

CHECKLIST OF COMMON INSECT RELATED EVENTS: TRI-RIVER COUNTIES

Note: This is a generalized checklist of when some of the more important insect related events *tend* to occur in the Tri-River County area. Year to year variations of insect activity are considerable and this should only be used as a guideline for introductory Master Gardeners to begin to anticipate and help recognize common insect occurrences. Your experiences will be invaluable to further modify and improve this to your local conditions.

Numerous Colorado State Service-in-Action/Fact Sheets and Extension Bulletins are available that can supplement information on the referred events.

January/February

Household Insects

Fungus gnats: Adults commonly are observed around windows and around the soil of potted plants where they originate.

Carpet beetles: Some adults may emerge and be found in homes.

Boxelder bugs, cluster flies, root weevils, lacewings: Overwintered adults become active in and around homes.

Winged termites: Winged reproductive stages begin to emerge and swarm.

Indian meal moth: Although infestations may persist year-round, presence of moths often declines in homes at this time.

Firewood insects: Bark beetles and wood borers emerge from stored wood in homes

Ants: Field ants (*Formica* species) may forage in homes for sweet materials.

Early March

Household Insects

Boxelder bugs, cluster flies: Overwintered adults become active in and around homes.

Clover mites: Migrations of mites from lawns into buildings may begin at this time, during warm days

Millipedes: Nuisance movements into homes occurs following wet weather.

Winged termites: Winged reproductive stages continue to swarm in late winter.

Firewood insects: Bark beetles and wood borers emerge from stored wood in homes.

Ants: Foraging by field ants for sweet materials intensifies in homes.

Trees/Shrubs

Oystershell scale: Scrape scales with eggs off limbs of aspen, ash and other host plants.

Ips beetles, twig beetles: These bark beetles may be active during warm periods in late winter. Recently transplanted pines may need protection. Trees grown in outbreak areas may need protection.

Lawns

Clover mites: Mites are actively feeding on lawns near buildings and shrubs during warm days.

Nightcrawlers: Tunneling activities during spring can create lumpy lawns.

Late March

Household/Miscellaneous

Note: Many of the same insect events that are listed for early March may similarly occur at this time.

Trees/Shrubs

Dormant oils: Many insects that winter on plants can be controlled with dormant applications of horticultural oils.

Ips beetles, twig beetles: These bark beetles may be active during warm periods. Recently

transplanted pines may need protection. Trees grown in outbreak areas may need protection.

Southwestern pine tip moth: Adults begin to emerge from pupae at the base of trees.

White pine weevil: Adults may be expected to be laying eggs around this time.

Honey bees: Honeybees will begin to forage during warm days. During this time they will visit sources of water and pollen.

Clover mites: Nuisance migrations into homes may be observed during warm days. Most activity is on south and west sides of buildings. Clover mites will continue to be active for the next two months.

Early April

Household/Miscellaneous Insects

Boxelder bugs, cluster flies: Overwintered adults become increasingly active in and around homes during warm periods.

Carpet beetles: Early spring is often the period when adult stages are most frequently encountered in homes.

Ants: Foraging ants in homes are common until temperatures allow them to seek food outdoors.

Trees/Shrub Insects

Engraver (Ips) beetles: Major Ips beetle flights are likely to have started by this time and may threaten at risk spruce and pines.

Aphids on fruit trees: Spray oils on dormant trees to kill overwintered aphid eggs.

Cooley spruce gall: Controls are best applied before the insects make the egg sack in late April.

Borers: Remove and destroy damaged tree limbs and canes infested with borer larvae before insects emerge.

Honeysuckle witches' broom aphid: Prune out old, damaged terminals that contain eggs.

Lawns

Denver billbug: Overwintered larvae may damage roots of turfgrass.

Turfgrass mites: Clover mites continue and banks grass mites begin to increase in droughty areas.

Sod webworms, cutworms: Damage to lawns by webworms and cutworms begin at this time.

Nightcrawlers: Tunneling activities and associated lawn lumps continue.

Midges: Non-biting midges emerge from ponds and mating swarms may be observed over lawns.

Late April

Tree/Shrub Insects

Cooley spruce gall: Insects continue development and usually begin to produce egg sack in late April.

Tent caterpillars: Early season species, mostly associated with cottonwood in low lying areas, should be rapidly developing. Aspen is another common host.

Lilac/ash borer: Flights of adult moths may begin.

Spider mites on pines: *Oligonychus subnudus* populations may increase rapidly on ponderosa and other susceptible pines

Spiny elm caterpillar: Small colonies of these caterpillars may be seen on willow, hackberry, aspen, elm and other trees.

Poplar twiggall fly: Adults can be found resting on newly emerged and females insert eggs into developing stems.

Lawns

Spider mites: Injury by Banks grass mite increases. Clover mite populations should be decreasing.

Early May

Household/Miscellaneous Insects

Tick season: The next two months are the peak season for tick activity and spread of Colorado tick fever.

Lawns

Spider mites: Injury by Banks grass mite often increases if dry conditions persist. Clover mite populations should be decreasing.

Trees/Shrub Insects

Southwestern pine tip moth: Egg-laying occurs when new needles emerge on pines.

Honeylocust plant bug: Nymphs have hatched and begin to damage new growth.

Peach tree borer: Larvae causing peak injury to bases of trees at this time

Tent caterpillars: Tent caterpillars affecting cottonwood in lower elevations may be completing development

Slugs: Slugs may cause peak damage to seedlings during cooler weather.

Cooley spruce gall: Eggs hatch and young nymphs move to feed on new growth. Galls are initiated.

Pine needle scale: Egg hatch may begin during warm seasons.

Garden Insects

Seedcorn maggot: Early planted beans, corn, and melons are susceptible to seedcorn maggot damage.

Flea beetles: Larvae chew small holes in many garden plants and may kill seedlings.

Strawberry injurries: Millipedes and slugs tunnel ripening berries.

Late May

Household/Miscellaneous

Miller moths: Peak flights typically occur at this time.

Tree/Shrub Insects

Pine needle scale: Crawler emergence typically begins around mid May, about the time of lilac peak bloom. Check infested plants.

Oystershell scale: Crawler emergence typically occurs in late May. Check infested plants.

Bronzed cane borer/rose stem girdler: Adults emerge from caneberries, currant, rose.

"Spruce" spider mites: Populations begin to increase on spruce, juniper

Cooley spruce gall: Current season galls are readily visible upon close inspection. Small nymphs are present in chambers of the gall.

Leafcurling aphids: Aphids curl the new growth of many plants at this time.

Poplar and willow borer: Peak injury (tunneling and sawdust) and adult emergence occurring.

Rose/apple leafhoppers: Peak injury to foliage of rose. Apple leafhopper may damage apple foliage.

Codling moth: Sprays after petal fall can help control the first generation. Monitor flights with pheromone traps.

Garden Insects

Narcissus bulb fly: Adult stages emerge and lay eggs on narcissus, daffodils, and hyacinth.

Flea beetles: Adults are present on cabbage, radish and related plants.

Early June

Tree/Shrub Insects

Pine needle scale: Crawler emergence usually is continuing and declining during this period.

Oystershell scale: Continue to monitor emergence of crawlers. Peak crawler period often occurs in

early June.

Honeysuckle witches' broom aphid: Damage to new growth begins to become evident.

Eriophyid mites: Gall making occurs on many plants. Highest populations of leaf vagrants present.

Putnam's cicada: Emergence of larvae and adult activity of begins at this time..

Honeylocust plant bugs: Peak injury by nymphs. Damage will end soon.

Honeylocust borer: Adults often emerge by mid-June. Beetles feed on leaves and then lay eggs on bark.

Poplar and willow borer: Peak injury (tunneling and sawdust) and adult emergence occurring.

Juniper spittlebug: Spittle masses become obvious as nymphs become fully grown.

Lawns

Spider mites: Populations of clover mites should be decreasing rapidly with warm weather.

Garden Insects

Flea beetles: Several species attack garden plants. Seedlings may need protection.

Squash bug: Start checking plants for first egg laying.

Grasshoppers: Egg hatch by many of the important species (*Melanoplus* spp.) should have begun.

Late June

Household/Miscellaneous Insects

Strawberry root weevil: Adults begin to move into homes.

Biting midges: A peak period of emergence and nuisance problems of biting midges (*Leptoconops*)

Ants: Swarming of winged reproductive forms may occur on warm days following rainfall.

Snailcase bagworm: Migrations of larvae occur to high points for pupation.

Tree/Shrub Insects

White pine weevil: Symptoms of wilting from larval girdling of terminals begins to become evident.

Cottony maple scale: Females swell and produce conspicuous egg sacks.

Spruce spider mite: Typical period of peak populations.

Peach tree borer: Adult emergence typically begins. Monitor flights with pheromone traps.

Mountain pine beetle: Optimal treatment time for most areas.

Putnam's cicada: Emergence of larvae and adult activity ending..

Cooley spruce gall adelgid: First emergence from spruce galls and migration.

Fall webworm: Typical period for adults to emerge and lay eggs

Honeylocust spider mite: Populations begin to build towards their midsummer peak.

Elm leaf beetle: Injury by generation one beetles become evident.

Root weevils: Leaf notching injuries by black vine weevil and other root weevils becomes noticeable.

Garden Insects

Grasshoppers: Egg hatch should be well underway. Survey breeding areas to identify sources of future infestations. Optimal time for treatment.

Squash bug: First egg laying often occurs. Treatment at this time is optimal.

Flea beetles: Populations usually have peaked during this period.

Twospotted spider mite: Populations start to increase on a wide variety of garden plants.

Early July

Household Insects

Strawberry root weevils: Migrations into homes accelerates.

Sun spiders (wind scorpions): Peak period of indoor migrations.

Snailcase bagworm: Migrations of larvae occur to high points for pupation.

Biting midges: A peak period of emergence and nuisance problems of biting midges (*Leptoconops*)

Ants: Swarming of winged reproductive forms may occur on warm days following rainfall.

Tree/Shrub Insects

Peach tree borer: Egg laying typically begins. Preventive sprays should be made at this time to kill newly hatching larvae.

White pine weevil: Wilting of infested terminals becomes obvious.

Elm leaf beetle: First generation larvae become full-grown and move down trunk to pupate.

Black vine weevil: Adult leaf notching injuries are obvious on euonymus and rhododendron.

Leafcurling aphids: Most species have departed from overwintering host trees and shrubs.

Cooley spruce gall adelgids: Peak period of emergence from galls and migration to Douglas-fir alternate host.

Fall webworm: Small tents begin to form in cottonwood, Prunus and other trees.

Mountain pine beetle: Adult emergence usually begins.

Leafcutter bees: Characteristic cut leaf injury begins to appear on rose, lilac and other susceptible hosts.

Root weevils: Leaf notching by black vine weevil and other root weevils becomes more noticeable

Garden Insects

Grasshoppers: Nymphs should be developing rapidly and increasingly moving into yards and gardens.

Squash bug: Young nymphs should be present. An optimum time to treat.

Tobacco (geranium) budworm: Some damage by first generation larvae may be evident.

Lawns

Sod webworms: Watch for damage to turf grasses by the second generation larvae.

Billbugs: Injury by larvae may be occurring at this time of year, often to relatively newly established lawns.

Chinch bugs: Outbreaks on lawns may occur during warm dry seasons.

Late July

Tree/Shrub Insects

Codling moth: Second, and most damaging generation begins to lay eggs. Monitor flights with pheromone traps.

Elm leaf beetle: Second generation egg laying and hatch often occurs in late July.

Cooley spruce gall: Abandoned galls become dry and very conspicuous.

Fall webworm: Tents grow large and begin to become conspicuous.

Mountain pine beetle: Typical peak period of new "hits" from invading adults

Walnut husk fly/Apple maggot: Peak period of adult flight and egg laying.

European paper wasp: Activity of wasps becomes much more noticeable as colonies increase. Damage to ripe fruit may begin and will continue for next month.

Lawns

White grubs: Peak period of egg laying activity by the "annual white grubs" (chafers).

Ants: Swarming of winged reproductive forms may occur on warm days following rainfall.

Garden Insects

'Tomato' hornworms: Peak damage by larvae occurs over the next month.

Squash bugs: Injury accelerates.

Grape leafhoppers/Zic-zac leafhoppers: Damage accelerates on grape and Virginia creeper.

Tobacco (geranium) budworm: Egg laying of the typically occurs at this time. larvae may be evident.

Early August

Tree/Shrub Insects

Honeylocust spider mite: Populations increase rapidly and cause leaf bronzing.

Peach tree borer: Second treatment may be of benefit if heavy flights persist. Monitor with pheromone traps.

Fall webworm: Peak feeding often occurs at this time.

Cicadas: Adult singing often peaks.

Lawns

White grubs: Egg hatch and initiation of injury by annual white grubs. Optimal treatment time for the latter.

Garden Insects

Whiteflies: High populations may be present if infested transplants were used in the garden.

Cane borers in raspberries: Wilting symptoms are not most evident at this time of year due to cane boring insects.

Grape leafhoppers/Zic-zac leafhoppers: Damage accelerates on grape and Virginia creeper.

Grasshoppers: As grasshoppers mature and vegetation dries out migration into yards intensifies greatly.

Squash bugs: Peak injury occurs at this time.

Tobacco (geranium) budworm: Peak injury to susceptible flowers (e.g., geranium, petunia) tends to occur at this time.

Miscellaneous

Yellowjackets: Nest size and nuisance problems greatly increase over the next month.

Late August

Household Insects

Cluster flies: Flies begin to move to buildings seeking overwintering shelter. Seal buildings to avoid later problems.

Yellowjackets: Nest size and nuisance problems accelerate.

Tree/Shrub Insects

Elm leaf beetle: Feeding injury by the second generation becomes visible.

Honeylocust spider mite: Populations normally decline.

Lawns

White grubs: Damage by annual white grubs accelerates.

Garden Insects

Corn earworm: High levels of injury to corn ears and susceptible fruiting vegetables at this time.

Miscellaneous

Whiteline sphinx: In some years large numbers of larvae may be observed migrating across rangeland areas.

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.

October

Household/Miscellaneous

Fruit/Vinegar flies: Flies develop in overripe fruit and become abundant in homes.

Wasps and hornets: Nests are abandoned at the end of the season.

Boxelder bugs, conifer seed bugs: Invasions of homes accelerates with cool weather. Massing bugs occur on building sides during warm, sunny days.

Hackberry blistergall psyllids: Adults move into homes and to shelter of other overwintering sites.

Spiders, crickets: Movements into homes accelerate greatly with cool weather.

Tree/Shrub Insects

Aphids on trees: Overwintering eggs are laid as long as weather permits.

Needle drop of pines: Pines naturally begin shed of third year needles in fall.

Lawns

Cranberry girdler: Damage to lawns by this sod webworm occurs in the fall.

Clover mites: Egg hatch follows cold weather and mites begin to develop on grasses and weeds

around foundations.

November/December

Household Insects

Indian meal moth: Adults are most commonly observed flying about homes during early winter.

Fungus gnats: Adults begin to be observed around windows and around the soil of potted plants where they originate.

Boxelder bugs, conifer seed bugs: Overwintering adults continue to be active in and around homes during warm days.

Fruit flies: Flies from overripe fruit continue to be present in homes.