



UNIVERSITY OF GEORGIA
EXTENSION

Hot Topics in Mosquito Management: PSEP

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GEORGIA
PSEP

Pesticide Safety Education



UGA Extension's **Pesticide Safety Education Program** (PSEP) is housed in the Entomology Department.

Our new website address: **psep.uga.edu**

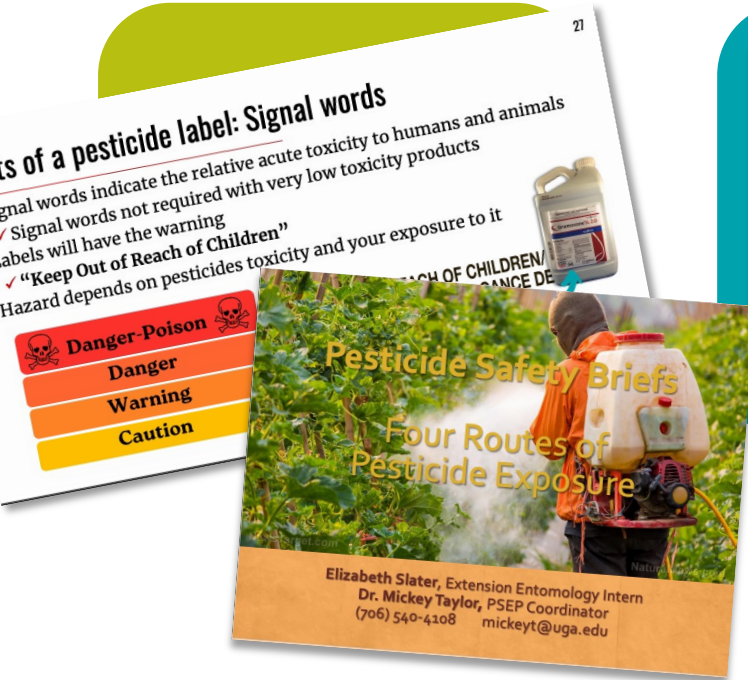
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Program Resources

UGA Extension's **Pesticide Safety Education Program** (PSEP) promotes the responsible and safe use of pesticides throughout Georgia.

Educational Resources



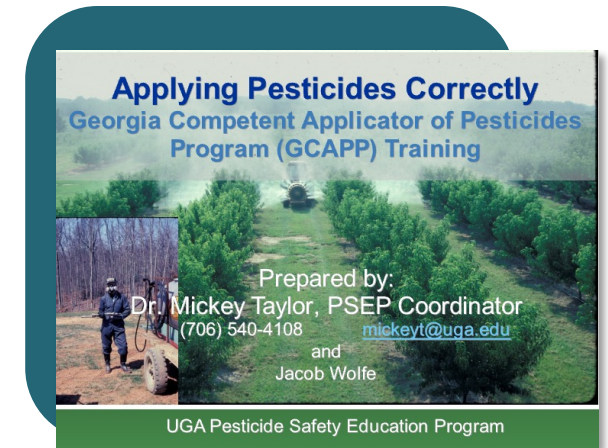
Training Programs



Study Guides



Homeowner Education



Ch-ch-ch-changes to Certification & Training

- ✓ GDA updated certification and training (C&T) plans to meet EPA approval
- ✓ *Who is affected?*
 - ✓ Any new applicators seeking commercial or private licenses or licensed applicators seeking recertification credits (*everyone!*)

2018: GDA started C&T revision

May 2021: GDA received 1st EPA review of C&T plan

March 2022: Received comments from EPA

Received several more comments through 2022 & made additional edits

April 2023: Plan approved by EPA HQ



2017: EPA certification of applicators plan was revised

March 2020: GDA submitted draft copy of certification plan

December 2021: GDA submitted revisions

May 2022: Resubmitted plan

December 2022: Submitted final version of plan



Important C&T Updates

- ✓ GDA anticipates 1–2-year process to complete necessary regulation changes
- ✓ GDA will need [*at least*] 1 year to update training and exam materials
- ✓ Aerial application (drones), soil fumigation, and non-soil fumigation
- ✓ Certified applicators supervising non-certified applicators
 - ✓ Met the training requirements for **40 CFR 171.201(d)**
 - ✓ **OR** met the training reqs for an Ag Handler (**40 CFR 170.501**)
 - ✓ If you are certified applicator but not in that category, you are officially considered a noncertified applicator



Structural Pest Division

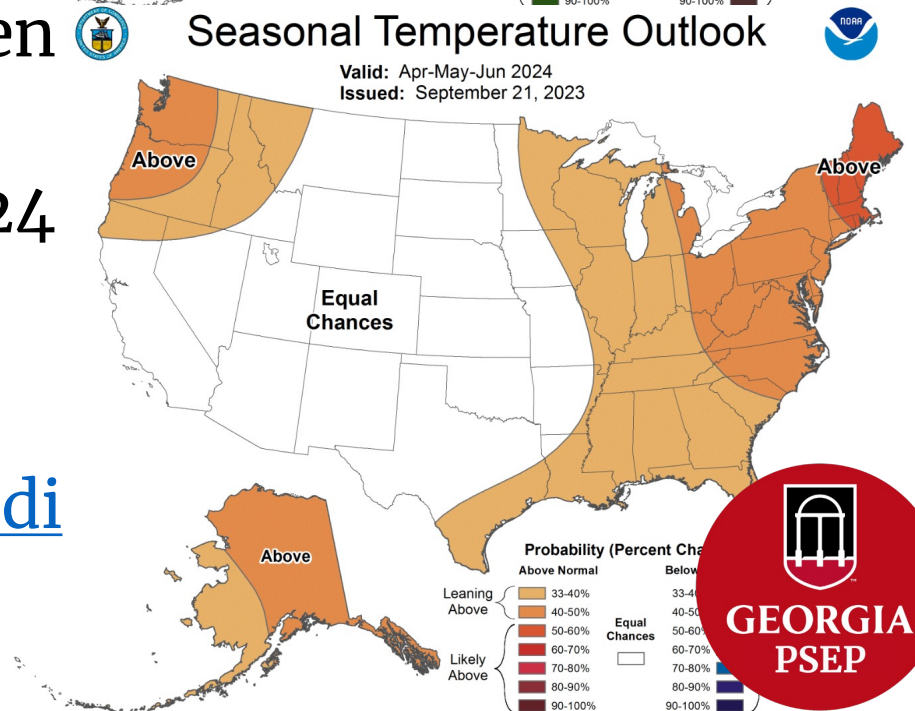
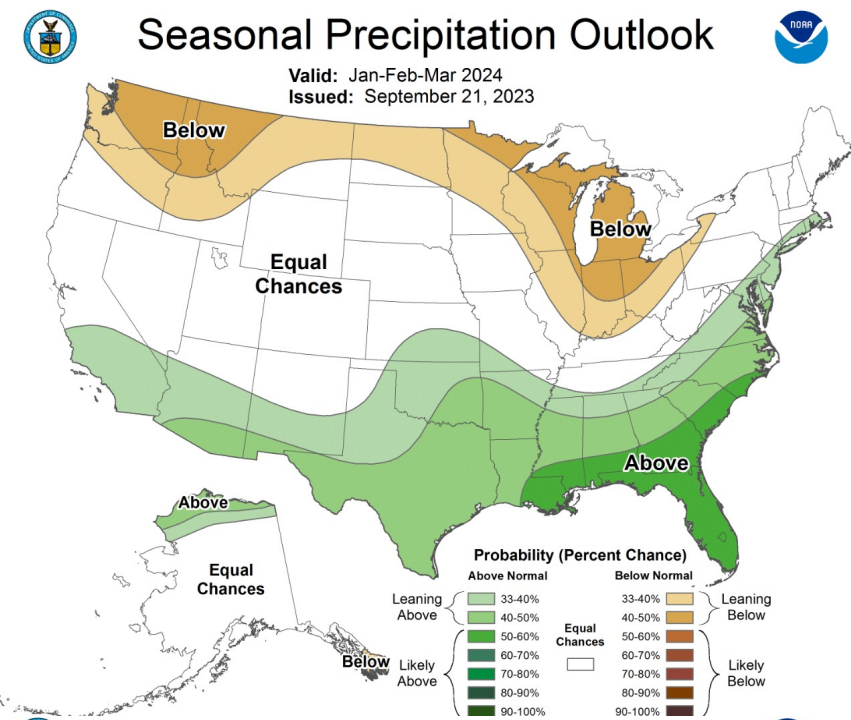
- Minimum age of 18 for Certified Operators
- Updated competency standards for certification of Certified Operators
- Additional requirements for proctoring of exams
- Provisions for right of entry (NOI)
- New requirements for supervision of noncertified applicators (GA Registered Employees)

Agricultural Inputs Division

- Right of entry for inspections for collecting different samples & records
- Record keeping for RUP's: name, address & EPA registration number
- Record keeping for noncertified applicators: name, supervisor & training
- Minimum age to 18
- List requirements for proctor during the commercial applicator exam
- Update competency standards for certification of commercial applicators
- Continuing education standards must define quantity & quality of content, frequency of monitoring courses.
- Adopt online & distance policy
- Standards for direct supervision of noncertified applicators
- Reciprocity evaluation, application & termination process

Management Season

- ✓ El Niño impacts GA's agriculture & pest management seasons
 - ✓ Delayed plantings & changes to mosquito season
- ✓ Weather impacts from these conditions worsen in the winter and following spring
 - ✓ Expect similar shifts in pest seasons in 2024
 - ✓ Rainy and warm spring
 - ✓ Monitoring will be 🔑
- ✓ <https://www.cpc.ncep.noaa.gov/products/predictions/90day/>



Climate & Ag in the SE


- ✓ <https://site.extension.uga.edu/climate/>
- ✓ Newsletter by our own Pam Knox
 - ✓ Keep up to date on weather that impacts production systems as well as pests
- ✓ “Winter 2023 is going to have cooler daytime temps and cloudy conditions with a lot of precipitation”

Climate and Agriculture in the Southeast

Home

Getting into the weeds with this winter's climate predictions

Pam Knox October 15, 2023




Climate prediction is a combination of looking at patterns that historically have affected our region in the past (analogies with previous events) and what computer models are saying about what we can expect this year based on large-scale weather patterns and how they are expected to evolve over time using mathematical formulas and current observations....

Posted in: [Climate outlooks](#), [Climate science](#)

Whose climate forecasts do you trust?

Pam Knox October 15, 2023




I don't put any faith in winter forecasts from the Old Farmer's Almanac or the Farmers' Almanac because over time scientists have shown that their forecasts are incorrect more often than they are right, although they are often so vague that it is hard to evaluate. But I know many farmers and others who consult...

Posted in: [Climate and Ag in the news](#), [Climate outlooks](#)

Dry until late in the week

Pam Knox October 14, 2023



The latest 7-day QPF map shows that now that this week is in, we are quite sure the southeast is about to...

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* = required field

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USDA
United States Department of Agriculture
Southeast Regional Climate Hub

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MM & Pollinator Protection



- ✓ Most news stories involving MM in 2023 have been related to pollinators & pollinator protection
 - ✓ Finding the balance between effective MM and protecting pollinators
- ✓ **Recordkeeping redundancy** → Protect your accounts!
 - ✓ Have more than one recordkeeping system
 - ✓ Some folks are wearing bodycams
- ✓ Encourage clients to disclose locations of pollinator gardens & sensitive sites (not just hives)
- ✓ Keep training applicators to recognize sensitive sites and avoid flowering plants & weeds



Symptoms of Pesticide Exposure

Reduced Activity

Lack of foraging on normally attractive blooming crop
Immobile, lethargic bees unable to leave flowers
Forager disorientation, reduced efficiency

Behavioral Changes

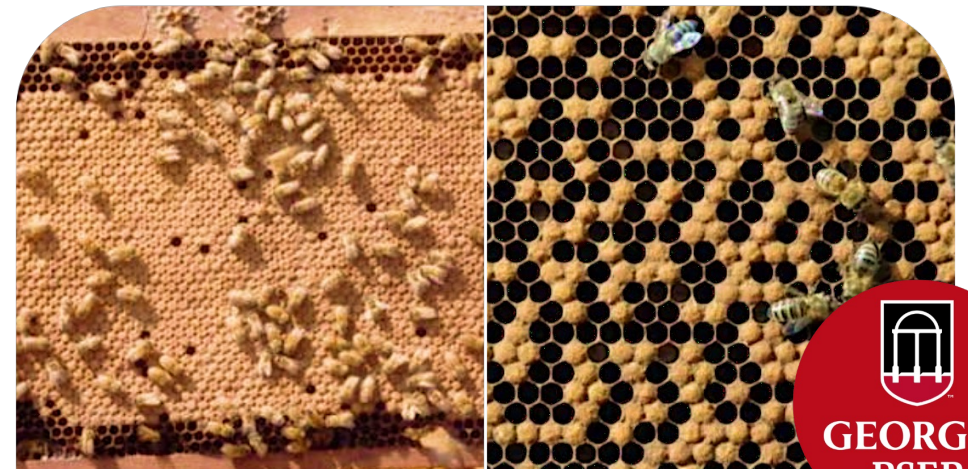
Increased defensiveness
Bees move slowly as though they have been chilled
Abnormal dances or confusion at hive entrance
Jerky, wobbly movements; spinning on back

Decline

Dead brood or newly emerged workers
Abnormal queen behavior & queen death
Excessive #s of dead and dying bees at hive entrance
Regurgitation of stomach contents & tongue extension



Normal vs Abnormal Egg Laying Patterns



Mosquito Vectored Illnesses in the US

- ✓ West Nile and Malaria have been showing up throughout the US in numbers bigger than years past
 - ✓ Most are usually from travel, but locally acquired malaria was detected this year (for the 1st time in decades)
 - ✓ 9 cases originating from the US (from TX & Sarasota Co., FL)
- ✓ Only supports the importance of having strong integrated MM programs in our community
 - ✓ Including public education to shift perception



Questions?



Stay in touch!

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