

Enhancing the Tech Team Program for the Commercial Beekeeping Industry: Pacific Northwest Tech Transfer Team

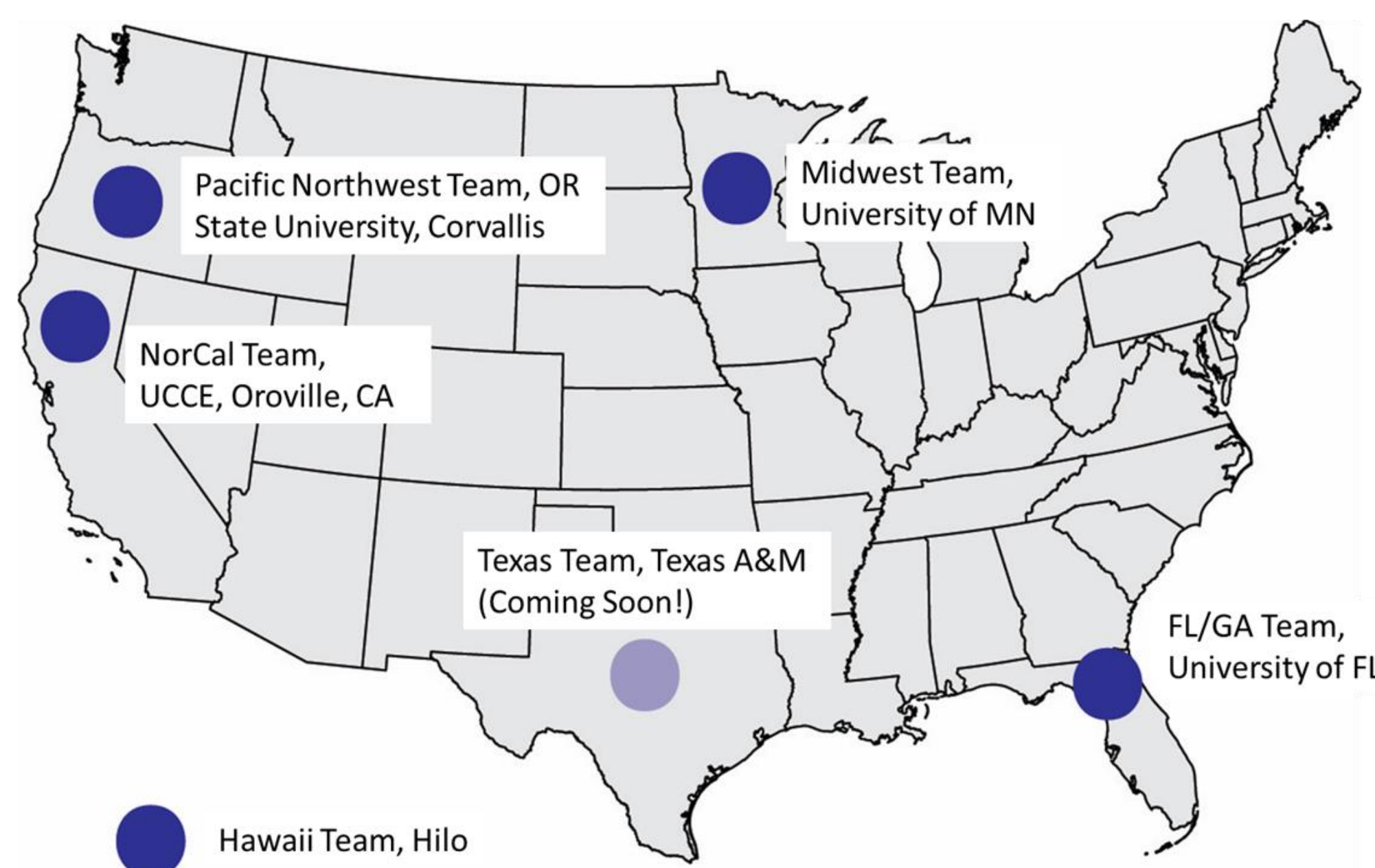


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Introduction

Commercial beekeepers face an increasing set of challenges to keep honey bee colonies alive and in robust health. Tech Transfer Teams were created under the Bee Informed Partnership (BIP) to serve commercial beekeepers in an effort to reduce colony mortality. Tech teams work with beekeepers nationwide to monitor colony health by quantifying disease and pest levels throughout the season.

Locations of BIP Tech Teams



We are the newest addition to the network of regional Tech Teams (see above). As the Pacific Northwest Tech Team (PNW), we currently work with 19 commercial beekeepers in Oregon, Washington and Idaho. The participating PNW beekeepers collectively provide approximately 68,000 colonies for almond pollination.

We work with each beekeeper based on their individual needs. The results for disease loads are provided in near real-time to assist beekeepers in evaluating and improving management decisions. The overall findings from our sampling efforts are translated on the national level through our website: beeinformed.org.

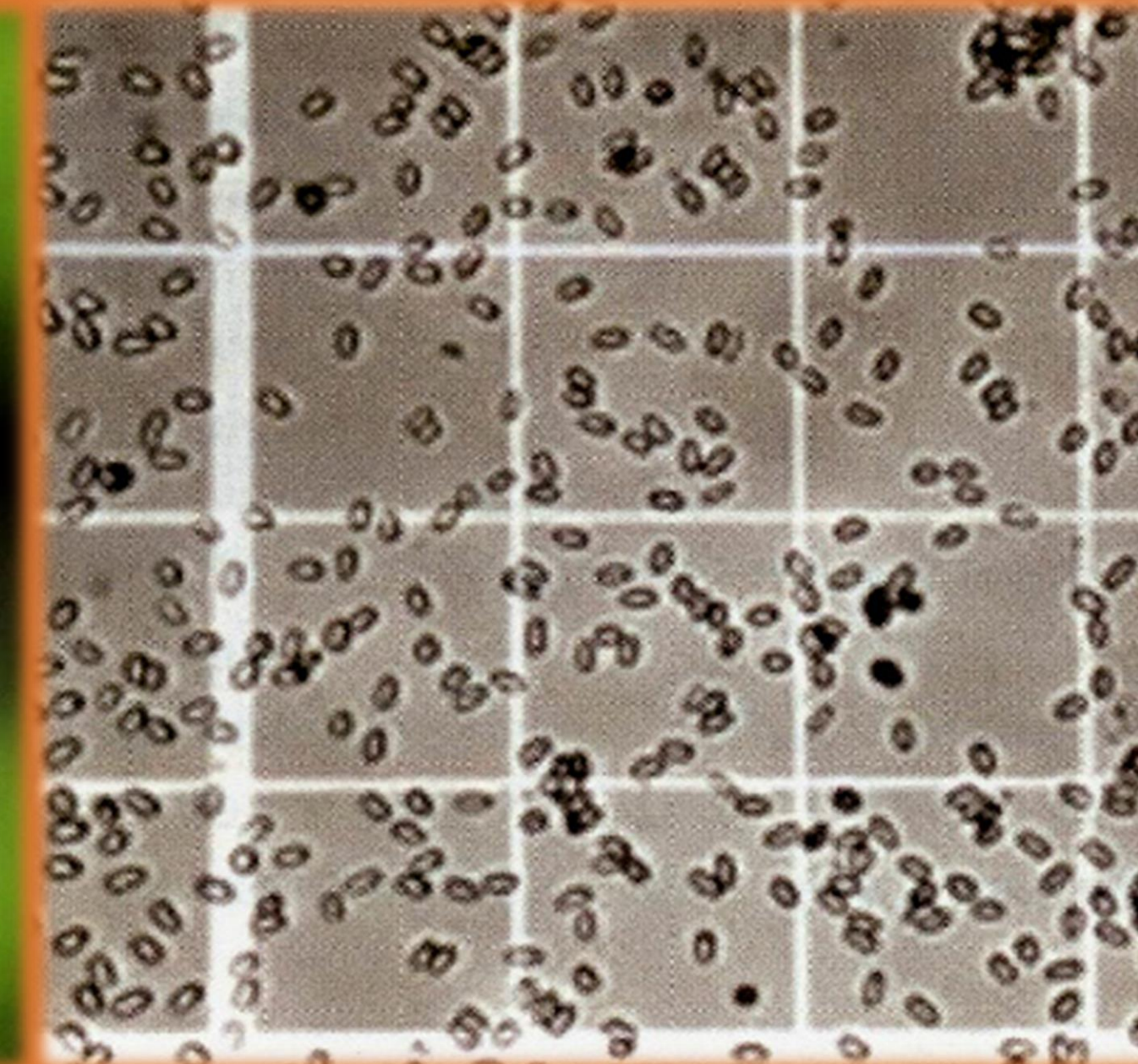
Objective 1

Evaluate individual colonies by routine, long-term sampling to monitor colony health by:

- Evaluating colonies for population, queen quality, weight, and presence of pests and brood diseases.
- Sampling approximately 300 bees in saline solution from each colony to quantify levels of both *Varroa destructor* (parasitic mite) and *Nosema* spp. (gut pathogen).



Varroa destructor
(parasitic mite)



***Nosema* spp.**
(gut pathogen)

By providing results to beekeepers in near real time, we are able to assist them in determining the most effective treatment schedule. Through longitudinal sampling of colonies throughout the year, we are able help beekeepers understand seasonal trends within their own beekeeping operation. In addition, we provide each beekeeper with a summary report of their pest levels, which allows them to anonymously compare their results among other beekeeping operations on a regional and national level.

Objective 2

Document management practices including migratory history, disease and pest control strategies, and supplemental feeding to determine best practices.

Collecting this management data in conjunction with monitoring colony health allows us to assist beekeepers in developing effective management strategies. By providing this information to beekeepers, they will be able to make more informed decisions that lead to improve colony health and survival rates.



Long-Term BIP Objectives

- Reduce colony mortality.
- Increase beekeepers ability to identify and adopt best management practices.
- Develop the Bee Informed Partnership as an economically sustainable and permanent entity.
- Share results with the beekeeping industry via beeinformed.org

Acknowledgements

