First Detector Training



Lori Spears
Invasive Species Survey Coordinator
Utah State University
First Detector Training Workshop – Sept 21, 2018

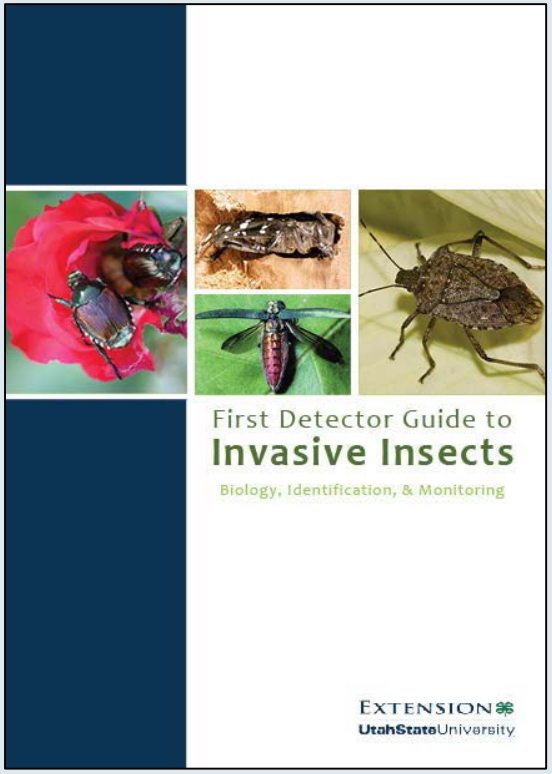
Agenda

- 9:00 am: **Welcome** (Lori Spears, USU)
- 9:15 am: **Partner agencies and their roles** (Dawn Holzer, USDA APHIS PPQ)
- 9:30 am: **Emerald ash borer** (Ryan Davis, USU)
- 10:15 am: **Break**
- 10:30 am: **Japanese beetle** (Joey Caputo, UDAF)
- 11:00 am: **Brown marmorated stink bug** (Cody Holthouse, Zach Schumm, USU)
- 11:40 am **Spotted lanternfly** (Lori Spears, USU)
- 12:00 pm: Lunch
- 1:00 pm: **Backyard beekeeping** (JayDee Gunnell, USU)

First Detector Swag Bags

Guides

- First Detector Guide to Invasive Insects
- Invasive Fruit Pest Guide for Utah
- Common Ornamental Pests of Utah



Utah's First Detector Program is a response to the constant and growing threat of invasive species

…and the list goes on and on.

…and the list goes on and on.

…and the list goes on and on.

…and the list goes on and on.

…and the list goes on and on.

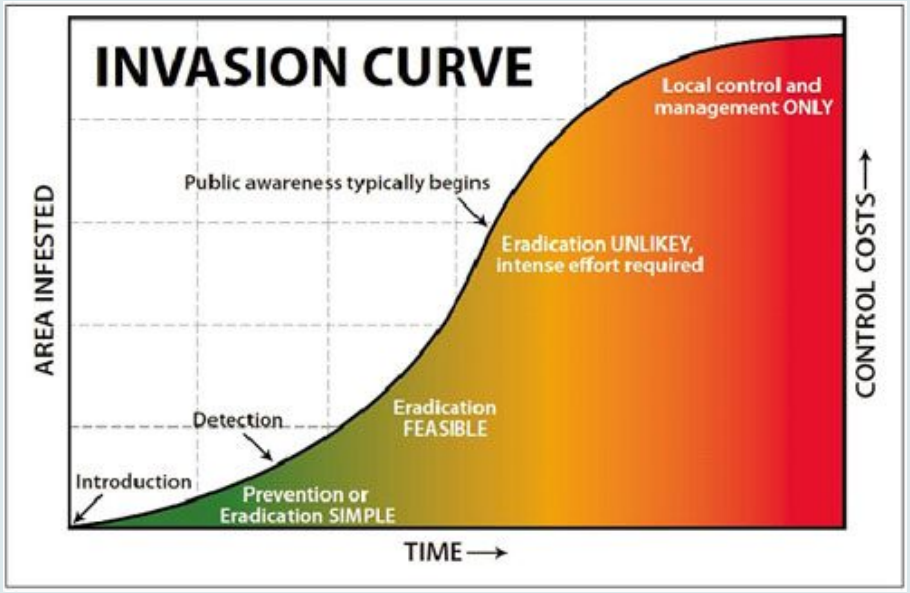
…and the list goes on and on.

Waiting in the wings…

Waiting in the wings…

What is an Invasive Species?

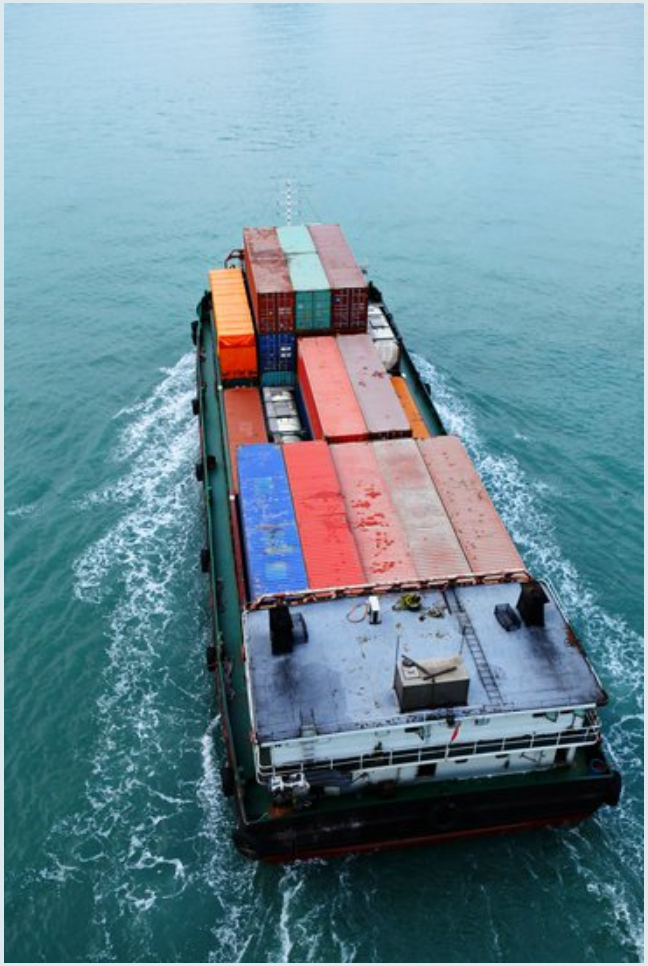
- An organism that is not native to the local environment and is capable of harming the economy, environment or human health.
- The term "invasive" is reserved for the most aggressive and destructive non-native species.



*One estimate of cost: $120 billion per year in the U.S. Pimentel et al. 2015

Invasive species can be introduced either accidentally or intentionally

Focus on Early Stages of Invasion




How Invasive Species Spread
WHY SHOULD YOU CARE? WHEN ESTABLISHED, INVASIVE SPECIES CAN: REDUCE CROP YIELD, QUALITY, AND INCOME • INCREASE MANAGEMENT COSTS AND PESTICIDE USE
OUTDOOR GEAR:
Clean outdoor gear before transport to a new location: noxious weed seeds and other pests can hide in soil and crevices on equipment.
WOOD PRODUCTS:
Don't transport wood across state lines or quarantine areas. Buy firewood from local sources and burn it where you buy it.
PASSENGER BAGGAGE:
Follow USDA plant inspection regulations when transporting fruits, vegetables, and plants. For international travel, declare all agricultural items to U.S. Customs and Border Protection to prevent introduction of invasive species.
TRANSPORTATION MODES:
Thoroughly inspect and wash personal and recreational vehicles (e.g., boat) to avoid transport of invasive species.
PLANT MATERIAL:
Purchase and promote non-invasive, environmentally safe species. Remove invasive species from your property and replace with non-invasive species suited to your region.
Invasive organisms are non-native, and capable of harming the economy, environment, and human health.
The term "invasive" applies to aggressive exotic species. Invasive species can spread naturally and by human-transport. Understanding how invasive species are spread is crucial to their prevention.
INCREASE NUISANCE PROBLEMS • INCREASE PUBLIC HEALTH AND SAFETY RISKS • LOWER BIODIVERSITY AND LAND VALUE • DISRUPT ECOSYSTEM SERVICES (E.G., POLLINATION, BIOCONTROL)
VISIT INVASIVE.USU.EDU
FOR MORE INFORMATION
EXTENSION
UtahStateUniversity
UtahStateUniversity
BOTANICAL CENTER


"HAVE WE MET?
I'M YOUR WORST
NIGHTMARE."
BEWARE
of hitchhikers


BUY IT WHERE YOU BURN IT
Tree-killing insects & diseases
can hitchhike in firewood
EXTENSION
UtahStateUniversity
UDAF
DONTMOVEFIREWOOD.org
21144N
YESCO


This ASH TREE IS AT
RISK OF BEING KILLED BY THE
EMERALD ASH BORER
www.emeraldashborer.info

Our goal is to create a group of well-trained, committed volunteer leaders

- Increase public awareness about the threats of invasive species to Utah's resources
- Collect samples or pictures, else pass on information for the UPPDL or UDAF to collect sample(s)
- Help coordinate local volunteer efforts, etc.

First Detector Responsibilities

- First Detectors never announce the arrival of a new pest.
- All information regarding potentially new, invasive pests must be treated as confidential.

Contact Us

ROLES & RESPONSIBILITIES

In order to become a First Detector, individuals must have a working email address and phone number, attend a First Detector training workshop, and fill out and sign a First Detector Confidentiality Form (to be handed out during the workshop). In addition, First Detectors must agree to the following terms:

- *First Detectors never announce the arrival of a new pest.* All information regarding potentially new, invasive pests must be treated as confidential. First Detectors should immediately notify the UPPDL regarding suspected symptoms or collection of life stages. The UPPDL will then communicate that information to the appropriate agencies. This protocol is required to avoid premature and incorrect reports, as significant unintended consequences may result from hasty, inaccurate communications.
- *First Detectors do not have the authority to enter private property without permission.* If you do receive permission to enter private property, it is recommended that the property owner accompany you.
- *Being a First Detector is voluntary.* First Detectors will not be financially compensated or reimbursed for time and/or travel. However, Continuing Education Units (CEUs) may be available for pesticide applicators and certified arborists. Master Gardeners may also be able to use volunteer time as a First Detector toward Master Gardener service hours.

SUBMITTING SAMPLES

The UPPDL is a service of USU Extension and the Department of Biology at USU. The UPPDL is staffed with highly skilled and experienced professionals that provide rapid and accurate identification of pest-related problems. First Detectors can submit suspect samples (digital images and/or physical samples) directly to the UPPDL. If possible, send digital images to the USU CAPS Coordinator (caps@usu.edu) for screening prior to submitting physical samples to the UPPDL.

Submitting Digital Images

Send high-resolution images as an email attachment to one of the labs listed on the next page. Images should be **in focus** and well-lighted, contain a ruler or other object for scale, and contain different parts/views of the insect and/or plant symptoms.

Submitting Physical Samples

Live insects can escape from containers; therefore, it is very important that you kill (do not squish) the insect before submitting it to the UPPDL. Place the insect into a spill-proof jar or vial containing rubbing alcohol (hand sanitizer or white vinegar are suitable alternatives). You can also freeze the insect before placing it into a sealable crush-proof container. If submitting plant material, handle it as if it contains a live pest (i.e., secure plant material so that an emerging pest could not escape). Wrap plant material in paper bags or newspaper. Secure samples using packing material to avoid breakage/damage. Samples containing plant material should be overnighted.

Include with your submission, the date, collection location, email address, phone number, and physical address in case we have follow-up questions. Mail sample(s) to one of the labs listed below, and as soon as possible to prevent drying or deterioration of the insect or plant material.

Utah Plant Pest Diagnostic Laboratory
Utah State University
5305 Old Main Hill
Logan, UT 84322
Phone: 435-797-2435
Email: caps@usu.edu
Website: http://utahpests.usu.edu/uppdl/

Utah Department of Agriculture and Food
Plant Industry and Conservation Division
350 N. Redwood Road
Salt Lake City, UT 84114
Phone: 801-538-7184
Email: agriculture@utah.gov
Website: http://ag.utah.gov/plants-pests.html

utahpests.usu.edu

UTAH PESTS
HELPS TO SOLVE
PLANT PEST ISSUES
THAT CONCERN UTAH CITIZENS EVERY DAY

IPM PEST ADVISORIES

Pest Identification Guides

BROWSE UTAH PESTS

- Fact Sheets
- Guides and Publications
- Slide Presentations
- Utah Pests News
- IPM Pest Advisories
- Bees and Other Pollinators
- Educational Videos
- Contact Us

UTAH PESTS PROGRAMS

- Utah Pests Home
- IPM Integrated Pest Management
- School Integrated Pest Management
- Utah Plant Pest Diagnostic Lab
- Cooperative Agricultural Pest Survey

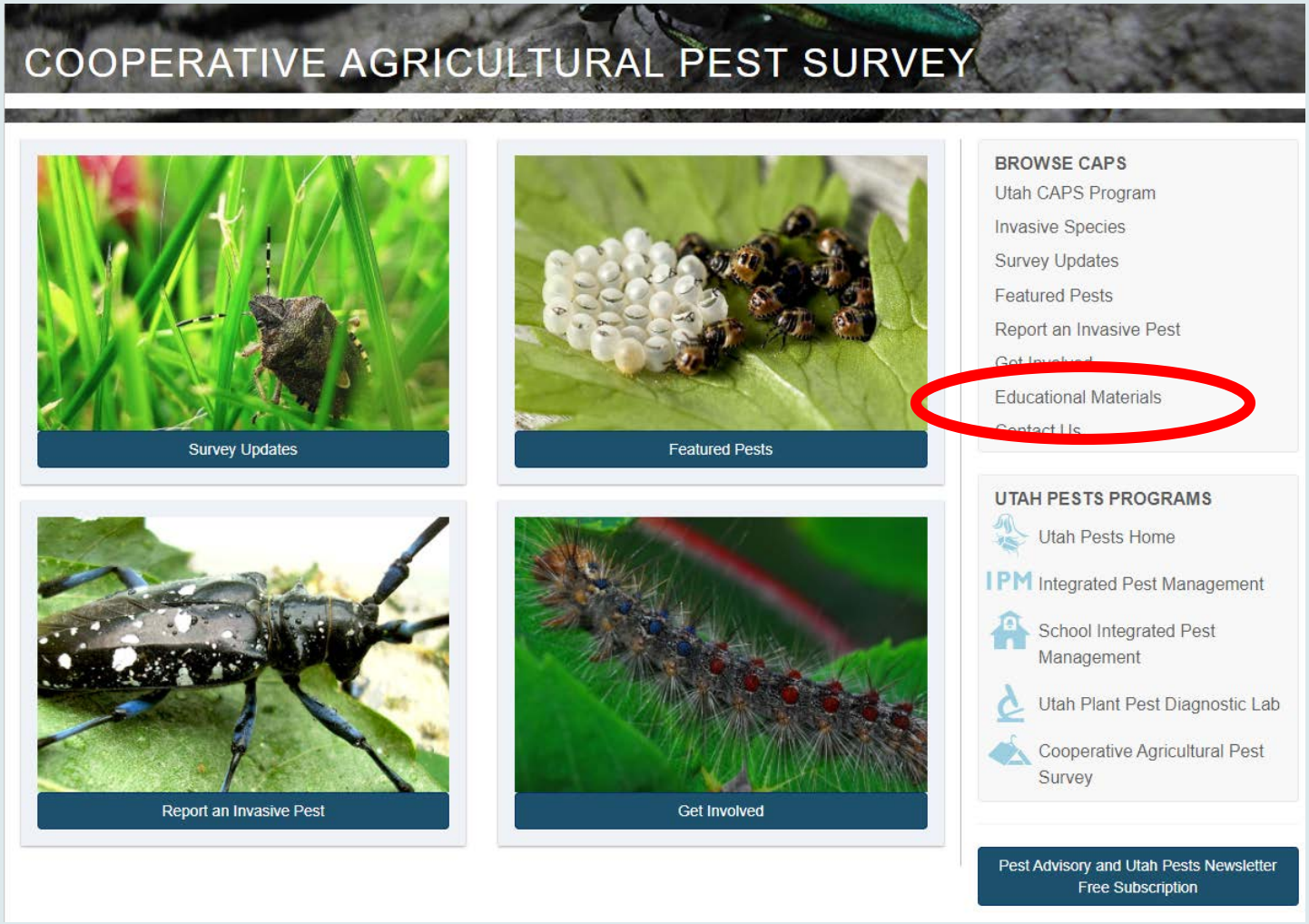
Latest News

In Search of Soybeans Resistant to the Brown Marmorated Stink Bug

The invasive brown marmorated stink bug "will eat almost anything." Among its targets is soybean, the number-two crop in the United State Researchers at the U.S. Department of Agriculture's Agricultural Resea Service are working to identify soybean breeds that exhibit resistance to the pest.

Read More

Powerpoint slides shown today will be available on the Utah Pests CAPS site soon



Outreach and Educational Materials

Fact Sheets | Field Guides | Informational Powerpoints | Rack Cards | Posters | Others

FACT SHEETS

Brown Marmorated Stink Bug Fact Sheet

A fact sheet that focuses on the monitoring and management of Brown Marmorated Stink Bug (BMSB) in fruit and vegetable crops in Utah. BMSB was accidentally introduced into the eastern U.S. from Asia in the late 1990s. It was first detected in Utah in 2012 and since 2017 has caused damage to fruits in vegetables in some Northern Utah counties. .

DOWNLOAD

Small Hive Beetle Fact Sheet

A fact sheet containing many facts about Small Hive Beetle (SHB). SHB is an exotic pest of honey and bumble bee colonies that is native to Africa. SHB feeds on pollen and honey, kills bee brood and workers, and causes honey to discolor and ferment. This pest is now found throughout much of the U.S. with highest infestations occurring in the Southeast. It was first detected in Utah in 2016 and is now confirmed in Washington and Davis counties. Infestations can be prevented by early detection, using good husbandry techniques, maintaining a high ratio of bees to comb, and keeping hives in partial to full sun. Chemical control options for SHB are limited due to toxicity to bees.

DOWNLOAD

BROWSE CAPS

Utah CAPS Program
Invasive Species
Survey Updates
Featured Pests
Report an Invasive Pest
Get Involved
Educational Materials
Contact Us

UTAH PESTS PROGRAMS

Utah Pests Home
IPM Integrated Pest Management
School Integrated Pest Management
Utah Plant Pest Diagnostic Lab
Cooperative Agricultural Pest Survey

Pest Advisory and Utah Pests Newsletter Free Subscription

Funding provided by USDA APHIS PPQ and USU Extension


ANY
QUESTIONS
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