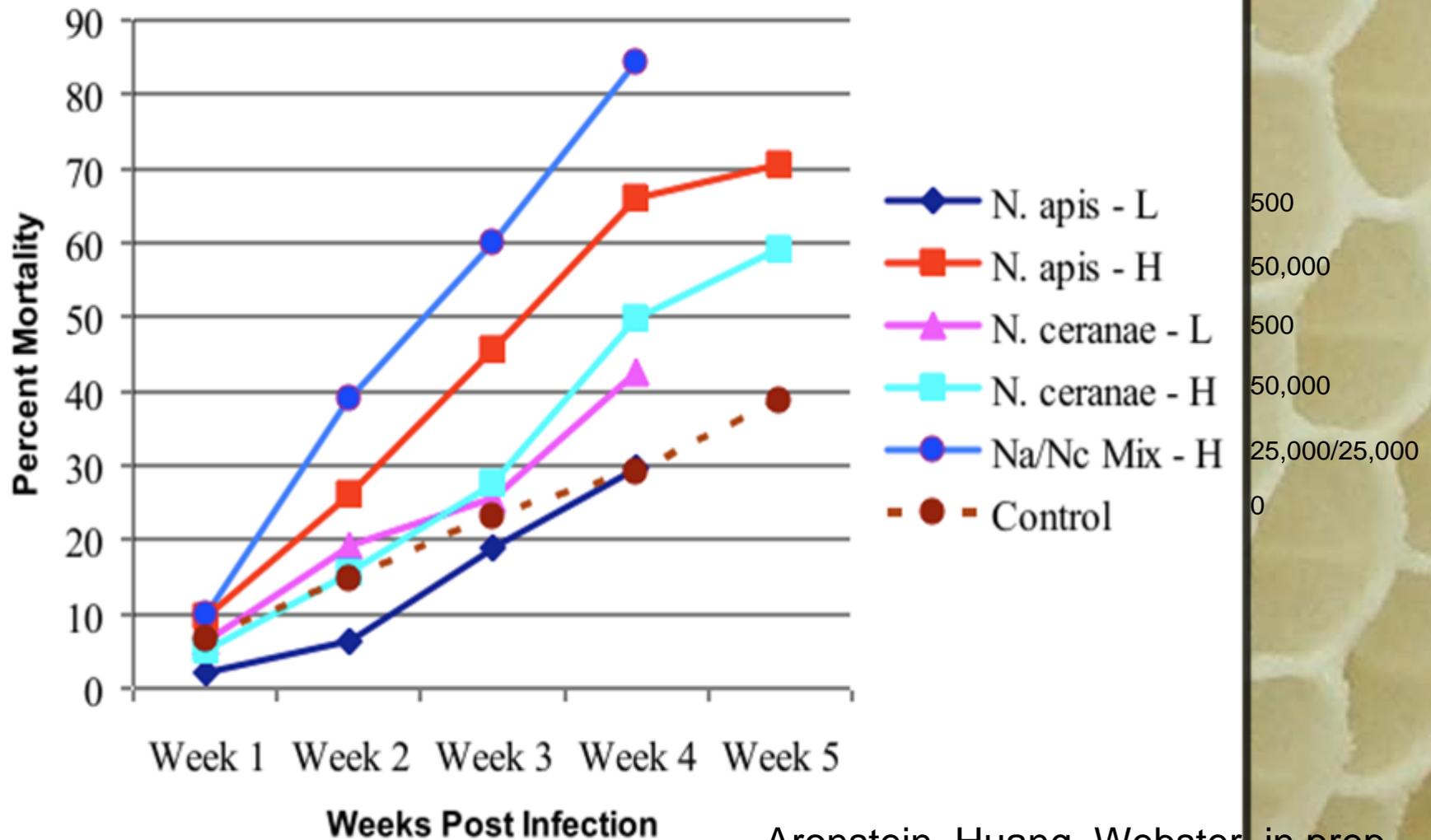
1. Determine and mitigate causes of CCD
2. Incorporate resistance traits and increase genetic diversity
3. Improve conservation and management of non-*Apis* bees
4. Deliver research knowledge to client groups



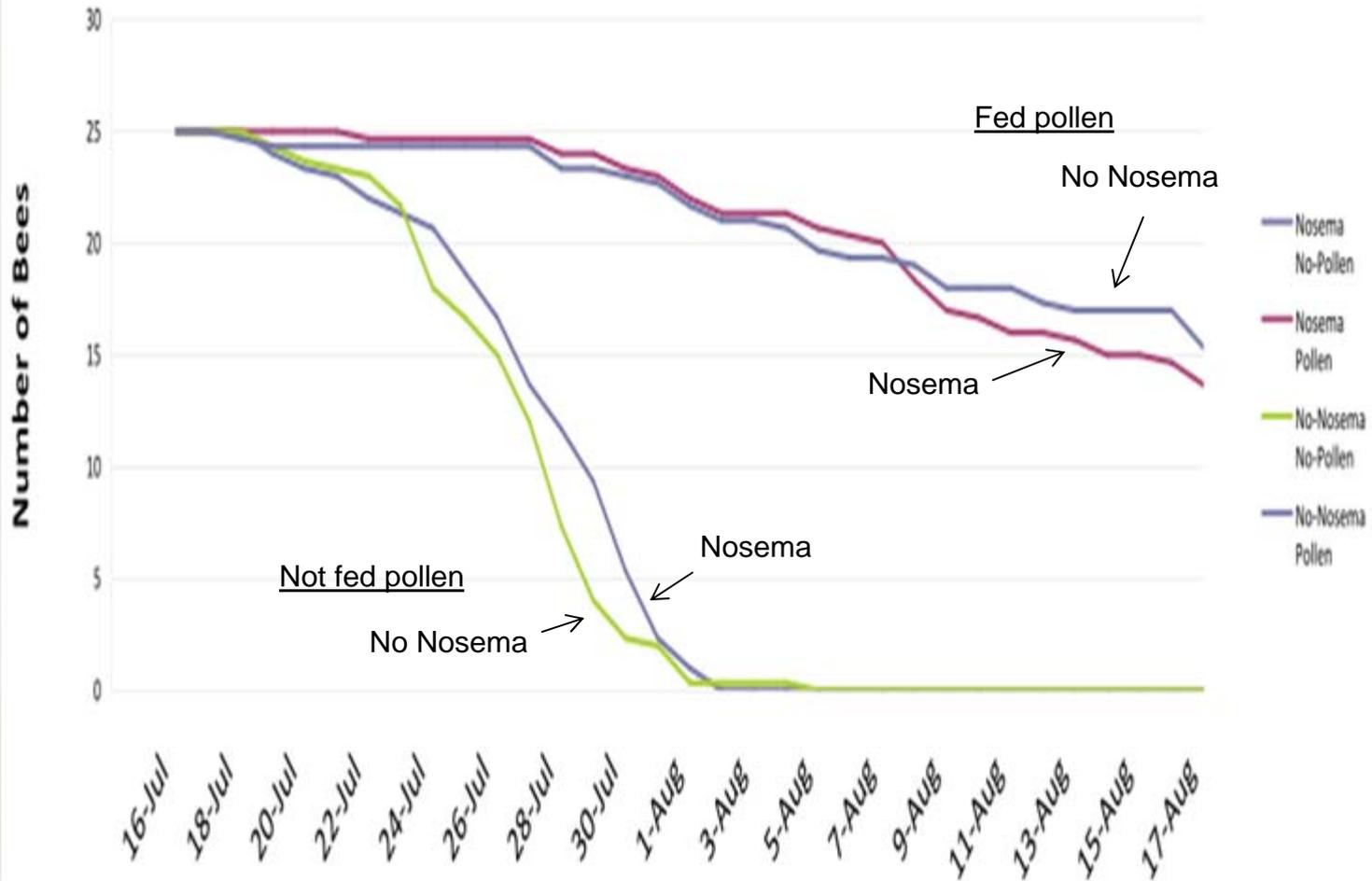
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Weekly Honey Bee Mortality



Survival Curve of Hive 2



Zachary Huang, in prep

Stationary Apiary Monitoring Scheme

- 7 states
- 30 colonies
- All same queens
- New woodenware, wax-coated plastic foundation (cappings wax)
- No chemical inputs

Monthly

- Colony strength
- Nurse bees for virus
- Foragers for Nosema, pesticides, and TMs
- Varroa (sugar shake)
- Native bees around apiary for pathogens and pesticides

Weekly (from 5)

- Pollen for pesticides

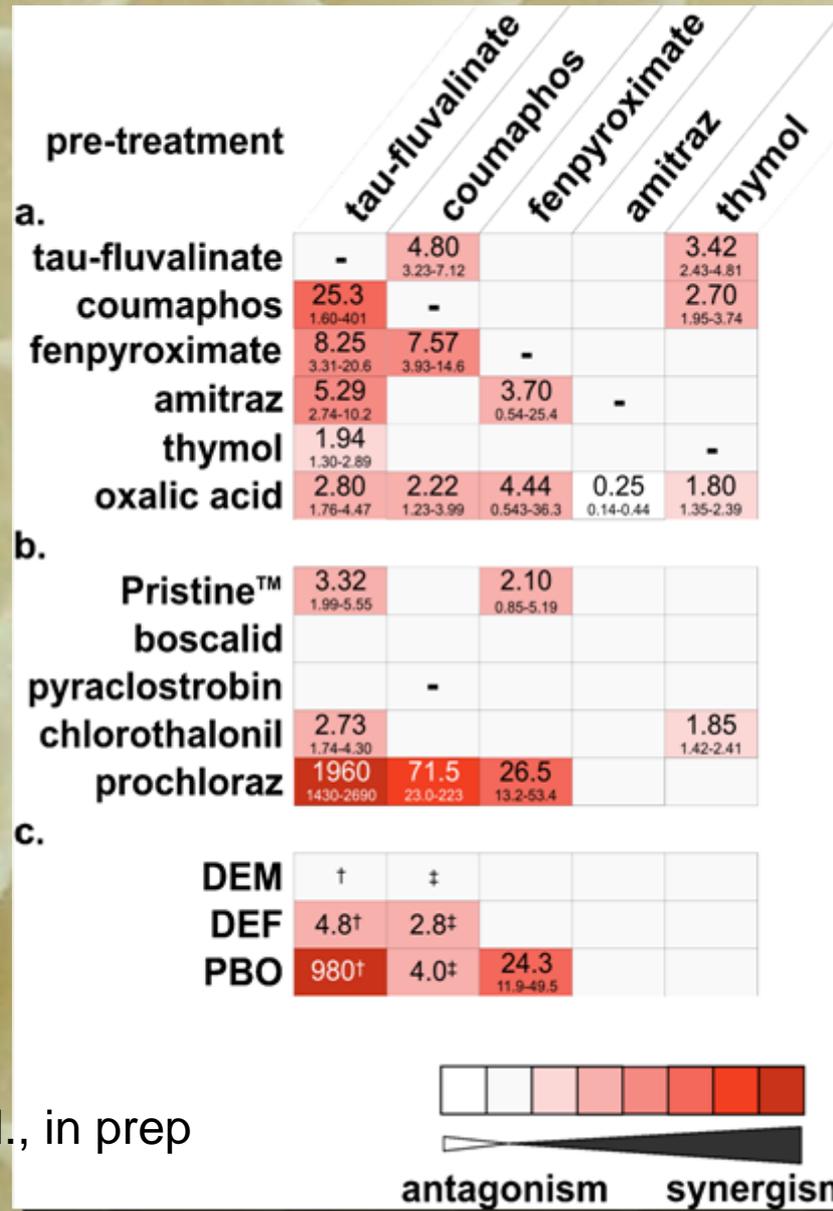




Colony prevalence of mixed infections

	ME	MN	PA	TX	WA
No virus	0%	0%	0%	0%	3%
ALL (BQC, DWV, IAP, SB)*	12%	0%	0%	0%	0%
BQC, DWV, IAP	4%	0%	0%	0%	0%
BQC, DWV, SB	60%	50%	25%	0%	30%
BQC, DWV	16%	29%	45%	5%	20%
BQC, SB	0%	4%	0%	0%	0%
DWV, IAP	4%	0%	0%	0%	0%
DWV, SB	4%	7%	10%	9%	27%
BQC	0%	0%	0%	0%	3%
DW	0%	11%	20%	86%	17%

Synergism ratios comparing medial lethal doses (LD₅₀)



Johnson, M. Ellis, et al., in prep

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Bee Health

Here are some of our featured articles and activities...



Healthy Bees Course from Univ. of Minnesota

Help honey bees fight for themselves with this interactive learning module.

[More...](#)

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In This Resource Area

[Background to Bee Health Community](#)

[Honey Bee Bioloav](#)

Answers from our Experts

October 09, 2009

Are their any ecological concerns about the



In The News...

October 16, 2009

[Penn State Researchers Promote Pollinator-friendly Native Gardens](#)

October 16, 2009

[O'Keeffe Foundation Gift Will Enhance Penn State Honeybee Research](#)

October 07, 2009

[How Sweet It Is! Washington State Offers Master Beekeeper Course](#)

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