Youth Environment and Health

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Pests and Pesticides in Child-serving Facilities: An IPM Newsletter

Paper wasps, other vespids and the pandemic

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In our last newsletter, we concluded that based on the responses to our 2021 school pest management phone survey, "COVID-19 had little effect on pest management or pest numbers in Tennessee's schools." We are also in the process of conducting pest management surveys of low-incoming housing, and the results are a bit different. In housing, most communities stopped interior service for at least several months and housekeeping inspections were put on hold too. While this survey is ongoing, so far, one-third of respondents noticed an increase in the number of bed bug infestations and one-half noted an increase in cockroach activity in the past year compared to previous years. For pest management experts at the University of Tennessee, the pandemic led to paper wasps and yellowjacket nests showing up in unusual places that were abnormally devoid of activity.

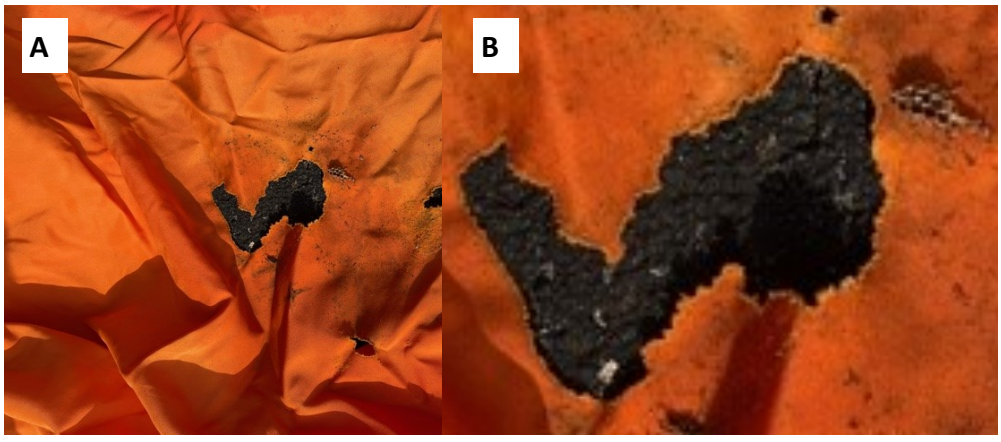

Figure 1. Yellowjacket damage caused to a table skirt (A). Damage area enlarged with yellowjacket nest visible (B).

For instance, this is yellow jacket damage to a table skirt on the trailer that Vol Network broadcast from on Saturday pregames (Figure 1). It was piled in the middle of the trailer last year and left there. The trailer is covered but not enclosed. In the photo on the right, the tarp damage is magnified and a piece of yellowjacket nest is visible.

Special Points of Interest

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This issue

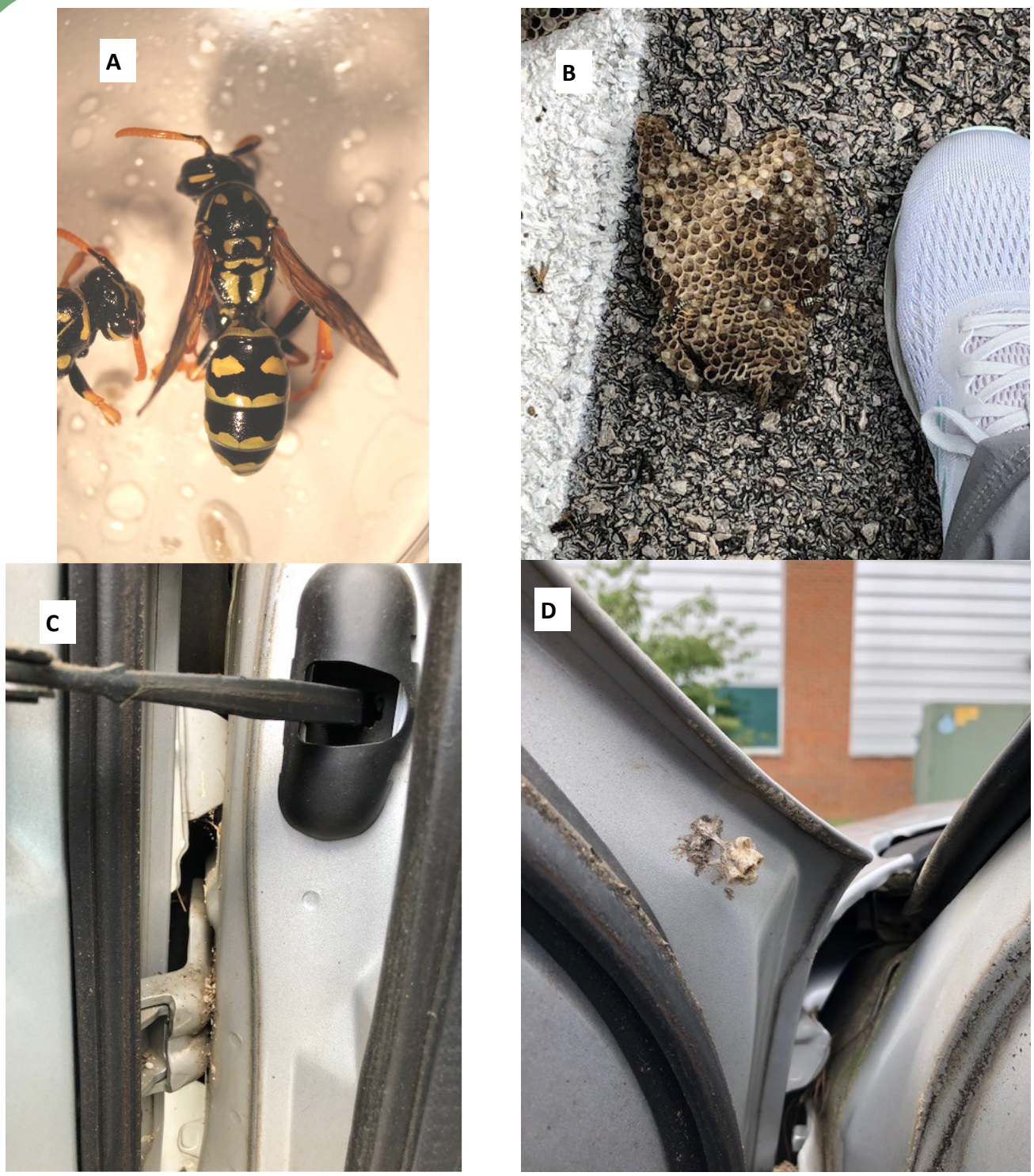

Figure 2. *Polistes dominula*, the European paper wasp (A). Its nest (B) that was removed from the front door hinge area (C) and a new nest that was built 15 days later (D).

Because our "field" work involved schools and low-income housing properties, we had refrained from conducting interior inspections and had not used our truck since the beginning of the pandemic. Meet *Polistes dominula*, the European paper wasp (Figure 2A). This species has been living in my UT truck for months. Its quarter-sized nest was first discovered on May 13 ,2021 glued to the hinge side of the passenger door on the driver's side and was treated with a wasp spray. On July 15, 2021, I took the truck for a

spin to ensure it was still running well. I had rolled down the windows to help cool the interior when I noticed wasps flying near the mirror so I quickly closed the windows. I informed UT Facilities Services about the nest and asked them to treat it. On July 15th, I noticed the wasps were still active. Other state vehicles parked near mine had wasps too and they had treated another truck. I met them at my truck on July 26th and a large nest (~4 X 3 inches) of *P. dominula* (Figure 2 B) was found on the hinge side of the driver's side door (Figure 2C). This nest was aggressively sprayed with wasp killer and removed from the truck.

Just as activity ceased near the hinge, we noticed a red and black paper wasp flying out of the gap behind the driver's side mirror (Figure 3 A & B). More spray was applied here and the nest was extracted piece by piece. At this point, we decided to open all of the panels, doors, and hood. To our relief, the only evidence of other nesting insects was an abandoned mud dauber nest under the hood. On August 10, I noticed *P. dominula* starting a small dime-sized nest on the hinge side of the driver's door (Figure 2D) and removed it by hand. All paper wasp nest sites are indicated in Figure 4. Let's hope that's the last we see of a paper wasp living in this truck.

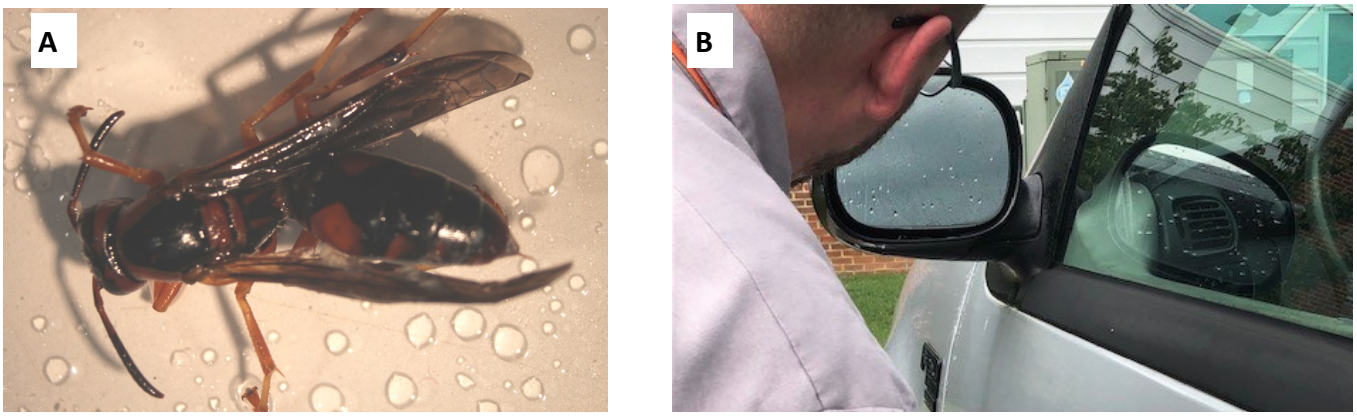

Figure 3. A red and black *Polistes* species (A) and the mirror they were nesting behind (B).

I bring these odd vespid nesting locations to your attention because many schools have been devoid of activity over the summer. Yellowjackets, paper wasps and other vespids may have built nests in inconvenient, undisturbed locations. If you haven't done so already, now is an excellent time to inspect the areas where children would likely encounter these pests. Holes in playground equipment, the yellow tubing that covers the top of chain-linked fences, piles of ignored tarps, and abandoned rodent nests are a few locations that could serve as a vespid nest site. While TCA 62-21-124 prohibits the application of pesticides without the supervision of a licensed operator, it does not apply to pesticide applications outdoors. Volunteers or employees can apply pesticides to outdoor wasp nests without having a certification card or being under a licensee, but they must still follow the pesticide label directions. Suppose someone is charging a fee for these services. In that case, they must be certified to apply pesticides by the Tennessee Department of Agriculture, work under a licensee, be bonded and have insurance. It's a good idea to mark off the treated area to prevent children from being stung as foraging wasps return to the nest and to avoid pesticide exposure.

July 15, large red and black Polistes spp. nest behind mirror.

August 10, dime-sized European paper wasp nest.

July 15, large European paper wasp nest.

May 13, Quarter-sized European paper wasp nest.

Figure 4. Times and locations of paper wasp nests found on UT truck.

EPA Webinars

Reduce the spread of viruses and bacteria in your schools this fall!

What can you do now to prepare for schools to reopen? View these webinars to learn about strategies for creating and maintaining healthy learning environments during the COVID-19 pandemic and beyond.

Cleaning for Health: Proactive Plans to Effectively Clean and Promote Healthy IAQ in Schools

Recorded on August 6, 2020

View this webinar on-demand to learn how to tailor your cleaning and maintenance plan and procedures to help implement cleaning guidance for schools and reduce the spread of viruses and bacteria. You also will hear about strategies for training staff and building a capable, committed team to effectively implement robust procedures focused on cleaning for health, as well as about the Centers for Disease Control and Prevention's considerations for schools guidance.

"Excellent POV from custodial management directors from districts hearing/learning about programs in place, statistics on benefits of management protocol, and the little tweaks done to address today's and any day's pandemics." – Webinar Attendee, 8/6/2020

Asthma-Friendly Schools: Strategies to Reduce the Risk of COVID-19 Transmission and Improve Indoor Air Quality

Recorded on May 6, 2021

View this webinar on-demand to learn how to implement IAQ management and layered risk-reduction strategies to reduce COVID-19 transmission and environmental asthma triggers in schools. This webinar features environmental hygienists and health providers at a leading hospital-based community environmental health program who help to create asthma-friendly schools, protect occupant health and improve academic performance in schools through implementing proactive approaches for indoor environmental management.

"I appreciated the numerous participants' clear and relatable presentations; and especially the pediatric health concerns and the legal perspectives on new and potential updates to OSHA policies and standards." – Webinar Attendee, 5/6/2021

View all of EPA's webinars anytime on-demand!

The U.S. Environmental Protection Agency (EPA) offers a series of webinars that cover strategies for developing comprehensive IAQ management plans, which include proactively preventing the spread of viruses and bacteria in schools. View these webinars on EPA's website.

Learn from technical experts, industry leaders and model school districts during these webinars, which include 30-minute mentoring Q&A sessions.

Gain recognition for your knowledge acquisition and commitment to action by receiving a certificate of completion for each training.

Spread the word! Forward this to a colleague.

Questions?

EPA offers free *IAQ Tools for Schools* resources—including the School IAQ Assessment Mobile App—to help schools maintain a healthy indoor environment by identifying, correcting and preventing IAQ problems. Learn more about the *IAQ Tools for Schools* guidance and access other valuable school environmental health resources at www.epa.gov/iaq-schools.

If you have any questions about the *IAQ Tools for Schools* guidance, please contact the *IAQ Tools for Schools* Connector Coordinator at iaqschools@epa.gov.

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For more information about IPM in Tennessee schools and other facilities, or to view past issues of *Pests and Pesticides in Child-serving Facilities*, please visit http://schoolipm.tennessee.edu

NATIONAL IPM INFORMATION

eXtension's Pests in the Home
https://pestsinthehome.extension.org/

National School IPM
schoolipm.ifas.ufl.edu/

IPM in Schools Texas
http://schoolipm.tamu.edu/

IPM Institute of North America
www.ipminstitute.org/

School IPM PMSP—all schools IPM by 2020 https://ipminstitute.org/projects/school-ipm-2020/

EPA schools
http://www2.epa.gov/managing-pests-schools

For further information about the IPM program at your school or in your county, contact your county Extension Agent or the school IPM Coordinator. For county agent contact information, please visit https://utextension.tennessee.edu/office-locations-departments-centers/

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of Tennessee Extension assume no liability resulting from the use of these recommendations.