

CHECKLIST OF COMMON INSECT RELATED EVENTS

- Metro Denver Area

Note: This is a generalized checklist of when some of the more important insect related events *tend* to occur in the Metro Area 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 many of the referred events.

January/February

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: Overwintered adults become active in and around homes.

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

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

Ants: Field ants forage in homes for sweet materials.

Clover mites: On very warm days in midwinter clover mites may become active on lawns and sides of buildings.

Early March

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

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.

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

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

Ips beetles: Ips beetles may be active during warm periods. Spruce and pines in high risk sites may need protection.

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.

Late March

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

Ants, clover mites: Movements indoors continue.

Poplar twiggall fly: Larvae continue 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.

Pinyon needle scale: Females produce cottony egg sacks on branches and trunk.

Ips beetles: Ips (engraver) beetles may be active during warm periods. Spruce and pines in high risk sites may need protection.

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

Spider mites on juniper: Spring populations may begin to increase; monitor plants.

Early April

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.

Millipedes: Nuisance movements into homes occurs following wet weather.

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

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

Ips beetles: Ips beetles may start flights by this time which can 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.

Zimmerman pine moth: Overwintered larvae remain exposed on the trunk and can be controlled at this time.

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.

European elm bark beetle: Pruned elm wood and logs should be destroyed prior to beetle emergence.

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

Rocky Mountain billbug: Overwintered larvae may damage roots of turfgrass.

Turfgrass mites: Clover mites continue and bank 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

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

Zimmerman pine moth: Overwintered larvae will may begin to move into trunk over the next few weeks.

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

Emerald ash borer: Systemic insecticides can be applied after new leaves emerge and flowering has passed.

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

European elm bark beetle: Preventive sprays should be completed before adults emerge and fly.

Pinyon tip moth: Larvae remain exposed on bark and can be controlled at this time

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.

Hawthorn mealybug: Overwintered stages on trunk move to twigs and feed.

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

Seedcorn maggot: Adults are active and laying eggs. Large warm season seeds (e.g., beans, corn, squash) are at high risk of damage if temperatures are cool.

Early May

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.

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

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

Honeylocust podgall midge: Adults begin laying eggs on new growth. First generation begins.

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

European elm flea weevil: Adults produce small holes in new growth and are laying eggs in leaves.

Banded elm bark beetle/European elm bark beetle: Adults emerge and feed on twigs. Most new transmission of Dutch elm disease occurs at this time.

Emerald ash borer: Systemic insecticides can be applied after new leaves emerge and flowering has passed.

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 various fruit and shade trees. Forest tent caterpillars are also active.

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.

Late May

Miller moths: Flights through the Front Range typically pick up at this time.

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

Emerald ash borer: Adults typically begin to emerge from trees at this time. (Coincident with full bloom of black locust). Soil-applied systemic insecticides should soon be applied, if they have not already. (Emamectin benzoate trunk injections can be used later.)

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

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

Bronzed birch borer, Gambel oak borer: Preventive applications of soil-applied systemic insecticides are best applied at this time. English oaks are at highest risk of damage by Gambel oak borer.

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

European elm flea weevil: Leafmining of larvae begins

Elm leafminer: Egg laying by adults may be expected.

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

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

Rabbitbrush beetle: Peak feeding injury by larvae.

Pinyon tip moths: Larvae start to tunnel into terminals.

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

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.

European elm scale: Overwintered females feed intensively and begin to produce large amounts of honeydew.

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

Seedcorn maggot: Early planted beans, corn, and melons are susceptible to seedcorn maggot damage and will start to show injuries now (poor germination, distorted seedlings).

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 family (crucifer flea beetles) and nightshade family (potato flea beetle) plants.

Honey bee swarms: This is commonly a time for peaks in swarming.

Early June

Miller moths: Moths continue to move through enroute to mountains.

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.

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

Elm leafminer: Early evidence of damage, small mines, may be observed.

Striped pine scale: Crawler emergence typically begins in early June.

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

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

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

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

European elm scale: Females swell as they begin to mature eggs. Heavy production of honeydew.

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.

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

Bronzed birch borer, Gambel oak borer: Adults often emerge by mid-June. Beetles feed on leaves and then lay eggs on bark. Preventive bark sprays of insecticides are best applied at this time.

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

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

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

Winged ants: Ant swarming often occurs during sunny afternoons following rainstorms.

Late June

Strawberry root weevil, springtails, duff millipede: Invasions of buildings may occur with hot dry weather

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

Spruce spider mite: Typical period of peak populations.

Striped pine scale: Crawler emergence in progress.

European elm flea weevil: Larvae mature in leaf mines

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

Root weevils: Leaf notching on many perennial plants may start

Pinyon spindlegall midge: Adults emerge and lay eggs at base of needles.

Rose leafhoppers: Peak injury to foliage of rose.

Japanese beetle: Adults begin to emerge. Chemical treatments can be applied for larvae.

Elm leafminer: Peak injury typical at this time.

Poplar borer: Adults often begin to emerge from aspen in late June.
Douglas-fir tussock moth: Typical peak period of injury. Monitor infested trees.
Peach tree borer: Adult emergence typically begins. Monitor flights with pheromone traps.
Cooley spruce gall adelgid: First emergence from spruce galls and migration.
Honeylocust spider mite: Populations begin to build towards their midsummer peak.
Elm leaf beetle: Injury by generation one beetles become evident.
European elm scale: Eggs begin to hatch and crawlers settle on leaves.
Pinyon pitch mass borer: Adult emergence begins.
Potato/tomato psyllid: Flights of migrating psyllids arrive in state and start to colonize garden plants.
Colorado potato beetle: Peak period of egg laying on potato and eggplant.
Flea beetles: Populations usually have peaked during this period.
Twospotted spider mite: Populations start to increase on a wide variety of garden plants.
Winged ants: Ant swarming often occurs during sunny afternoons following rainstorms.

Early July

Strawberry root weevils: Migrations into homes accelerates.
Sun spiders (windscorpions): Peak period of indoor migrations.
Peach tree borer: Egg laying typically begins. Preventive sprays should be made at this time to kill newly hatching larvae.
Japanese beetle: Adult emergence and feeding at a peak. Chemical treatment for larvae can be made now.
European elm flea weevil: Adults emerge and feed on leaves, producing leaf shotholes
Elm leaf beetle: First generation larvae become full-grown and move down trunk to pupate.
Root weevils: Adult leaf notching injuries are obvious on euonymus, lilac, privet, peonies and other plants.
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.
Pinyon pitch mass borer: Adult emergence continues and egg laying begins.
Codling moth: Flights and egg laying of the second, most damaging, generation often begin at this time.
Leafcutter bees: Characteristic cut leaf injury begins to appear on rose, lilac and other susceptible hosts.
Apple maggot: Expect the emergence of adult flies and onset of egg laying. Monitor flights with sticky traps.
Mexican bean beetle: Larvae begin to damage beans.
Colorado potato beetle: Peak period of larval injury. End of first generation.
Tobacco budworm: Early evidence of injury to flowers may be present.
Sod webworms: Watch for damage to turf grasses by the second generation larvae.
Honey bee swarms: This is commonly a time for peaks in swarming in sunny afternoons.

Late July

Codling moth: Second generation continues 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.
Elm aphids: Stages on leaves excrete large amounts of honeydew.
Japanese beetle: Adult feeding continues but declines. Eggs hatch and larvae begin to feed on turfgrass. Biological controls for larvae (nematodes, Btg) can be used at this time.

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

Potato/tomato psyllid: Symptoms may begin to appear on potatoes and tomatoes.

Mexican bean beetle: Larvae begin to damage beans.

Spotted-wing drosophila: Adult numbers increase and put ripening berry crops at risk.

Early August

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.

Japanese beetle: Adult feeding continues but declines. Eggs hatch and larvae begin to feed on turfgrass. Biological controls for larvae (nematodes, Btg) can be used at this time.

Ips beetles: Reproduction and adult flight may reoccur throughout the season. Reapplication of preventive insecticides may be necessary in high risk sites.

Aster yellows: Peak period of transmission by infective leafhoppers.

Tobacco budworm: Damage to geraniums and petunias accelerates in August.

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.

Spotted-wing drosophila: Adult numbers high and ripening berry crops are at high risk.

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

Late August

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

Yellowjackets: Nest size and nuisance problems accelerate.

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

Honeylocust spider mite: Populations normally decline.

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

Zimmerman pine moth: Adult emergence, egg laying and egg hatch are expected to occur. First treatment opportunity.

Kermes scale on oak: Insects are developing rapidly and flagging of infested twigs begins to be visible.

European elm scale: Yellowed foliage (scale flagging) symptoms begin to occur on heavily infested branches.

Corn rootworms: Adults concentrate on late planted sweet corn and clip silks.

Potato/tomato psyllid: High populations often occur on tomato in late summer.

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

Tobacco budworm: Peak injury to flowers

Spotted-wing drosophila: Adult numbers high and ripening berry crops are at high risk.

Japanese beetle: Larvae develop quickly and feed on roots of turfgrass; adult numbers in considerable decline

Early September

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.

Large caterpillars: Several species of large caterpillars (twotailed swallowtail, achemon sphinx, 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.

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

October

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, multicolored Asian lady beetles: 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.

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

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

Oak bulletgall wasp: Adults begin to emerge late in month.

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

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

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, multicolored Asian lady beetles: 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.