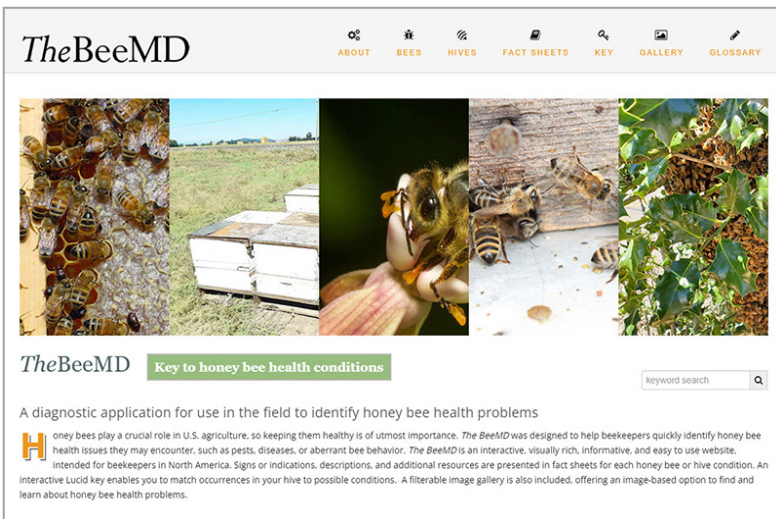ITP and Pollinator Partnership present

*The*BeeMD

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https://idtools.org/thebeemd/
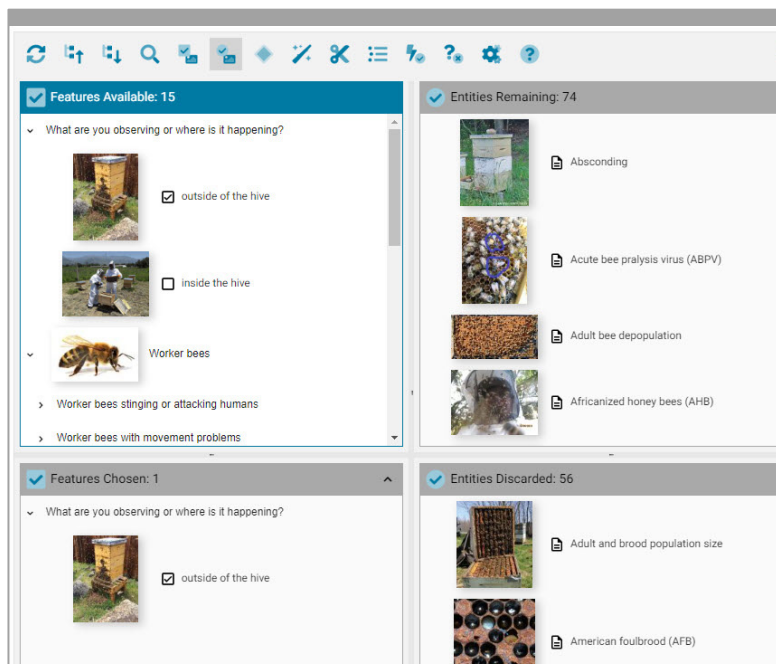
The Western honey bee, *Apis mellifera*, plays a vital role in agriculture in the U.S. as well as worldwide. While beekeepers manage honey bee colonies to support crop pollination, there are challenges associated with successful beekeeping. *The BeeMD* aims to help beekeepers and others concerned with bees quickly identify honey bee health issues, through an interactive, visually rich, informative, and easy to use website. First released to the public in 2016 and now on the idtools.org platform, *The BeeMD*'s original web content has been restructured and streamlined, and more information and many new photos have been added.

The BeeMD offers users a variety of resources to aid in the diagnosis of honey bee health issues:

- Lucid matrix-based interactive identification key
- filterable, "visual key" style image gallery
- informative, illustrated fact sheets for 102 conditions
- helpful information on bees, hives, and beekeeping

Nuc hives

Nucs are another relatively common means of starting a colony of bees. A nuc (=nucleus, sometimes nook or nuk) colony is a smaller version of a full-sized colony. A nuc may be established with 1- 4 frames of brood and 1 or 2 support frames of bee bread and honey. Often a nuc is housed in a smaller hive body (a nucleus hive). When purchased as a starting method, the 3-5 frames of the nuc are transferred to a standard hive box at the intended apiary site.

5-frame nuc colony; photo by Dewey M. Caron

Nuc colony; photo by Dewey M. Caron

5-frame nucs ready for sale; photo by Dewey M. Caron

A nuc grows faster than package bees. Often a second box is added after 3 weeks of initial transfer to a standard hive, depending on the season. Nucs, like package bees, should initially be fed sugar syrup. In some seasons, when started early, nucs can even provide some surplus honey to harvest.

Resources – Nuc hives

Dadant and Sons Nucs, Swarms and Colonies, Pt. 1. Accessed 2024. https://www.dadant.com/learn/nucs-new-hive/

"Making *Nucleus* Colonies" *Youtube*, uploaded by Paul Kelly, University of Guelph Honey Bee Research Centre, October 13, 2022. https://www.youtube.com/watch?v=hcetzBlK6r8

Swarm capture

Capturing a swarm of bees is another means of starting a new hive. Bees may be transferred from the swarm bivouac site (vegetation or a structure) directly into a hive, or the swarm may be captured by shaking the bees into a bucket or convenient vessel and then subsequently transferring the bees into a hive. The swarm doesn't always stay when hived.

Screenshots from the tool: above, supplementary helpful hive information and images about nucs and swarm capture; at left, the Lucid interactive key showing the "outside of the hive" feature-state selected.

The BeeMD is one of 49 online identification tool websites produced or hosted by the USDA Identification Technology Program (ITP). To learn more about ITP's products, including mobile apps and image collections, please visit http://idtools.org or email the ITP team at itp@usda.gov.