Since our last newsletter, most of us have enjoyed a cool and comfortable winter season with slightly below average precipitation. There were some major exceptions, though—think damaging floods on Kaua‘i and hail on O‘ahu! The National Weather Service drought information for April states that we still have drought conditions for leeward Maui County and several areas on the Big Island. In general, not terrible weather for the bees but let’s all hope for some normal or higher rainfall amounts through the summer.

Apiary Program staff have been busy collecting data for the USDA’s National Survey of Honey Bee Health and Diseases. We collected 25 samples from Kaua‘i, O‘ahu, Maui, Moloka‘i and the Big Island—mahalo nui loa to all the beekeepers who kindly allowed us to sample their hives! Results take 4-6 months but will be sent directly to participating beekeepers. If you would like to participate next year, please contact us.

We also hosted Dr. Jamie Ellis, an expert on varroa mite and small hive beetle, from the University of Florida to check out our local beekeeping conditions, eat some plate lunch, and give a series of talks across the state (Lihu‘e, Honolulu, Hilo, and Kealakekua). Hopefully some of you were able to catch one of his talks—he’s a lively speaker!

Staff from the Bee Informed Partnership (BIP) also visited the state. BIP aims to collect data nationwide to help beekeepers reduce colony losses and improve their stock. Maybe you were able to hear Mike Andree from BIP and our own Apiary technician, Lauren Rustert, talk about their work in Kahului last month. Please let us know if you have any comments or suggestions about these events or anything else...

More and more beekeepers have joined our voluntary registry—swarm season is here and we are starting to give out referrals to our registrants based on the information we have collected. We have also made big changes to our website, www.hawaiibee.com so check it out and let us know what you think.

P.S—As we mentioned in our last email, please take the time to participate in the Bee Informed Partnership’s National Winter Loss and Management Surveys. More participation means more information—this helps all beekeepers!

Varroa resistant (VSH) bees

Just like other livestock, people have been choosing honey bees for traits like production, temperament, and health for many years. Honey bee breeding has also focused on specific diseases or parasites, including tolerance or resistance to varroa mites. Beekeepers on the mainland have a variety of lines available to them that have been bred to respond to the presence of varroa, including Minnesota Hygienics, Russians, and Varroa Sensitive Hygiene (VSH). These bees are able to sense the varroa mite under a capped brood cell and respond by uncaping it and removing the infected larva. This interruption of the mite life cycle keeps varroa levels in check naturally, meaning fewer treatments are necessary. It is illegal to import bees to Hawai‘i, but VSH genes have been brought here by importing honey bee semen and instrumentally inseminating queens. The HDOA Apiary Program is working with these special breeder colonies to rear and evaluate VSH bees for traits including mite build up, honey production, temperament and general health. We hope to have beekeeper cooperation with this project in the future.
Danielle Downey started her position with the Hawai`i Apiary Program in December 2010. Her goal is to help beekeepers—from hobbyists to big time commercial guys—meet the challenges that new invasive pests have brought to island bees. Hawai`i is home to over 300 beekeepers, with about 15,000 hives, and the new Apiary Program, lead by Danielle, is dedicated to supporting their work.

Danielle has been working with bees and the pests that prey on them for almost 20 years. She received her BS from the University of Minnesota with Dr. Marla Spivak, breeding hygienic bees. At Simon Fraser University, she received her MSc with Dr. Mark Winston, studying tracheal and varroa mite infestations. She’s also worked for commercial beekeepers and taught beekeeping courses in both lecture and field settings. She is the past president of the Apiary Inspectors of America and a bee wrangler—she can show you how to make a beard of bees! She came to Hawai`i from Utah, where she was the State Apiarist.

Here, Danielle really is as busy as the bees. She visits all islands to meet with beekeepers, offers courses and public presentations to help people understand how to protect bees from pesticides and conserve their habitat, and helps beekeepers whose bees are plagued with pests like varroa. "We can't change that these pests came to the islands," she says, "but we can change the ways we manage bees to keep them healthy and strong." Her goals are to teach these new techniques and to help prevent the spread of invasives. Along the way she works to build better communication among beekeepers, growers, and the government; and to enhance public awareness of the impact the loss of bees will have on Hawai`i and the world.

Legislative Update

We have been following three bills through the Hawai`i State Legislature:

1. Senate Bill 2332 provides a) an exemption to honey producers without access to municipal water and b) an exemption from processing up to 500 gallons of honey annually in a certified facility. Conditions for the water exemption currently include direct sale of honey to consumers, presence of hand-washing facilities, and water quality standards. Conditions for the certified facility exemption presently include sale of honey directly to consumers or to a retail store that sells directly to consumers and several labeling requirements. This bill has passed its second reading as amended in the House and was referred to the House Finance Committee.

2. House Bill 1947 (Part II) includes the same language as Senate Bill 2332; Part I is not directly related to honey. This bill has passed its second reading in the Senate and was referred to the Senate Ways and Means Committee.

3. House Bill 2100 aims to appropriate general state funds to the UH system for bee hive research statewide, in consultation with the HDOA. An unspecified sum shall be allocated to each of Hawai`i island, Maui, O`ahu, Kaua`i, and to UH Hilo. The House Ways and Means Committee has recommended passage on Third Reading, as amended.

Penalties for importing prohibited animals

Along with snakes and Gila monsters, honey bees, live or dead, are prohibited from entry to the state according to Hawai`i Revised Statutes Chapter §150A-6. Enforcement of such laws is carried out by HDOA’s Plant Quarantine Division.

The penalty for importing or possessing illegally imported honey bees is a misdemeanor and is subject to a fine of between $5000 and $20,000. The penalty for importing honey bees with the intent to propagate, sell, or release them is a class C felony subject to a fine between $50,000 and $200,000.

Please remember that our bees have enough problems as it is, without the possible addition of new pests and diseases that can accompany imports. Bringing bees into the state is illegal and could have terrible consequences—think Africanized bees near a playground or more imported pests like Tropilaelaps mites. (Just a note of historical interest—it’s been illegal to bring honey bees into Hawai`i since 1908!)