

Colorado Coalition for School IPM Newsletter

September 2017

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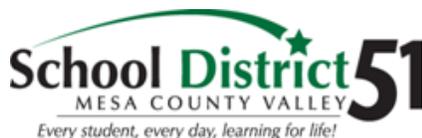
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CCSIPM Spotlight: Mesa County Valley School District

Mesa County Valley School Districts 51 Begins the Implementation of Integrated Pest Management Program

By Clyde Wilson, Assistant Regional School IPM Coordinator - EPA

Mesa County Valley School District 51 in Grand Junction, CO becomes the 17th Colorado



School District to initiate the implementation of the School Integrated Pest Management Program. The District is home to 22,105 students, according to Colorado Department of Education 2016 – 2017 school year statistics, and is the 12th largest school district in Colorado. In August of 2017, the initial baseline assessments were conducted in Mesa County Valley School District 51 by an assessment team that was under the supervision of Charles Pope, Environmental Health and Safety Manager for the district, and included Environmental Health and Pest Management Specialists from the Mesa County Health Department, Colorado State University, and

the U.S. Environmental Protection Agency.

In 2011, the Department of Health and Human Services, the U.S. Environmental Protection Agency and the U.S. Department of Education began collaborative efforts to accelerate the adoption of Integrated Pest Management Program in U.S. schools, to create healthier school environments for students and staff, and mitigate unnecessary and often times, excessive exposures to pesticides in the school environment.

Students in particular are at greater risk for adverse effects from chronic exposures to pesticides in the school environment, because of the amount of time that they spend in the school setting weekly, and because they are uniquely vulnerable to exposures to chemicals and pesticides that may be endocrine disruptors and cancer causing agents, or probable carcinogens.

Chronic exposures to certain chemical compounds are particularly concerning for children and adolescents since they do not have fully developed endocrine systems that would allow the body to process some of the chemical exposures and excrete them from the body.

Many of the pest that children are exposed to in the school setting are also potent triggers of Asthma episodes. Cockroaches and mice are quite common and perhaps the most common pest found in schools and are both considered potential potent Asthma triggers.

The use of Integrated Pest Management strategies in schools creates healthier environments for students, teachers and staff. Through the use of this approach, food preparation areas are cleaner, bacteria are reduced, the spread of viral pathogens is limited, and the unnecessary exposure to pests and pesticides is reduced. IPM also reduces allergens, which can trigger asthma symptoms or contribute to the onset of asthma.

- Nearly 10 percent of children in the United States have asthma, and 80 percent of their asthma is caused by allergens.

- Thirty-seven percent of children with asthma in the United States are allergic to cockroach allergens. Children who are allergic to these cockroach allergens also are more likely to require medical attention for asthma-related issues.

Integrated Pest Management (IPM) is a science based strategy that addresses pest issues before they arise, reducing pest presence through preventive measures. IPM takes advantage of all appropriate pest management strategies and controls pest populations by removing their basic survival elements—such as food, water and shelter—and by blocking access to facilities where these items might be readily available

IPM is a Proven Solution;

IPM isn't just a good idea: It's a science-based approach to controlling pests that works. In a study of three school districts in North Carolina, researchers found—

- Schools implementing IPM practices reported decreased pest presence compared to those implementing conventional calendar-based pest management practices.
- In schools with IPM programs, 14 percent of dust samples had detectable pest allergens compared to 44 percent of dust samples from schools with conventional pest management programs.
- Schools implementing IPM methods used 99.9 percent less active pesticide ingredient than schools using conventional pest management methods.

By implementing IPM practices, schools can reduce pest presence and related allergens and asthma triggers, thereby improving student and staff health, increasing student attendance, and potentially boosting school funding while addressing health disparities.

When asked about his experience with managing pest populations in the school environment and the district's decision to focus on the implementation of the School Integrated Pest Management (SIPM) Program, Charles Pope offered the following comments;

It is critical that we protect the health and safety of our students and staff. The District's Administration is fully committed to working with the EPA, Mesa County Health and Colorado State University to integrate IPM practices to reduce the use of pesticides in our schools and administrative facilities.

Prior to our baseline assessment, we had directed

building staff to lock food items in plastic seal tight containers, address clutter and housekeeping issues, and to utilize good sanitation practices.

Staff and contractors were prohibited from using rodent pesticides in our buildings. Instead, snap trap use was encouraged to control mice. When addressing cockroach control, we routinely used pesticides while students were out for winter, summer and spring breaks. Custodians used the "Work Order" system, to have maintenance staff install exit door sweeps and seal openings along foundation walls.

The baseline assessments clearly indicated that there was a need for continuing improvements in creating a healthier environment in our facilities. Cockroaches were a significant problem in some locations, and was common in many classrooms where excessive boxes, paper, books and other clutter was found. This is clearly an indication that we need to do more to reinforce our existing practices and implement additional measures to eliminate clutter which serves as harborage sites for pest, and eliminate available food sources for pest in our facilities.

Previously, we had no formalized policy to enforce these practices. With the assistance of EPA, the Mesa County Health Department and Colorado State University, we will write and implement a School District IPM policy with the assistance of our District Administrative Leadership, to reduce the use of pesticides in our buildings and in our outdoor environments, thus creating a district-wide environment with a focus on improving the health and safety of our students and staff."

Colorado Coalition for School IPM Agency Partner Spotlight: Colorado Dept. of Agriculture

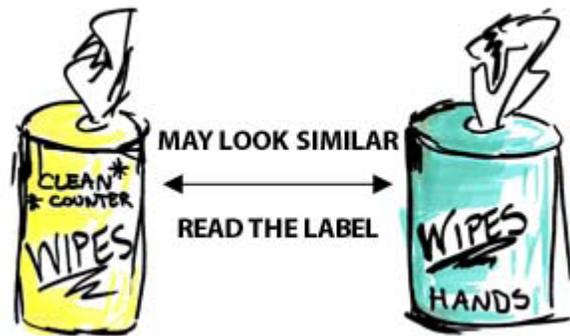
Unlocking the Mystery around the Use of Disinfectant Products in Colorado Schools

By John W. Scott, Pesticides Program Manager,
Section Chief - CDA

Recently the Colorado Department of Agriculture was contacted by a parent from a local school district requesting information on what the requirements and restrictions may be, for children using disinfectant wipes in schools. As we looked into this further and spoke with EPA Region 8's School IPM Coordinator, Clyde Wilson, and to the schools themselves; it

became apparent that the use of anti-microbial wipes was a regular practice the schools have employed to sanitize hard surfaces in classrooms.

The school’s purpose for the use of these disinfectant products is based on a requirement that stems from the Colorado Department of Public Health and Environment’s (CDPHE) School Program (SP). I was able to reach out to Amy Gammel, the SP program coordinator, who clarified that, “The Rules and Regulations Governing Schools in Colorado requires commonly touched surfaces to be sanitized weekly and whenever visibly soiled. These surfaces include but are not limited to desks, tables, keyboards, computer mice. Personal items such as protective eye wear and headphones need to be sanitized between users. Any product used must be intended for the surface it is applied to and all labeled instructions must be followed.” Amy also clarified that the intent of the regulation is for school staff to sanitize these surfaces, not the children. If you have specific questions on CDPHE’s requirements you can contact Amy at (303)692-3645, option 3 or cdphe_jevu@state.co.us.



Pesticides	Drugs & Antiseptics
Used on surfaces, non-living things	Used in or on living things
Example: wipes for the kitchen or bathroom	Example: hand-sanitizing wipes
Regulated by the U.S. EPA	Regulated by the U.S. FDA

What are antimicrobials?

Antimicrobial products kill or slow the spread of microorganisms. Microorganisms include bacteria, viruses, protozoans, and fungi such as mold and mildew.¹ You may find antimicrobial products in your home, workplace, or school.

The U.S. Environmental Protection Agency (EPA) regulates antimicrobial products as pesticides, and the U.S. Food and Drug Administration (FDA) regulates antimicrobial products as drugs/antiseptics. As pesticides, antimicrobial products are used on objects such as countertops, toys, grocery carts, and hospital equipment. As antiseptics, antimicrobial products are used to treat or prevent diseases on people, pets, and other living things.

If a product shows an “EPA” registration number anywhere on the label, you know it’s a pesticide and NOT meant for use on the body.²

The National Pesticide Information Center (NPIC) website is a good resource to obtain more information on anti-microbial products and the difference between sanitizer types at: <http://npic.orst.edu/factsheets/antimicrobials.html>

Anti-microbial Pesticide Label Requirements

The Colorado Department of Agriculture regulates the use of all pesticides in the State of Colorado. Anti-microbial products, being pesticides, have specific

label directions that must be followed as a matter of state and federal law. Anti-microbial hard surface wipes, such as Clorox Wipes, have specific use directions that all users must abide by. A few typical precautionary and use directions are:

KEEP OUT OF REACH OF CHILDREN: This is a general label requirement for all pesticide products. The warning statement requirement may be waived when the registrant adequately demonstrates that the likelihood of contact with children during distribution, storage or use is remote or if the pesticide is approved for use on infants or small children (mosquito repellants).

Anti-microbial products intended for sanitizing hard surfaces generally do not have any restrictions on the age of the user. However, EPA hasn’t allowed the Precautionary Statements or the Directions for Use to contain any statement which implies that the product may be used by children.

A modified Child Hazard Warning statement may be used for products where child contact is expected during normal use. For products requiring a modified statement prohibiting use by children, language will state: “Do not allow children to apply product” or “Do not allow children to play with pet collar”.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS. CAUTION: Precautionary statements are intended for the user of the pesticide to ensure they know the risks associated with using the product. You’ll see warnings such as:

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

FIRST AID statements are intended to give the user directions to follow in case of exposure, such as:

FIRST AID: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center for treatment advice. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

PHYSICAL OR CHEMICAL HAZARDS statement provides information on the characteristics of the product, like if it's corrosive or flammable. You'll see statements such as: **PHYSICAL OR CHEMICAL HAZARDS:** Do not use or store near heat or open flame.

STORAGE AND DISPOSAL directions will have statements such as: **STORAGE AND DISPOSAL:** Canister is not intended to be refilled by the consumer: Dispose of wipe in trash after use. Do not flush. Tightly close lid between uses to retain moisture. Nonrefillable container. Do not reuse or refill this empty container. Offer empty container for recycling. If recycling is not available discard container in trash.

In the Use Directions section you may find additional information that should be noted to ensure safe use, such as:

For surfaces that may come in contact with food, a potable water rinse is required. This product is not for use on dishes, glassware, or eating utensils.

Not for cleaning or sanitizing skin. Do not use as a diaper wipe or for personal cleansing.

This product will not harm most surfaces including acrylic, sealed fiberglass, etc...

For toys, rinse with water after wiping with -or- using the product.

Remember, the label is the law!

1. What are Antimicrobial Pesticides?; U.S Environmental Protection Agency, Office of Prevention, Pesticides, and Toxic Substances, Office of Pesticide Programs, U.S. Government Printing Office: Washington, DC, 2010

2. Anti-microbials Topic Fact Sheet; National Pesticide Information Center, <http://npic.orst.edu/factsheets/antimicrobials.html>

Featured Pests of the Month: Spiders

Potentially Dangerous or Poisonous Spiders in Colorado

Assefa Gebre-Amlak

Pest Management Specialist, Colorado State University Extension

Spiders are beneficial arthropods that survive by feeding on insects. Oftentimes they are the most important biological control of insect pests in gardens, fields, forests, and homes. However, their presence is a cause of concern to some people. Many people fear spiders because of stories or myths. Others object to spiders because of their habit of building webs in and around the home.

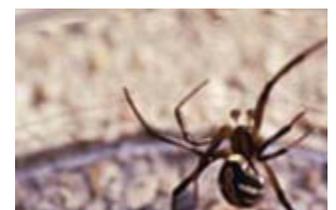
Common non-poisonous Colorado spiders with good pictures can be found in Colorado State University Extension fact sheet #5.512 (F. B Peairs, W.S Cranshaw and P. E. Crushing). These include funnel spiders, jumping spiders, wood louse hunters, ground spiders, cobweb spiders/house spiders, cellar spiders, wolf spiders, banded garden spiders and trantulas.

There are also a few spiders whose bite requires medical attention, namely, black widows and brown recluse spiders whose habitat and management described below.

Widow spiders, particularly the western widow (*Latrodectus hesperus*), are common in Colorado. They usually build their webs near the ground in dark, undisturbed sites. Window wells, entrances to



Female black widow with egg sacs.



Male black widow spider.

crawl spaces, old rodent burrows, corners of garages, and abandoned rodent burrows are some of their favorite web sites.

The presence of red or red-orange markings on the underside of the abdomen is characteristic of widow spiders. This pattern may be in the form of a distinct hourglass pattern or appear as two separate triangles. The markings may be distinct and bright, or sometimes faint and indistinct. Overall color of the adult females is uniform black, although immature stages and males may have brown, red, and white markings on the back. Some non-poisonous spiders that are commonly mistaken for widow spiders are *Steatoda* species (cobweb spiders), mentioned earlier.

Bites from the widow spider are painful and potentially dangerous because they contain a nerve venom. Fortunately, widow spiders are non-aggressive and rarely bite. When bites do occur they happen when the female is provoked, for example, when an unwitting person presses down on a spider that is resting beneath a log or rock. See fact sheet 5.605, *Western Widow Spider* for additional information.

Brown Recluse spider: The brown recluse (*Loxocles reclusa*) is rare in Colorado because of our cold winters and dry climate. However, it is common to areas along the southern Mississippi Valley and are occasionally brought into the state but rarely, if ever, get established. The



Brown recluse spider (male) showing six eyed pattern.

brown recluse lives within a loose, messy web in dark corners of buildings.

Brown recluse spiders are pale brown or buckskin colored with long, dark brown legs. A violin shaped dark marking is present behind the head, and the abdomen is uniformly colored. Unlike most spiders, the brown recluse possesses only three pairs of eyes. They are commonly mistaken for funnel web spiders, certain wolf spiders, and even sun spiders.

The venom of the brown recluse is damaging to human cells. In susceptible individuals a slow-healing, ulcerous wound may form at the bite site. Oftentimes the original bite is not noted, but after a few hours a blister will form and pain develops. For more information see fact sheet 5.607, *Brown Recluse Spiders in Colorado: Recognition and Spiders of Similar Appearance*.

Most spiders are not aggressive and bite only when trapped against the skin. If a bite is suspected or is known to have occurred, follow these first aid steps

recommended by the American Red Cross:

Treat the site of the bite with an antiseptic to prevent infection.

Apply ice to the site of the bite to reduce pain and swelling.

If a black widow or brown recluse spider bite is suspected, or if serious symptoms develop such as increasing pain or swelling, consult a physician.

If at all possible, bring the spider to the physician's office. Effective antivenins are available for black widows, but they can only be used if the spider that inflicted the bite is positively identified.

It should be stressed that spider bites are difficult to diagnose correctly as there are many other medical conditions that mimic the same symptoms. Spider bites, particularly those of "brown recluse spiders," are greatly overdiagnosed in Colorado.

Controlling spiders around the home: From a biological standpoint, it is rarely necessary to control spiders. However, if it is desirable to get rid of spiders in the home, a combination of sanitation and pesticides should be effective. Pesticides alone, without some effort to remove or modify favorable spider habitats, will not be effective.

Remove rocks, wood piles, compost piles, old boards, and other sheltering sites adjacent to the home. Eliminate migration of spiders into homes by caulking cracks and crevices around the foundation. Make sure all screens and doors are sealed tight. Keep crawl spaces free of debris and limit boxes and other potential hiding places from basements and other dark storage areas. Regularly vacuum or brush spider webs. The elimination of other insects that are prey can limit spider development.

Occasional spiders can be removed by hand (wear gloves or trap the spider in a container) or with a vacuum. Sticky traps, used to control cockroaches and rodents, can capture spiders when placed along baseboards or other migration areas. Spiders are most often found in kitchens, bathrooms or basements where they are seeking a source of moisture.

Where spiders and webbing occur in nuisance numbers on the outside of buildings they can be washed off with a forceful jet of water. Reduction of outdoor lighting, or replacing lighting with yellow or sodium vapor lights that are not attractive to insects, can limit spider web building. Dark colored siding seems to be less attractive than white siding to the insects on which spiders feed.

Residual insecticides can be used to control spiders when applied to corners and other sites where spiders tend to breed. Household insecticide products containing various pyrethroids (bifenthrin, cyfluthrin, permethrin, tetramethrin) are commonly available for this purpose and must be applied in accordance with the label's instructions.

Sources: Colorado State University Extension fact sheets #5.512 (F. B Peairs, W.S Cranshaw and P. E. Crushing), 5.605 (W.S.Cranshaw) and 5.607 (W.S Cranshaw).

Current Pests: What Are You Seeing?

Statewide

Arapahoe, Douglas, & Elbert Counties

Early September

- Yellow jackets, hornets: Nest size and nuisance problems peak. Large paper nests in trees and shrubs attracting attention.
- Spottedwing drosophila: Peak injury to fruit likely to be noticed.
- Cluster flies, boxelder bugs: Migrations into homes for overwintering increase.
- Spiders, crickets: Movements into homes accelerate greatly with cool weather.
- Large spiders: Cat-face and garden spiders become fully grown and attract attention.
- Large caterpillars: Several species of large caterpillars (cecropia moth, Polyphemus moth, sphinx moth larvae) wander about landscapes when fully grown and attract attention.
- Peach tree borer: Rescue treatments should be applied before soil temperatures become too cool.
- Pearslug: Damage by the second generation occurs during early September.
- Slugs: Garden injuries increase with the return of cool, wet weather.
- Grasshoppers: Migrations to gardens continue, decline
- Bumble flower beetles: Beetles feed on flowers and visit bacterial ooze.
- Nightcrawlers: Tunneling activities increase with

cool temperatures and can create lumpy lawns.

Late September

- Millipedes: Movements into homes occurs following wet periods
- Spiders, crickets, root weevils, conifer seed bugs:
- Movements into homes accelerate greatly with cool weather.
- Yellow jackets: Nuisance problems with yellow jackets scavenging on sweets persist, decline.
- Aphids on trees: High populations of aphids may develop on several species (willow, oak, aspen) prior to frost.
- Cooley spruce gall: Winged stages return to spruce and leave overwintering
- stage on tree.
- Yellowjackets, bees: Wasps and bees may be seen visiting trees and shrubs where honeydew producing insects (e.g., aphids, soft scales) are present.

Denver Metro Area

Early September

- Yellow jackets, hornets: Nest size and nuisance problems peak. Large paper nests in trees and shrubs attracting attention.
- Large spiders: Cat -face and garden spiders become fully grown and attract attention.
- Large caterpillars: Several species of large caterpillars (achemon
- sphinx, cecropia moth, polyphemus moth) wander about landscapes when fully grown and attract attention.
- Peach tree borer: Rescue treatments should be applied before soil temperatures become too cool.
- Pearslug: Damage by the second generation occurs during early September.
- Slugs: Garden injuries increase with the return of cool, wet weather.
- Aster yellows: Symptoms are obvious on many garden flowers and vegetables.
- Bumble flower beetles: Beetles feed on flowers and visit bacterial ooze.

- Nightcrawlers: Tunneling activities and associated lawn lumps renew as soils cool.

Late September

- Millipedes: Movements into homes occurs following wet periods
- Spiders, crickets: Movements into homes accelerate greatly with cool weather.
- Aphids on trees: High populations of aphids may develop on several species (willow, oak, aspen) prior to frost.
- Hackberry nipplegall psyllids: Emergence from galls and dispersal of adults to overwintering shelter
- Kermes scale on oak: Watch for emergence of the crawler stage.
- Cooley spruce gall: Winged stages return to spruce and leave overwintering stage on tree.
- Yellow jackets, bees: Wasps and bees may be seen visiting trees and shrubs where honeydew-producing insects (e.g., aphids, soft scales) are present.

Eastern Plains Counties

Early September

Household/Miscellaneous

- Cluster flies: Flies begin to move to buildings seeking overwintering shelter. Seal buildings to avoid later problems.
- Yellow jackets, hornets: Nest size and nuisance problems peak. Large paper nests in trees and shrubs attracting attention.
- Large spiders: Cat-face and garden spiders become fully grown and attract attention. Male tarantulas migrate.

Tree/Shrub Insects

- Large caterpillars: Several species of large caterpillars (cecropia moth, polyphemus moth, sphinx moth larvae) wander about landscapes when fully grown and attract attention.
- Peach tree borer: Rescue treatments should be applied before soil temperatures become too cool.

Garden Insects

- Slugs: Garden injuries increase with the return of cool, wet weather.

- Aster yellows: Symptoms are obvious on many garden flowers and vegetables.
- Bumble flower beetles: Beetles feed on flowers and visit bacterial ooze.

Lawns

- White grubs: Damage by annual white grubs becomes obvious.

Other

- Tarantulas: Mature male tarantulas wander in search of mates.

Late September

Household/Miscellaneous Insects

- Millipedes: Movements into homes occurs following wet periods
- Spiders, crickets: Movements into homes accelerate greatly with cool weather. Male tarantulas migrate.

Tree/Shrub Insects

- Aphids on trees: High populations of aphids may develop on several species (willow, oak, aspen) prior to frost.
- Cooley spruce gall: Winged stages return to spruce and leave overwintering stage on tree.
- Yellow jackets, bees : Wasps and bees may be seen visiting trees and shrubs where honeydew producing insects (e.g., aphids, soft scales) are present.

El Paso & Teller Counties

Early September

Household/Miscellaneous

- Yellowjackets, hornets: Nest size and nuisance problems peak. Large paper nests in trees and shrubs attracting attention.
- Cluster flies, boxelder bugs: Migrations into homes for overwintering increase.
- Spiders, crickets: Movements into homes accelerate greatly with cool weather.
- Large spiders: Cat - face and garden spiders become fully grown and attract attention.

Tree/Shrub Insects

- Large caterpillars: Several species of large caterpillars (cecropia moth, polyphemus moth,

achemon sphinx moth larvae) wander about landscapes when fully grown and attract attention.

- Peach tree borer: Rescue treatments should be applied before soil temperatures become too cool.
- Pearslug: Damage by the second generation occurs during early September.

Garden Insects

- Slugs: Garden injuries increase with the return of cool, wet weather.
- Grasshoppers: Migrations to gardens continue, decline
- Bumble flower beetles: Beetles feed on flowers and visit bacterial ooze.

Lawn Insects

- Nightcrawlers: Tunneling activities during spring can create lumpy lawns.

Late September

Household/Miscellaneous Insects

- Millipedes: Movements into homes occurs following wet periods
- Spiders, crickets: Movements into homes accelerate greatly with cool weather.
- Yellowjackets: Nuisance problems with yellowjackets scavenging on sweets persist, decline.

Tree/Shrub Insects

- Aphids on trees: High populations of aphids may develop on several species (willow, oak, aspen) prior to frost.
- Cooley spruce gall: Winged stages return to spruce and leave overwintering stage on tree.
- Yellowjackets, bees: Wasps and bees may be seen visiting trees and shrubs where honeydew producing insects (e.g., aphids, soft scales) are present.

High Country Counties

Early September

Household/Miscellaneous

- Yellowjackets, hornets: Nest size and nuisance problems peak. Large paper nests in trees and shrubs attracting attention.

- Cluster flies, boxelder bugs: Migrations into homes for overwintering increase.
- Spiders, crickets: Movements into homes accelerate greatly with cool weather.
- Large spiders: Cat-face and garden spiders become fully grown and attract attention.

Tree/Shrub Insects

- Large caterpillars: Several species of large caterpillars (cecropia moth, polyphemus moth, sphinx moth larvae) wander about landscapes when fully grown and attract attention.
- Peach tree borer: Rescue treatments should be applied before soil temperatures become too cool.
- Pearslug: Damage by the second generation occurs during early September.
- Aphids: Late season outbreaks are common on aspen, conifers

Garden Insects

- Slugs: Garden injuries increase with the return of cool, wet weather.
- Bumble flower beetles: Beetles feed on flowers and visit bacterial ooze.

Lawn Insects

- Nightcrawlers: Tunneling and associated lawn lumps increase with cool weather.

Late September

Household/Miscellaneous Insects

- Millipedes: Movements into homes occurs following wet periods
- Spiders, crickets: Movements into homes accelerate greatly with cool weather.
- Yellowjackets: Nuisance problems with yellowjackets scavenging on sweets persist, decline.

Tree/Shrub Insects

- Aphids on trees: High populations of aphids may develop on several species (willow, oak, aspen) prior to frost.
- Cooley spruce gall: Winged stages return to spruce and leave overwintering stage on tree.
- Yellowjackets, bees: Wasps and bees may be seen visiting trees and shrubs where honeydew

producing insects (e.g., aphids, soft scales) are present.

Northern Front Range

Early September

Household/Miscellaneous

- Yellowjackets, hornets: Nest size and nuisance problems peak. Large paper nests in trees and shrubs attracting attention.
- Large spiders: Cat-face and garden spiders become fully grown and attract attention.

Tree/Shrub Insects

- Large caterpillars: Several species of large caterpillars (achemon sphinx, cecropia moth, polyphemus moth) wander about landscapes when fully grown and attract attention.
- Peach tree borer: Rescue treatments should be applied before soil temperatures become too cool.
- Pearslug: Damage by the second generation occurs during early September.

Garden Insects

- Slugs: Garden injuries increase with the return of cool, wet weather.
- Aster yellows: Symptoms are obvious on many garden flowers and vegetables.
- Bumble flower beetles: Beetles feed on flowers and visit bacterial ooze.
- Spottedwing drosophilid: Peak damage to strawberries and raspberries.

Late September

Household/Miscellaneous Insects

- Millipedes: Movements into homes occurs following wet periods
- Spiders, crickets: Movements into homes accelerate greatly with cool weather.

Tree/Shrub Insects

- Aphids on trees: High populations of aphids may develop on several species (willow, oak, aspen) prior to frost.
- Cooley spruce gall: Winged stages return to spruce and leave overwintering stage on tree.
- Yellowjackets, bees: Wasps and bees may be seen visiting trees and shrubs where honeydew

producing insects (e.g., aphids, soft scales) are present.

Pueblo & Fremont Counties

Early September

Household/Miscellaneous

- Cluster flies: Flies begin to move to buildings seeking overwintering shelter. Seal buildings to avoid later problems.
- Yellowjackets, hornets: Nest size and nuisance problems peak. Large paper nests in trees and shrubs attracting attention.
- Large spiders: Cat-face and garden spiders become fully grown and attract attention. Male tarantulas migrate.

Tree/Shrub Insects

- Large caterpillars: Several species of large caterpillars (cecropia moth, polyphemus moth, sphinx moth larvae) wander about landscapes when fully grown and attract attention.
- Peach tree borer: Rescue treatments should be applied before soil temperatures become too cool.

Garden Insects

- Slugs: Garden injuries increase with the return of cool, wet weather.
- Aster yellows: Symptoms are obvious on many garden flowers and vegetables.
- Bumble flower beetles: Beetles feed on flowers and visit bacterial ooze.

Lawns

- White grubs: Damage by annual white grubs becomes obvious.

Other

- Tarantulas: Mature male tarantulas wander in search of mates.

Late September

Household/Miscellaneous Insects

- Millipedes: Movements into homes occurs following wet periods
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Tree/Shrub Insects

- Aphids on trees: High populations of aphids may develop on several species (willow, oak, aspen) prior to frost.
- Cooley spruce gall: Winged stages return to spruce and leave overwintering stage on tree.
- Yellowjackets, bees: Wasps and bees may be seen visiting trees and shrubs where honeydew producing insects (e.g., aphids, soft scales) are present.

Southwestern Counties

Early September

Household/Miscellaneous

- Yellowjackets, hornets: Nest size and nuisance problems peak. Large paper nests in trees and shrubs attracting attention.
- Cluster flies, boxelder bugs, conifer seed bugs: Migrations into homes for overwintering increase.
- Spiders, crickets: Movements into homes accelerate greatly with cool weather.
- Large spiders: Cat-face and garden spiders become fully grown and attract attention.

Tree/Shrub Insects

- Large caterpillars: Several species of large caterpillars (cecropia moth, polyphemus moth, sphinx moth larvae) wander about landscapes when fully grown and attract attention.
- Peach tree borer: Rescue treatments should be applied before soil temperatures become too cool.
- Pearslug: Damage by the second generation occurs during early September.

Garden Insects

- Slugs: Garden injuries increase with the return of cool, wet weather.
- Bumble flower beetles: Beetles feed on flowers and visit bacterial ooze.

Late September

Household/Miscellaneous Insects

- Millipedes: Movements into homes occurs following wet periods
- Spiders, crickets: Movements into homes accelerate greatly with cool weather.

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- Yellowjackets, bees: Wasps and bees may be seen visiting trees and shrubs where honeydew producing insects (e.g., aphids, soft scales) are present.

Tri-River Counties

Early September

Household/Miscellaneous

- Cluster flies: Flies begin to move to buildings seeking overwintering shelter. Seal buildings to avoid later problems.
- Yellowjackets, hornets: Nest size and nuisance problems peak.
- Large paper nests in trees and shrubs attracting attention.
- Large spiders: Cat-face and garden spiders become fully grown and attract attention. Male tarantulas migrate.

Tree/Shrub Insects

- Large caterpillars: Several species of large caterpillars (cecropia moth, sphinx moth larvae) wander about landscapes when fully grown and attract attention.
- Peach tree borer: Rescue treatments should be applied before soil temperatures become too cool.

Garden Insects

- Slugs: Garden injuries increase with the return of cool, wet weather.
- Corn earworm: High levels of injury to corn ears and susceptible fruiting vegetables at this time.
- Sap/Bumble flower beetles: Beetles feed on flowers and visit bacterial ooze.

Lawns

- White grubs: Damage by annual white grubs becomes obvious.

- Nightcrawlers: Production of noticeable “lawn lumps” increases with cooler weather.

Late September

Household/Miscellaneous Insects

- Millipedes: Movements into homes occurs following wet periods
- Spiders, crickets: Movements into homes accelerate greatly with cool weather. Male tarantulas migrate.

Tree/Shrub Insects

- Aphids on trees: High populations of aphids may develop on several species (willow, oak, aspen) prior to frost.
- Cooley spruce gall: Winged stages return to spruce and leave overwintering stage on tree.
- Yellowjackets, bees: Wasps and bees may be seen visiting trees and shrubs where honeydew producing insects (e.g., aphids, soft scales) are present.

Source: <http://bspm.agsci.colostate.edu/outreach-button/insect-information/> (Yard/Garden Insect Calendars)

Credits

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