

CHECKLIST OF COMMON INSECT RELATED EVENTS - COLORADO HIGH COUNTRY AREAS

Note: This is a generalized checklist of when some of the more important insect related events *tend* to occur in the High Country counties. Year to year variations 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.

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.

Indian meal moth: Adult moths emerge from stored foods and can be seen flying around homes.

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

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

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

Early March

Household Insects

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

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

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

Trees/Shrubs

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

Late March

Household/Miscellaneous

Flickers: Males are actively drumming on buildings and defending territories during mating season.

Swallow Bugs: Overwintered swallow bugs become active in anticipate of returning migrant birds and bite humans.

Millipedes: Nuisance movements into homes occurs following wet weather.

Ants: Field ants forage in homes for sweet materials.

Trees/Shrubs

Poplar twiggall fly: Larvae begin to leave galls and pupate in soil at the base of trees.

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

Ips beetles: Ips (engraver) beetles may be active during warm periods. Recently transplanted pines and pines in outbreak areas may need protection.

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

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

Spider mites on juniper: *Platyetranychus libocedri* populations may begin to increase on arborvitae.

Tiger moth: Tents and actively feeding larvae may be observed in pinyon and juniper.

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.

Vole injury: Tunneling injuries in lawns and girdling of shrubs may be evident as snow melts.

Early April

Household/Miscellaneous Insects

Swallow bugs: Overwintered swallow bugs become active in anticipate of returning migrant birds and bite humans.

Boxelder bugs, elm leaf beetles, 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.

Tick season: Tick season usually has started and typically persists until high temperatures occur in early summer.

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

Earwigs: First generation eggs hatch about this time.

Trees/Shrub Insects

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

Poplar twiggall fly: Larvae continue to leave galls and pupate in soil at the base of trees.

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

White pine weevil: Overwintered adults may become active and move to terminals of spruce to feed and lay eggs if daily temperatures exceed 50°F.

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

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

Conifer sawflies: Larvae feed on older growth of various pines.

Late April

Household Insects

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

Tree/Shrub Insects

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

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

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

Poplar twiggall fly: Adults emerge and begin to lay eggs in emerging aspen shoots.

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.

Douglas-fir beetle: In forested areas, adult emergence, flights and tree attacks may begin.

Ips beetles: Ips (engraver) beetles may be active during warm periods. Recently transplanted pines and pines in outbreak areas may need protection.

White pine weevil: Overwintered adults may become active and move to terminals of spruce to feed and lay eggs if daily temperatures exceed 50F.

Lawns

Turfgrass mites: Clover mites continue to feed on lawns and enter homes in nuisance migrations.

Nightcrawlers: Tunneling activities and associated lawn lumps continue.

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

Garden

Spinach leafminer: Egg laying and tunneling begins in older spinach foliage.

Early May

Household/Miscellaneous Insects

Miller moths: Flights into areas often begin in early May.

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

Lawns

Spider mites: Clover mite populations should be peaking and may begin natural decline.

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

Trees/Shrub Insects

Hackberry psyllid: Adults return to trees and lay eggs on the emerging leaves.

Western spruce budworm: Overwintered larvae begin to tunnel buds and flowers. Check for early stages of infestations.

Elm leaf beetle: Adults return to trees and chew holes in leaves.

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: Larvae may be seen making tents on aspen and various fruit and shade trees. Forest tent caterpillars are also active on aspen and ash.

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

Late May

Tree/Shrub Insects

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

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

Blackhorned pine borer: Adult emergence and egg laying typically occurs at this time.

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

Fruittree leafrollers: Leafrolling may begin to be observed on many trees/shrubs.

Hackberry psyllid: Current season galls begin to be visible as small eruptions on leaves.

Douglas-fir beetle: Attacks on new trees by overwintered adults may begin.

Oak defoliators: Loopers and leafrollers may begin to defoliate oak stands.

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.

Currantworm: Larvae chew leaves of current and gooseberry. Damage starts in the interior of shrub.

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

Cicada: Adult emergence of common species usually occurs at this time.

Garden Insects

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

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

Grasshoppers: Eggs may begin to hatch of early hatching species (e.g., clearwinged grasshopper)

Currantworm: Larvae chew leaves of current and gooseberry. Damage starts in the interior of shrub.

Strawberry injuries: Millipedes and slugs tunnel the ripening berries.

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

Household Insects

Miller moths: Moths move to mountains with warm weather. (Restricted to east of Continental Divide)

Snailcase bagworm: Full grown larvae begin to migrate and attach to sides of buildings, fences and other surfaces.

Tree/Shrub Insects

Pine needle scale: Crawler emergence should have begun, about the time of lilac peak bloom. Check infested plants.

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

Honeysuckle aphid: Damage to new growth begins to become evident.

Tent caterpillars: Infestations persist at higher elevations but should be peaking and decline at this time.

White pine weevil: Wilting of spruce terminals begins to be visible

Douglas-fir tussock moth: Egg hatch may begin. Monitor infested trees.

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

Spruce spider mite: Populations begin to increase on spruce, juniper

Spruce beetle: Egg laying typically begins during this period

Douglas-fir tussock moth: Intensify monitoring of infested sites as feeding damage increases.

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

Fruittree leafrollers: Peak populations of larvae are generally present.

Elm leaf beetle: Egg laying and egg hatch often peaks at this time.

Cottonwood leaf beetle: Egg laying begins on cottonwood.

Cicadas: Adult emergence persists

Bronzed cane borer/rose stem girdler: Peak period of egg laying in caneberries, currant, rose.

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

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

Western spruce budworm: During outbreaks in forested areas this is often optimal time to treat
Lilac leafminer: Typical period of peak injury to leaves of lilac, euonymus, privet

Garden Insects

Grasshoppers: Egg hatch of most pest species should begin by now. Watch for young stages.

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

Slugs: A peak period of activity and injury.

Late June

Household Insects

Strawberry root weevil: Adults begin to move into homes.

Snailcase bagworm: Full grown larvae continue to migrate and attach to sides of buildings, fences and other surfaces.

Tree/Shrub Insects

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

Spruce spider mite: Typical period of peak populations.

Douglas-fir tussock moth: Egg hatch often is peaking during this period. Monitor infested trees.

Rose leafhoppers: Peak injury to foliage of rose.

Western spruce budworm: Treatment timing during outbreaks.

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

Large aspen tortix: Defoliation of aspen may become visible at this time.

Poplar borer: Adults often begin to emerge from aspen in late June.

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

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

Spruce beetle: Egg laying begins to peak typically during this period

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

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

Mountain pine beetle: Optimal treatment time for most areas.

Garden Insects

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.

Duff millipedes: Migrations into homes may begin.

Earwigs: Migrations into homes begin.

Tree/Shrub Insects

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

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.

Douglas-fir tussock moth: Typical peak period of injury. Monitor infested trees.

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

Mountain pine beetle: Adult emergence usually begins.

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

Poplar leafminers: Activity of tentiform leafminers become visible in lower canopy of poplars at this time.

Garden Insects

Tomato hornworm: First activity by hornworms

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.

Pearslug: Larvae damage plum, cotoneaster.

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

Garden Insects

Flea beetles: Second generation adults emerge and feed

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

Early August

Household Insects

Earwigs: Nuisance problems peak.

Duff millipedes: Frequent peak of household invasions.

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.

Garden Insects

Aster yellows: Peak period of transmission by infective leafhoppers.

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

Cane borers in raspberries: Wilting symptoms are most evident at this time of year due to cane boring insects.

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 begin to decline.

Pine butterfly: Adult butterflies may be observed to swarm around ponderosa pine following

outbreaks.

Dagger moth: Larvae feed on maple leaves and clip petioles.

Garden Insects

Twospotted spider mite: Expect highest populations and greatest injury at this time.

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.

October

Household/Miscellaneous

Green lacewings, willow leafminers: Adults of these insects sometimes enter mountain homes during Fall.

Fruit 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.

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.

Poplar twiggall fly: Galls become obvious when aspen leaves fall.

Ponderosa pine needleminer: Larvae tunnel needles.

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.