

Vol. 8 · July 2024

The Stalk



Accomack & Northampton County Cooperative Extension
Eastern Shore Agricultural Research & Extension Center

Northampton County Watermelons

Mid-Atlantic Drone Workshop - July 23rd - 24th Virginia Tech ESAREC



MID-ATLANTIC SPRAY DRONE WORKSHOP

33446 Research Dr.
Painter, VA 23420

Tuesday, July 23 -
Wednesday, July 24

Elevate your expertise at our cutting-edge Drone Workshop! Dive into the latest research on drone applications in agriculture, from cover crop seeding to drift management. Hear directly from researchers and our farmers about their real-world experiences and witness field research and flight operations firsthand. Engage with industry leaders and top exhibitors to discover how drones can revolutionize your farming practices.

Register Here

Join Dr. Vijay Singh's Eastern Shore AREC Weed Science team and elevate your expertise at our cutting-edge Drone Workshop! Dive into the latest research and data on drone applications in agriculture, from cover crop seeding to drift management. Stay informed with updates on flight regulations, and witness flight operations and demonstrations firsthand. Don't miss this unique opportunity to hear directly from farmers and custom applicators about their real-world experiences. Engage with industry leaders, interact with top exhibitors, and discover how drones can revolutionize your farming practices. The 2-day program will include presentations on day 1 by USDA, university researchers,

and the EPA on the efficacy of drone-based liquid and granular pesticide applications, cover crop seeding, drift management and flight regulations.

Day 2 will cover farmers and custom applicators' experiences, spray drone product information by manufacturers and vendors, field visits to showcase drone spray studies in corn, soybeans and vegetables, drone flight operations and demonstrations.



The Mid-Atlantic drone workshop is free for all farmers but we ask that you register early!

Sponsorship opportunities are available [HERE](#).



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THE AGENT'S CORNER

Theresa Pittman - Accomack County ANR Agent

Hélène Doughty - Northampton County ANR Agent

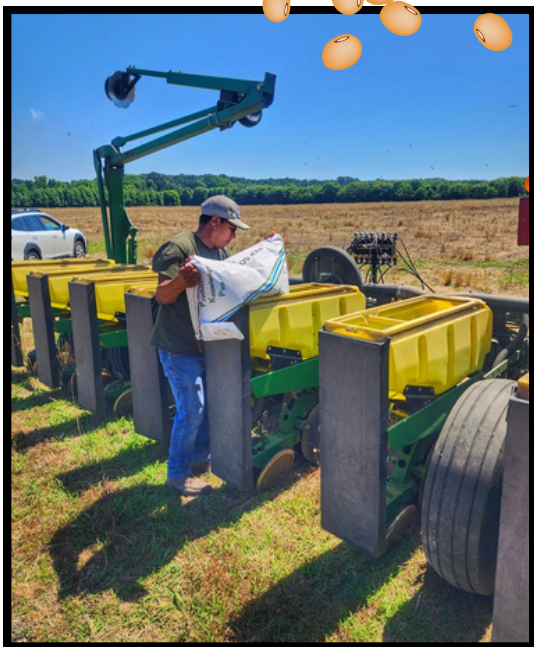
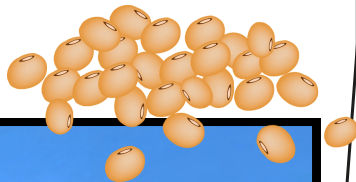


VCE Eastern Shore Soybean Variety Trial is planted!

Enlist E3 soybeans were planted on June 4th in Nassawadox for this year's extension soybean variety trial. Seed included a mix of 12 group IV and 6 group V from Channel, Mid-Atlantic Seeds, Revere, DynaGro, Pioneer, HiSOY and ChemGro.

Stay tuned for the results this coming fall/winter!

Thank you to Atkinson Farms for accepting to work with us in putting out a soybean variety trial for the 2024 season.



Agents' Calendar:

"Working for the Wellbeing of Our Communities!"

What are your ANR agents up to in July?

- July 1st - VCE / ESAREC Monthly meeting
- July 2nd - Collaboration meeting with Virginia Land Trust
- July 8th - On-Farm Food Safety Employee Training
- July 8th - Meeting with Terrametrics Agriculture
- July 10th - Potato GAP certification annual review
- July 11th - ANR Agent Training: "Funding Sources"
- July 11th - Potato harvest and damage rating wireworm research
- July 14-17 - National Assoc. of County Ag. Agents Professional Improvement Conference, Dallas, TX
- July 23-24: Mid-Atlantic Drone Workshop
- July 25: ESO Insect Camp

Ongoing:

- Regional Shared-use kitchen Needs Assessment and Comprehensive Study
- International Soil Tillage Research Conference Project Management (2024 ISTRO, Virginia Beach Sept. 23-27)
- Agricultural commodities competitions at the ES Ag Fair

Weekly

- Click Beetle Trap Monitoring
- Pheromone Trap Insect Monitoring

FOLLOW US ON SOCIAL MEDIA



Northampton

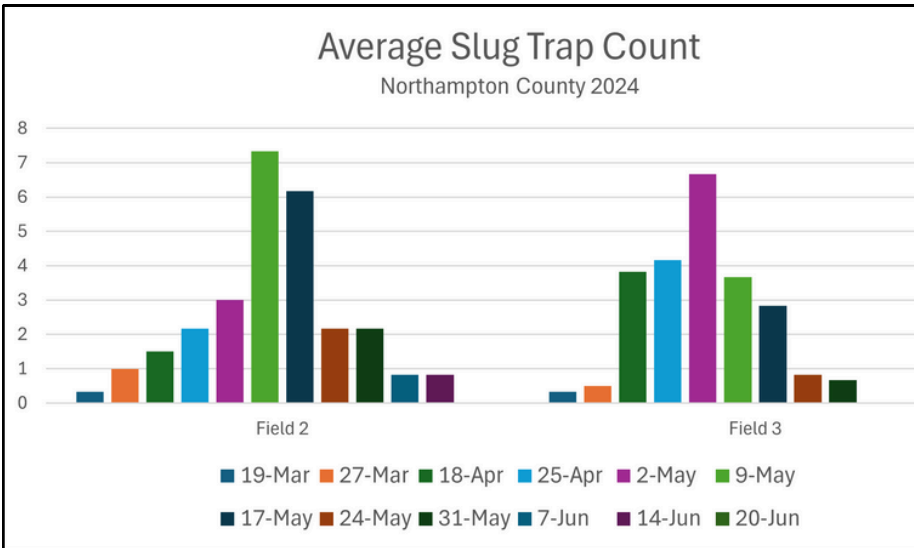
@vce_northampton

Accomack

@vce_accomack



Update on local Virginia Cooperative Extension participation in multi-state slug trapping project



The slug trapping project has ended in June providing a piece of the puzzle in gathering important information on the population dynamics and thresholds of these pests. The overall project is funded by the United Soybean Board and multiple state counterparts and includes partners in Delaware, Maryland, Pennsylvania, Virginia Ohio, Tennessee and Oregon. Altogether, 25 Extension agents and specialists studying several variables in about 100 fields. The focus was to study slugs in no-till fields with corn debris and with or without cover crops ahead of full-season soybean planting.

On the Eastern Shore, this included weekly counts under shingle slug traps, collection of slugs and stand count and damage rating from VC to V2. Components of the project include a multitude of facets with the Eastern Shore focusing on collecting and shipping slugs to identify beneficial entomopathogenic nematodes as well as establishing a treatment threshold and a slug hatch prediction model using shingle traps and other data. In the 2 monitored fields, slug population steadily increased with a peak around the beginning of May. By mid to late June, little to no slugs were trapped. Weather conditions play a role in the continued presence of slugs but this is confirmation that early soybean planting can lead to slug issues when conditions are optimal.



Agent Question of the Month

How do I control squash bugs in my squash plantings?

June is oftentimes when squash bugs really become active and lay their conspicuous copper colored egg masses on squash plants. This month, inquiries were made by a micro-farm on controlling them at this time of the year.

Before they colonize the plants: use row covers but remove during flowering for pollination.

After they colonize the plants: if they have started laying eggs, wait until the nymphs (photo to the right) have emerged and apply an insecticide with an active ingredient such as bifenthrin. Organic insecticides such as Pyganic or Neem oil can be used but need to be re-applied often (every 3 days) and must target the very young nymphs with considerable attention to obtaining good coverage.



Squash bug nymph



On-Farm Food Safety Mentoring Process by VCE Agents

🌱 Attention, Farmers! 🌱 Are you ready to elevate your food safety practices? Is your buyer asking for GAP Certification? Look no further! Virginia Cooperative Extension (VCE) agents are here to guide you through the certification process.

Obtaining Good Agricultural Practices (GAP) certification is one-way growers can verify their production and handling practices are aligned with recommended food safety guidelines.

When mentoring a farm through GAP certification, extension agents follow these steps:

1. Initial On-Farm Assessment: Agents conduct an on-farm assessment, discussing product flow, water sources, soil amendments, hygiene practices, and more.
2. Plan of Action (POA) Manual: Agents help the farm develop a POA manual, which outlines safety practices and modifications needed for certification.
3. Monitoring and Documentation: The farm documents practices in the POA manual, ensuring compliance with safety guidelines.
4. Mock Audit (Pre-Audit Walk-Through): A pre-audit farm walk-through (mock audit) helps prepare the farm for the actual certification audit.
5. Post-Audit Visits/Updates: Agents provide post-audit support as needed after the USDA Audit performed by the VA Department of Agriculture Produce Safety Department.

Remember, the process can seem daunting, but these steps guide farms toward successful GAP certification! 🔍

For more information VISIT THIS LINK



Is the Produce Safety Rule (PSR) the same as GAP certification?

The Produce Safety Rule (PSR) is regulation that establishes science-based minimum standards for safe production and harvesting of fresh fruits and vegetables. These standards are based on a foundation of Good Agricultural Practices (GAPs). However, while the PSR is based on a solid framework of understanding on-farm risks and GAPs, it is not the same as GAP certification. Whereas the FSMA PSR is regulatory and mandatory for growers who are covered under the PSR, GAP certification is a voluntary program that verify that fruits and vegetables are produced, packed, handled, and stored as safely as possible to minimize risks of microbial food safety hazards.





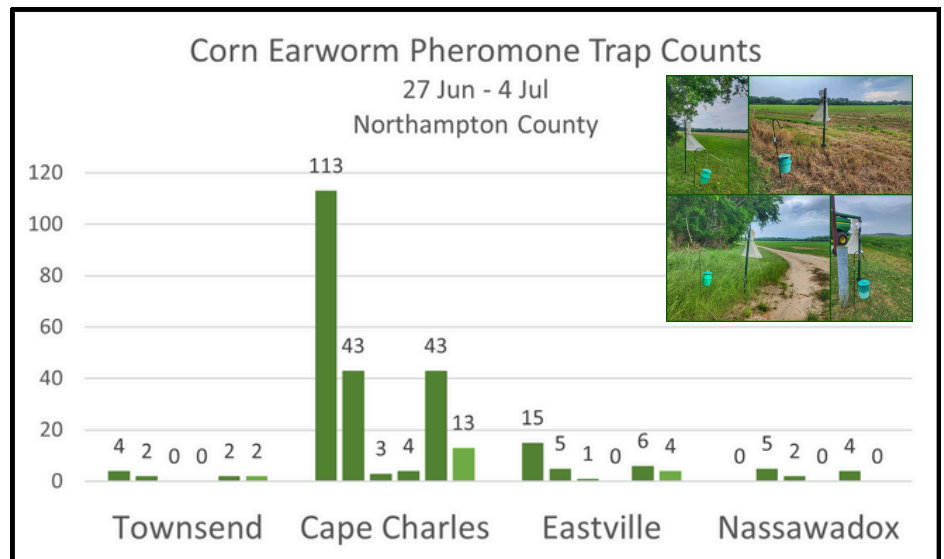
INSECT PESTS ACTIVITY UPDATE

the Virginia Cooperative Extension insect monitoring program has been ongoing for 5 weeks with moderate activity of corn earworm and no activity from fall armyworm. Beet armyworm traps will be added in the future to ensure we do not miss activity from this occasional pest, but difficult to control pest, in our area (does anyone recall the 2006-2007 soybean infestation!).

Pheromone traps were set up in Northampton county on 23 May, likely a bit early particularly since the growth stage of large cropping systems on the Eastern Shore are not at significant risk at that time (but the entomologist in me is eager to know what is happening at the first site of a corn earworm moth!).



All 3 insects monitored are migratory moths that come from the South of the United States, infesting sensitive crops in our area. Migration flights typically proceed North. Trap catch numbers increasing in Northampton County will lead to increasing numbers in the course of time in Accomack County. Some outliers may be observed as can be seen in the graph below with CEW trap catch numbers being highest in Cape Charles, not the most Northern geographical data point. This can be a result of corn earworm overwintering in our region based on milder winter conditions.



STING BUGS

Their activity has been relatively quiet up to now, but I have seen Southern green stink bug nymphs already. Brown marmorated stink bug should really spike up around August. regular scouting efforts are necessary for this

insect in tomatoes, snap beans and soybeans beginning at flowering R2 stage. Stink bug feeding also affects sweet corn but most spray rotations include pyrethroids that will control them.

THRIPS

Thrips activity has been relatively quiet as well. Regular scouting in tomato crops and snap beans is recommended.

MITES

The drought conditions we experienced are perfect for the establishment and population increase of two-spotted spider mites. The regular application of pyrethroids for control of other insects significantly flares mite population by stimulating their reproduction and killing natural enemies.



Pumpkin Growing Update for the Eastern Shore's Largest Contest

Attention, pumpkin enthusiasts! As we approach the Virginia Cooperative Extension Vegetable and Row Crops competition at the Eastern Shore Agricultural Fair on Saturday, October 5th, 2024, here's the latest scoop on giant pumpkin growth:

1. Vine Development:

- Pumpkin vines should be well-established by now, with healthy leaves and runners spreading across the soil.
- Cut all secondary vines to 15ft of length and remove all tertiary vines.

2. Flowering Stage:

- Female flowers have a small, swollen base (the future pumpkin), while male flowers have a straight stem.
- Bees and other pollinators play a crucial role in transferring pollen between flowers for successful fruit set.

3. Fruit Selection for Prize Pumpkin:

- Remove all female flowers but one or two.
- You can hand pollinate the female flowers by exposing the stamen of the male flower and "painting" it inside the female flower.
- Place the growing pumpkin on a pallet or cardboard to prevent rot.

4. Watering and Soil Care:

- Consistent moisture is essential. Water deeply but infrequently to encourage deep root growth.

5. Fertilization:

- Apply a foliar fertilizer regularly to encourage growth.

6. Pest and Disease Monitoring:

- Keep an eye out for common pumpkin pests and diseases like squash bugs, squash vine borer and powdery mildew, downy mildew.
- Address any issues promptly to prevent damage.
- Call your extension agent for pest and disease control options!



Remember, each pumpkin has its unique journey, and dedicated growers are nurturing their contenders with care and enthusiasm. 🎃 Happy growing! ✨



WHAT'S THAT BUG?

Hélène Doughty, Northampton ANR agent, invites you to test your entomology knowledge. Take a guess on the pest and email or DM your answer!
hdoughty@vt.edu

June Answer

Our previous "What's That Bug" are gold-backed snipe flies. These insects live in low vegetation in deciduous forests. They mate (as seen in the picture) in late May or early June and their larvae live on rotting wood or wet soil until pupation. Adult golden-backed snipe flies are considered predators of other insects, although never observed in agricultural settings except for forests' edges.



Forestry Management: Did the Shelterwood Project Work?

The Eastern Shore AREC serves as research for many different annual plants that varies from vegetables, grain, oilseed, and fiber crops to the more permanent oak and loblolly pine. We are working with Mr. Robbie Lewis, Eastern Shore Area Forester with the Virginia Department of Forestry, to manage our AREC lands to best suit our climate and geography. We have the unique experience to now validate work started over 30-years ago to see what forestry practices work and what did not necessarily work.

According to Forester Lewis, in the early 1990's a regeneration practice was initiated on the Eastern Shore AREC to benefit oak species. Large oaks were left standing to create a diffuse light situation on the ground under the stand, benefiting oak seedlings that were growing there at the time. Ultimately, the practice did not work very well and was not followed up with proper stand maintenance over the years.

As a result, the stand is currently comprised of a handful of large, old, mainly Cherry Bark Oaks scattered over the parcel. Mixed in with these old oaks are young yellow poplars, red maples, sweetgum, some loblolly pine, black cherry, holly, and a few other species. The majority of this non-oak cover is mid-rotation and pulpwood size.



Old growth Cherry Bark Oak left for seeding for the shelterwood regeneration method established in the early 1990's.

Forester Lewis recommends repurposing this parcel as an oak savannah. Given the structure and size classes comprising the stand, and oak savannah practice could work very well, add an interesting cover to the Eastern Shore AREC, and create a place for yearly forestry work to be conducted. Creating an oak savannah would begin with clearly designating all of the large, old oaks to remain standing. A clearcut harvest would then be conducted to completely remove and chip all standing timber. We would be after the "clean swept" appearance that can be currently seen in recently harvested clearcut parcels. The effect will be an open appearance with large, old oaks scattered over the parcel.

The next step will be to allow early succession cover to grow over the next growing season.

Over time this growth, mixed with the hard mast dropped on the ground by the old growth oaks, will produce wildlife food and cover.

To maintain cover, the Department of Forestry will need to prescribe burn the early succession cover every year or two and is dependent on how thick the cover will grow, weather, and varies with seasons. Periodically conducting prescribed burning will allow observation into the aftereffects of fire.



Forester Robbie Lewis scouting and making plans for improvements to our surrounding woodlands per our Forestry Management Plan.





Summer Interns!



Cole Siegel

Cole Siegel is interning with the Plant Pathology lab this summer. Cole graduated this year from Nandua High School. He will be attending William and Mary this fall to study evolutionary biology. Cole likes a good chess match but does not care for having his picture taken or more than one ride in a row on the spider at the Wachapreague Volunteer Fireman's Carnival.



Thomas Eno

Thomas Eno is interning with the Weed Science department this summer at the Eastern Shore AREC. Thomas is a rising junior at Broadwater Academy and is interested in studying engineering at Virginia Tech upon graduation.

The International Soil Tillage Research Organisation (ISTRO) Conference, ISTRO2024, is only a few months away! We look forward to welcoming scientists and students from around the world to showcase Virginia agriculture and the progressive strides we are making towards sustainable farming practices. Visit our website to submit an abstract for presentation, register, or find more information and ways to sponsor our conference. All are welcome! We look forward to seeing many of you in September 2024 in Virginia Beach, Virginia, USA!



Find more information here:

<https://www.ares.vaes.vt.edu/ares/eastern-shore/istro-2024-22nd-conference.html>



RESEARCH
FROM ESAREC FACULTY & STAFF



VIRGINIA AGRICULTURAL EXPERIMENT STATION
EASTERN SHORE AGRICULTURAL
RESEARCH AND EXTENSION CENTER
VIRGINIA TECH.

On-farm Wheat Field Trials to Improve Fusarium Head Blight Management Coming to an End

Dr. Douglas Higgins, Extension Specialist, Plant Pathology

Fusarium head blight (FHB), also known as scab, is a destructive fungal disease of small grains in Virginia due to its detrimental impact on yield and grain quality. With funding from the Virginia Small Grains Board, the Higgins lab conducted several field trials during the 2023/2024 growing season to evaluate FHB fungicide efficacy against naturally



occurring Fusarium populations. Trial locations were on the Eastern Shore, Middle Peninsula, and Northern Neck. Stay tuned for the full reports to be posted to the to the Virginia Grain Producers Association website and published in the 2024 Virginia On-Farm Wheat Test Plot VCE publication.



Join our team at the Virginia Tech Eastern Shore Agricultural Research and Extension Center in Painter, VA!

Mechanic (Job posting #529483)

The mechanic position supports the Agricultural Farm Manager in the maintenance, repairs, and upkeep of agricultural machinery, fleet vehicles, buildings, and performs fieldwork that includes driving tractors, combines, planting, irrigation, and similar at the Virginia Tech Eastern Shore AREC. A high school diploma or equivalent is required.

The candidate must have knowledge regarding agricultural systems, farm or experiment station experience, or education in repair and maintenance of agricultural equipment and vehicles, or relevant experience in repairs and maintenance. The candidate should have a working knowledge of farming practices, grounds maintenance, and the ability to work outside in varying types of weather.

To apply, please visit: <https://careers.pageuppeople.com/968/cw/en-us/job/529483/mechanic>



VA AG EXPO 2024 will be held at Level Green Farms

August 1, 2024

3710 Daingerfield Landing
Champlain, VA 22438



August 1st



Champlain, VA

Make sure you have August 1, 2024 on your calendar to experience some of the cutting-edge technology and information that is available to our farmers in Virginia! The 2024 Virginia Ag Expo will be held on Level Green Farms in Champlain, VA from 8:00 am until 2:00 pm. Come mingle with your Eastern Shore AREC graduate students, staff, and faculty to discuss wheat disease management, scouting and weed management using unmanned aerial vehicles (UAVs), cover crop and nutrient management, and tillage benefits that enhance nutrient mining from deep within the soil profile. As always, a soil pit is planned so attendees can see and experience first-hand the moisture and nutrient bank for crop production from 5-feet deep in the soil profile. Over 100 exhibitors are planning to attend along with representatives from Virginia Tech's Virginia Agricultural Experiment Station and ARECs from across the Commonwealth. Stay tuned for more information to meet with Virginia Tech faculty, staff, students, and alumni at the Alumni Association event happening on the evening of July 31, 2024. More information can be found online at <https://www.vaagexpo.com/> or via <https://www.facebook.com/vaagexpo>.

Kit Pick-up



Kit Return



**Registration
link sent via
email!**

EASTERN SHORE HOUSEHOLD WATER QUALITY PROGRAM




**Accomack County
Northampton County**




**23185 Front St
Accomack, VA 23301** **16392 Courthouse Rd
Eastville, VA 23347**

Monday August 26th (kit pick-up)
Tuesday August 27th (kit drop-off)

Do you have a well or spring and wonder if your water is safe to drink?

The Virginia Household Water Quality program offers affordable water testing and education to improve the water quality and health of Virginians who rely on private wells and springs.

The cost is only \$10 per sample kit. The kit can be picked up on August 26th and returned with the water samples on August 27th at your county extension office. Results will be emailed.

Testing includes: bacteria, lead, copper, arsenic, iron, manganese, pH, hardness, sodium, sulfate, fluoride, and nitrate.

For questions, contact either the Accomack or Northampton County Extension Offices

Accomack 757-787-1361 mrbarnes@vt.edu	Northampton 757-678-7946 hdoughty@vt.edu
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VIRGINIA AGRICULTURAL EXPERIMENT STATION
EASTERN SHORE AGRICULTURAL RESEARCH AND EXTENSION CENTER
 VIRGINIA TECH.

Virginia Cooperative Extension brings the resources of Virginia's land-grant universities, Virginia Tech and Virginia State University, to the people of the commonwealth. VCE provides education through programs in Agriculture and Natural Resources, Family and Consumer Sciences, 4-H Youth Development and Community Viability.

The Virginia Tech, Eastern Shore AREC is committed to supporting commercial vegetable, grain, oilseed, and fiber production throughout the Commonwealth of Virginia. Centrally located on Virginia's Eastern Shore, the center conducts basic and applied research on more than 25 agricultural crops.

Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and local governments. Its programs and employment are open to all, regardless of age, color, disability, sex (including pregnancy), gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, military status, or any other basis protected by law.

If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in any activity, please contact Rachel Barnes at 757-787-1361* (*TDD number is (800) 828-1120) during business hours of 8:00 a.m. and 4:30 p.m. to discuss accommodations.