



303-232-0666 or www.mountainhightree.com

PLANT HEALTH CARE CALENDAR

This calendar shows some of the more common insects and diseases that attack and damage our trees, shrubs and lawns in this area along with a brief description of each. These are just a few of the more damaging insects and diseases. For more information visit our web site for links to the Colorado State University Extension.

Timing for treatments can vary depending on weather, location, pest emergence and other variables. We hope this will assist you in becoming more aware of these problems. Insect and disease control is only one tool of overall landscape care. A complete maintenance program is the key to healthy trees, shrubs and turf. Please call if you have questions on any specific problem or for general Plant Health Care information.

SHADED AREAS INDICATE THE APPROXIMATE TIMES FOR THE MOST EFFECTIVE CONTROL

TIMING	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEPT	OCT	NOV	DEC
INSECTS	TREE AND SHRUB INSECTS & DISEASES											
Aphids	Sap sucking insects causing foliage to become sticky and distorted on many trees, shrubs and evergreens. A sooty mold often develops that may discolor the area below.											
Ash / Lilac Borer	Larvae burrow into trunks and excavate galleries in young and stressed Ash trees, causing severe limb die back possible death.											
Ash Sawfly	Green larval worms feed on the leaves of Ash trees; potentially defoliating the entire tree.											
Boxelder Bug	This insect is primarily a nuisance that does little harm to the Boxelder trees. They are very difficult to control effectively. Control can be applied any time adults are present.											
Bronze Birch Borer	Larval feeding destroys tissue of trunks and branches. Preventative treatments are recommended.											
Codling Moth	Frequently referred to as "The worm in apples". Treatments are most effective just after full blossom, but can extend through harvest when maximum control is required.											
Cottony Maple Scale	Large cotton-like egg masses. Can be found on Maple, Locust, Cotoneaster, Viburnum and other trees and shrubs.											
Cottonwood / Poplar Borer	Affects weakened Cottonwood, Poplar and Aspen trees causing drill like holes in the trunk. Mortality is common in affected trees.											
Crown Borer	Attacks the lower trunk of Peach and Plum trees causing jelly like masses. Can cause decline or death of tree.											
Elm Bark Beetle	The carrier of Dutch Elm Disease; also destroys the tissue under the bark. Primarily affects American and English Elms.											
Elm Leaf Beetle	Small worm like larvae feed on the leaf tissue, leaving leaves transparent. Adult beetles can chew holes and defoliate the tree.											
Elm Leaf Miner	Larvae appear inside new leaves as they develop appearing as brown and transparent pockets in the leaf. Can also cause premature leaf drop. Can affect many trees including Elm, Birch, Boxwood, Hawthorn and Roses.											
Emerald Ash Borer	Attacks all Ash species. Early symptoms of an infestation include dead branches near the top of the tree, or leafy shoots growing out from the base of the trunk. There will be "D" shaped exit holes and bark will split exposing serpentine like tunnels. Best controls are achieved with preventative treatments.											
European Elm Scale	Immature stage will secrete large amounts of sticky honeydew and cause sooty mold that will discolor branches and the ground under them. Will cause twig and branch die back.											
IPS Engraver Beetle	Larvae make small holes through bark and tunnel underneath. Sawdust like frass is emitted. Often starts at the top. Usually fatal to Spruce and Pine trees that are attacked. Controls must be applied as a preventative treatment.											
Japanese Beetle	A newcomer to Colorado. Can feed on almost any plant including turf roots. Seems to prefer certain vines, roses and berry plants. Best controls requires monitoring and a full plant health care program.											
Kermes Scale	Larval feeding will cause tufts of Oak leaves to fall. Heavy infestations will cause branch die back and tree death.											
Mites	Thousands of species that can damage many trees, shrubs, evergreens and our lawns. Best controls are achieved with a plant health care program.											
Leafhopper	Will feed on new Locust leaves as they emerge and cause distorted looking leaves.											
Mealy Bug	Small white cottony spots on twigs of Hawthorns and other trees. Heavy infestation can cause early leaf drop and branch die back.											
Mountain Pine Beetle	Primarily a mountain problem but has migrated to the front range, attacking and killing Scotch, Ponderosa, Mugo and Lodgepole Pine trees											
Oystershell Scale	Affects Aspen, Ash, Lilac, Cotoneaster and other plants. Best treated in crawler stage.											
Pine Bark Adelgid	Newly discovered with specific identity still unconfirmed. Resides under the bark of Ponderosa Pines and appears as a small cottony mass. Can cause decline and death of tree.											
Red Headed Ash Borer	Relatively new to the Denver Metro Area. Drill holes evident in trunk. Can severely damage young and old Ash trees alike.											
Pine Needle Scale	Visible as small white specks on some Pine and Spruce needles and causes severe tissue damage to those needles. Not to be confused with the natural resin specks on Bristlecone Pine trees.											
Spruce Gall Adelgid	Causes a brown cone like growth on the tips of Spruce trees. Damage is mostly cosmetic.											
Striped Pine Scale	A soft scale causing obvious thinning and decline of Scotch and Mugo Pine trees.											
Turpentine Beetle	Attacks the lower 8 feet of stressed Pine tree trunks causing obvious sawdust like frass filled pitch tubes.											
Tussock Moth	The caterpillar larvae feed on the top of Spruce trees and can cause significant defoliation.											
Walnut Twig Beetle	Attacks twigs and branches of Walnut trees, plus carries a deadly vascular clogging fungus known as 1000 Canker disease. No control.											
Zimmerman Pine Moth	Larvae feed on and cause distressed tissue around Pine tree branches where they connect to trunks, causing weakened branch attachment and failure.											
DISEASES												
Powdery Mildew	A fungal disease which infects leaves of trees and shrubs such as Apple, Lilac, Roses and lawns. Leaves will have a light powdery look while lawns will have a gray appearance. Fungicide applications can help.											
Anthracnose	Several species attack trees such as Sycamore, Ash, and Maple causing significant stress and potential death.											
Cytospora	Some of the more aggressive species infect and kill Aspen, Cottonwood and Mountain Ash.											
Dutch Elm Disease	This disease has been killing American and English Elm trees in Denver since 1970. Preventative programs can be very effective for control.											
Fireblight	Aggressive bacterial disease of Apple, Crabapple, Pear, Peach, Mountain Ash and Hawthorns.											
Leaf Spot	Leaf spot is often the cause of discolored leaves falling from Aspen and Cottonwood trees in July and August.											
1000 Canker Disease	This disease is vectored by the Walnut Twig Beetle and is killing Walnut trees at an alarmingly rapid rate.											

TIMING	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEPT	OCT	NOV	DEC
LAWN INSECTS & DISEASES												
Ascochyta	Ascochyta is a drought stressed related fungal disease that may occur throughout growing season, but is more likely to occur when conditions are dry following hot periods. Dull mower blades and other cultural practices will also contribute to the potential severity.											
Cinch Bugs	A black beetle with wings that normally has gray diamond patterns on their backs. They suck the moisture out of the grass.											
Dollar Spot	This fungal disease develops throughout the season and is most active during periods of warm days and cool nights in the spring, early summer and fall. Close examination may reveal a cobweb-like mycelium that forms as the fungus develops. Dollar spot may be spread into new areas by mowers, water and foot traffic.											
Grubs	The white colored larvae that feed on turf roots causing major turf damage throughout Colorado. This group of insects develops into various adults such as Chafer Beetles, Japanese Beetles and June Beetles, among others.											
Mites	There are thousands of species of mites in the environment and many feed on turf areas. Damage can occur during the entire year because some species favor cool temperatures while others enjoy warmer temperatures. With regular watering mites should not be a problem during summer months.											
Necrotic Ring Spot	This is the most destructive disease of bluegrass in Colorado. Distinctive circular patches of straw colored grass develops from June to August. This disease will intensify and spread if left untreated.											
Sod Webworm	They feed on turf roots causing significant die back in turf areas. Damage will often begin to show up in the early to mid-summer. Small moths darting in and out of lawn are often times sod webworm moths.											
Weeds	The most prevalent and problematic weeds in our lawns include Clover, Spurge, Dandelion, Thistle, Wild Violet and Bindweed.											

COMMON TREE SPECIES - THE INSECTS & DISEASES THAT CAN AFFECT THEM

Ash	Aphids, Ash borer, Red-Headed Ash Borer, Oystershell Scale, Ash Sawfly, Cottony Maple Scale and Emerald Ash Borer*
Apple/Crabapple	Aphids, Mites, Fireblight, Powdery Mildew and Codling Moth
Aspen/Cottonwood / Poplar	Aphids, Leaf Spot, Cytospora Canker and Cottonwood / Poplar borer
Boxelders	Aphids and Box Elder Bug
Birch	Aphids and Birch Borer
Elms	Aphids, Mites, Elm Leaf Beetle, Elm Scale, Elm Leaf Miner, Dutch Elm Disease and Elm Bark Beetle
Hawthorn	Aphids, Mites, Leaf Miner, Mealy Bug and Fireblight
Linden	Aphids and Mites
Locust	Mites, Leaf Hopper, Canker and Locust borer.
Maple	Aphids, Cottony Maple Scale, Verticillium wilt and Anthracnose
Pear	Fireblight *Some species are more susceptible to fireblight than others
Peach / Plum	Aphids and Crown Borer
Juniper	Aphids, Mites and Needle Scale
Pines	Aphids, Mites, IPS Engraver Beetle, Pine Needle Scale, Zimmerman Pine Moth, Striped Pine Scale, Pine Bark Adelgid, Mountain Pine Beetle and Turpentine Beetle
Oaks	Aphids, Mites, Kermes Scale and Oak Borer
Spruce	Aphids, Mites, IPS Engraver Beetle, Tussock Moth, Aphid Gall and Cytospora Canker
Walnut	Aphids, Walnut Twig Beetle and 1000 Canker Disease
Willow	Aphids, Mites and Cytospora Canker
Vines, Roses and other species	Aphids, Mites and Japanese Beetle



MOUNTAIN HIGH
Tree Care & Consulting



In Harmony with Nature. In Partnership with You.

PLANT HEALTH CARE CONTROL CALENDAR



Our mission at Mountain High Tree, Lawn & Landscape Co. is to provide the best, most up to date and environmentally sound tree, lawn and landscape services available.

This calendar is designed to help assist you in identifying potentially damaging insects and diseases so that you can be more pro-active in recognizing tree and lawn problems. As always please contact us anytime you have a question or concern regarding your landscape care needs.

Proudly serving the Denver Metro area since 1974.

Sincerely,



Ralph Bronk

Ralph Bronk, President

Proud Member of:



D
I
S
E
A
S
E
S

I
N
S
E
C
T
S