Connecting Florida Farmers Through Monthly State-Wide Invasive Species Webinars

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Situation

Invasive species cause many problems such as economic losses in agriculture and horticulture, human/animal health hazards, disruption of native ecosystems and more. A 2022 study suggests that the U.S. loses around $1.2 trillion annually due to invasive species. Florida is high-risk for the introduction of new species due to the state's mild winters, diversity of agricultural commodities, and multitude of international airports and deep-water ports as entry points for new species. Research demonstrates that farmers, green industry professionals, and the public are important in early detection of invasive species, but awareness is critical to strong volunteer-based networks. The Florida First Detector Program is a multiagency educational effort focused on enhancing the early detection of invasive pests that threaten Florida. Historically, this program has offered in-person workshops across Florida; however, since COVID-19, the demand for webinars has increased, leading to a need to expand to a virtual realm.
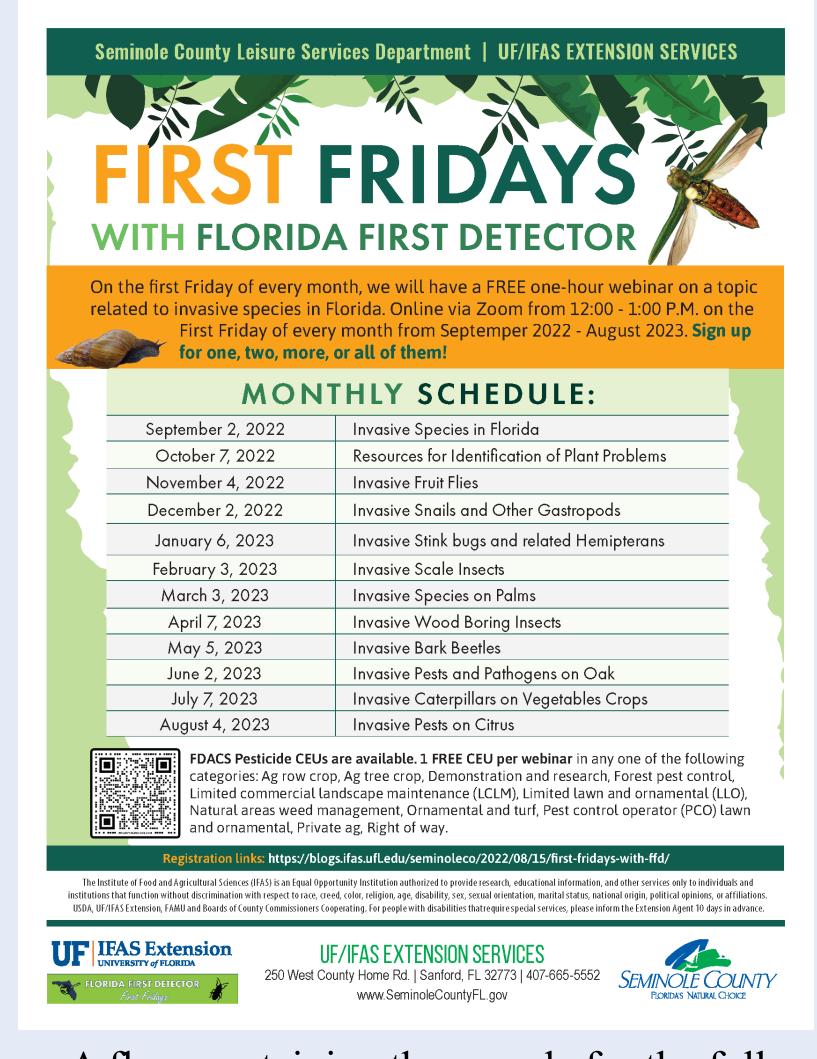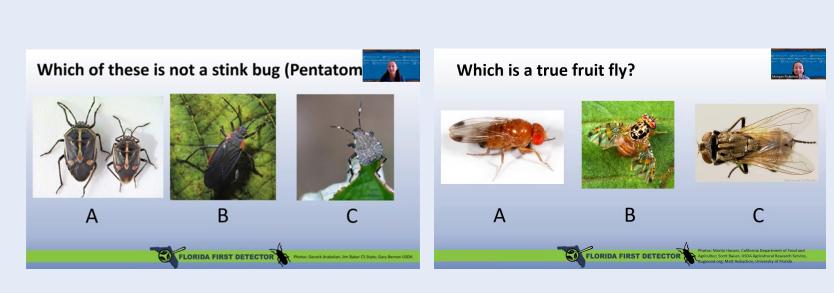
Education Methods

UF/IFAS Extension Seminole County partnered with the Florida First Detector program to host a state-wide webinar series on invasive species titled "First Fridays with Florida First Detector." The webinar agendas were created based on feedback at bi-weekly cooperator meetings with regulatory agencies, and topics target diverse audiences of farmers, landscapers, homeowners and others. Beginning in September 2022, an hour-long webinar occurred on the first Friday of every month. Webinars were approved for Florida pesticide Continuing Education Units (CEUs). Post-webinar surveys were used to measure outcomes including knowledge gain and intent to adopt learned practices, thus far. Behavior change will be evaluated using 6 month follow-up surveys as the series continues.

A flyer containing the agenda for the full series September 2022-August 2023 was used to advertise in-person and online.

Social media graphics were created monthly for each webinar and shared broadly on many online platforms.
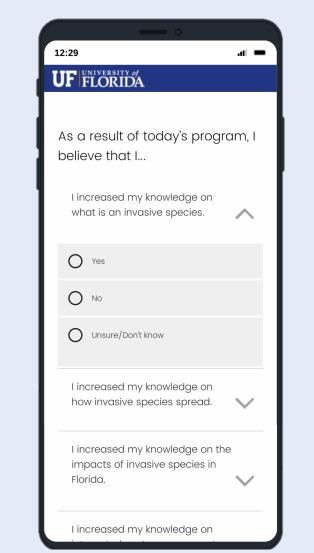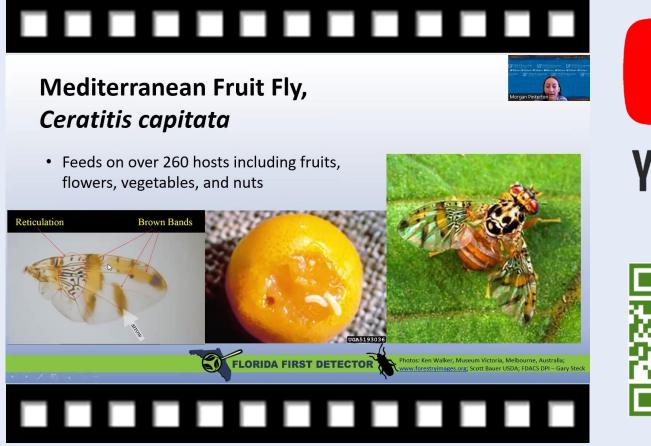
Interactive polls were used throughout the webinars to engage with the audience and record participation for CEUs.
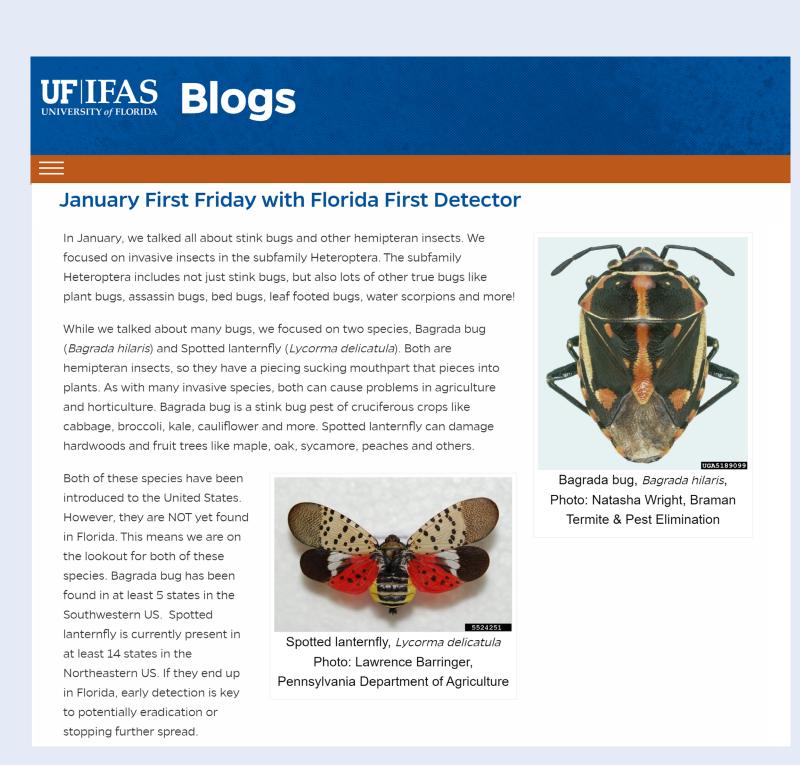
Institutional Review Board (IRB) approved surveys were emailed to participants via Qualtrics immediately after each webinar. Surveys could be accessed on any web-enabled device including mobile browsers. Follow up surveys will be sent as the program continues.

Webinar recordings were posted to YouTube following the live class. Scan the QR Code above to access a playlist containing the First Friday's with Florida First Detector videos.

Monthly blogs are posted containing a recap of the topic covered for the month, links to resources covered in the webinar, access to the recording, and how to register for future webinars.

Results

The six webinars, thus far, have been highly successful, with over 420 participants, more than 300 CEUs issued, and over 1,600 views on recap blogs and recordings. In post-webinar surveys, 95.5% (321/336) indicated they agreed or strongly agreed that they understood the topics measured in the survey (+30.3% from before the webinar). Additionally, 94.3% (317/336) of survey respondents self-reported that they increased their knowledge on invasive species and 99.4% (328/330) intend to adopt at least one practice learned. Some specific practices are:

- 100.0% (326/326) intend to be cautious not to move pests to new areas.
- 99.7% (324/325) intend to use integrated pest management strategies to control undesirable species.
- 98.4% (315/320) intend to educate others about invasive species.
- 94.7% (308/325) intend to submit a sample of a suspicious pest or plant.
- 94.6% (300/317) intend to search for pest species featured in the webinar.

With follow-up surveys, the team will continue to evaluate behavior changes by webinar participants over time.

Conclusions

The First Fridays with Florida First Detector webinars have broadened the capacity to teach diverse audiences about identification and early detection of invasive species. The series has directly contributed to the acquisition of over $136,000 in grant funds to further support invasive species educational programs in 2023 and 2024. The team has already began preparations for more webinars in 2024 and intends to improve these webinars based on feedback and survey data. Other researchers and extension professionals have reached out to the team for guidance on hosting similar online, interdisciplinary, multi-part programs. Thus, by sharing our experiences and successes, the team's efforts on invasive species education can serve as a model for other educators too.

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