

Early Season Guide to Pest Management

The following table should assist you in the early season planning process. **Remember that this is just a guide** and that conditions will vary. Information on any entry preceded by an * may be available on our website or can be requested by calling or writing to the Insect and Disease Laboratory, 50 Hospital Street, Augusta, Maine 04330-6514, Phone (207) 287-2431, Fax (207) 287-2432.

Insect or Disease	Cultural Controls	Chemical Controls
Apple Scab	Remove any fallen leaves not raked last autumn; plant resistant crabapples such as 'Adams', 'Baskatong', 'Beverly', 'Bob White', 'David', 'Dolgo', 'Donald Wyman', 'Liset', 'Red Jewel' and 'Sugartyme'. Other varieties of apple that are resistant to scab include Liberty, Pristine, Jonafree, Freedom, Redfree, Crimson, Enterprise, and William's Pride.	Propiconazole (Banner) or Thiophanate methyl (Cleary's 3336) or Chlorothalonil (Daconil, Ortho multi purpose fungicide) or Mancozeb (Dithane, Fore, Protect, Zyban) every ten days during wet weather. Captan, Manzate, and Polyram are also effective.
*Balsam Gall Midge		Diazinon or chlorpyrifos (Lorsban**) late May to early June.
*Balsam Shootboring Sawfly		Lorsban 4E** or Diazinon AG500 3 times at 5 day intervals during the 2 weeks following the observation of activity of adults (mid-late April) or in the two weeks prior to normal balsam twig aphid spray dates.
*Balsam Twig Aphid		Diazinon**or chlorpyrifos (Lorsban**) at bud break.
*Birch Casebearer		Malathion or carbaryl (Sevin) applied after most or all of the cases have moved to opening buds.
Black Knot of peach, plum, and cherry	Prune and destroy knotted twigs and branches.	Thiophanate methyl (Cleary's 3336 or Fungo Flo) when dormant and twice again at three week intervals.
*Browntail Moth	Clipping of overwintering webs is only effective prior to the time larvae beginning actively feeding on emerging foliage (mid to late April).	The use of pesticides is a complex issue requiring professional assistance and there are restrictions on treating near water. Call for more information.
*Bruce Spanworm		Emerges early as buds begin to swell on northern hardwoods, especially beech. Larvae bore into buds. Controls not usually recommended.
Cyclaneusma Needle Cast of Scotch pine	Use disease free planting stock; remove non crop Scotch pines from area.	Chlorothalonil (Bravo) prior to bud break and during wet periods throughout growing season.
Dogwood Anthracnose	Remove any fallen leaves not raked last autumn; fertilize trees; prune out dead twigs and suckers; plant Chinese or Japanese dogwood instead of native flowering dogwood.	Chlorothalonil (Daconil 2787), or Thiophanate methyl (Cleary's 3336, Fungo Flo, Zyban) or Propiconazole (Banner) or Mancozeb (Dithane, Fore, Protect) at bud break and again three times at three week intervals.
Dutch Elm Disease	Plant disease resistant elms; eliminate all potential beetle breeding elm material within 700 feet of trees to be protected.	Onyx (bifenthrin) or chlorpyrifos (Lorsban**) for beetle vector control on the lower 9' of trunk.
*Eastern Tent Caterpillar	Prune out egg masses on twigs prior to hatch; remove and destroy small tents as they develop (late April-early May)	Acephate, carbaryl (Sevin), cyfluthrin or <i>Bt</i> on warm days when larvae leave tents to feed.
*Fall Cankerworm		Acephate (Orthene), <i>Bt.</i> , carbaryl (Sevin), cyfluthrin applied while larvae are small (late May-early June on boxelder in Aroostook County). Early to mid May on elm and oak in southern Maine.
*Gypsy Moth	Scrape egg clusters from tree boles and larger branches into a container and destroy them. Complete before egg hatch (late April).	Acephate (Orthene), <i>Bt.</i> , carbaryl (Sevin), cyfluthrin, or diflubenzuron (Dimilin**) when larvae are actively feeding (early June).
Hawthorn Leaf Spot Mt. Ash Leaf Spot	Remove any fallen leaves not raked last autumn; plant resistant sorts such as <i>Crataegus crus-galli</i> .	Thiophanate methyl (Cleary's 3336, Fungo Flo) or Chlorothalonil (Daconil) or Mancozeb (Dithane, Fore) as leaves unfold at two week intervals until dry weather.
*Hemlock Woolly Adelgid	Watch for signs of infestation and report immediately.	Call for information.

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Horse Chestnut Leaf Blotch	Remove any fallen leaves not raked last autumn.	Thiophanate methyl (Cleary's 3336, Fungo Flo) or Chlorothalonil (Daconil 2787) at bud break and twice more at 14 day intervals.
*Larch Casebearer		Carbaryl (Sevin), or cyfluthrin (Tempo) applied after most cases have moved to the expanding needle clusters (late April to early May).
Maple Anthracnose	Remove any fallen leaves not raked last autumn.	Thiophanate methyl (Cleary's 3336 or Fungo Flo) at bud break and twice again at 10-14 day intervals.
Peach Leaf Curl		Chlorothalonil (Bravo) or Ferbam (Carbamate) or Ziram applied as full coverage spray when trees are dormant.
*Pear Thrips		Controls and timing not well understood. Thrips are active on expanding maple.
Pine-Pine Gall Rust of jack and Scotch pine	Prune rust galls from lightly infected trees; rogue heavily infected trees from plantations before May 1. Use disease free planting stock.	None at this time.
Rhabdocline Needle Cast Swiss Needle Cast of Douglas Fir	Rogue severely infected trees from plantations before May 1.	None at this time.
*Satin Moth		Treat infested poplars and willow in mid to late May with <i>Bt</i> , carbaryl (Sevin) or cyfluthrin.
Sphaeropsis Shoot Blight of two and three needle pines	Use disease free planting stock; remove non crop tree hard pines from area.	Chlorothalonil (Bravo) at bud break and when shoots are half grown.
*Spruce Gall Adelgids	Prune off and destroy new developing galls in mid to late June.	Treat infested trees just prior to bud break with dormant oil, carbaryl (Sevin) chlorpyrifos (Lorsban**) or imidacloprid (Merit). Controls can also be applied in the fall.
*Ticks	Watch for ticks throughout the field season (April-November). Avoid high risk areas if possible, inspect yourself daily and remove ticks and use repellents as directed.	Compounds containing DEET can be used as repellents. Those containing the toxicant permethrin can be used on clothing as directed.
*Viburnum Leaf Beetle	Where possible, prune off any twigs with scabby, egg-filled holes prior to May 1st.	Watch in mid - late May)- for developing larvae and treat with acephate (Orthene), carbaryl (Sevin), or chlorpyrifos (Lorsban**).
*White Pine Blister Rust	Prune cankered lateral branches from trees and excise stem cankers by removing bark at least four inches above and below and two inches either side of discolored bark.	None at this time.
*White Pine Weevil	Refrain from planting white pine or spruce for reforestation in open areas, on heavy clay soils, or on heavily sodded fields. Correctively prune damaged trees to establish new leaders.	Apply control in the spring once there have been several days above 60 degrees Fahrenheit. Use Pyrenone Crop Spray, Astro, Onyx, Talstar or Dibrom 8 at 14-20 day intervals until June. <u>Commercial Forest and Christmas Tree Plantations:</u> <u>Dimilin** or Lorsban**.</u>

***NOTE:** These recommendations are not a substitute for pesticide labeling. Read the label before applying any pesticide. Pesticide recommendations are contingent on continued EPA and Maine Board of Pesticides Control registration and are subject to change.

Caution : For your own protection and that of the environment, apply the pesticide only in strict accordance with label directions and precautions.

****Restricted-use pesticide may be purchased and used only by certified applicators.**