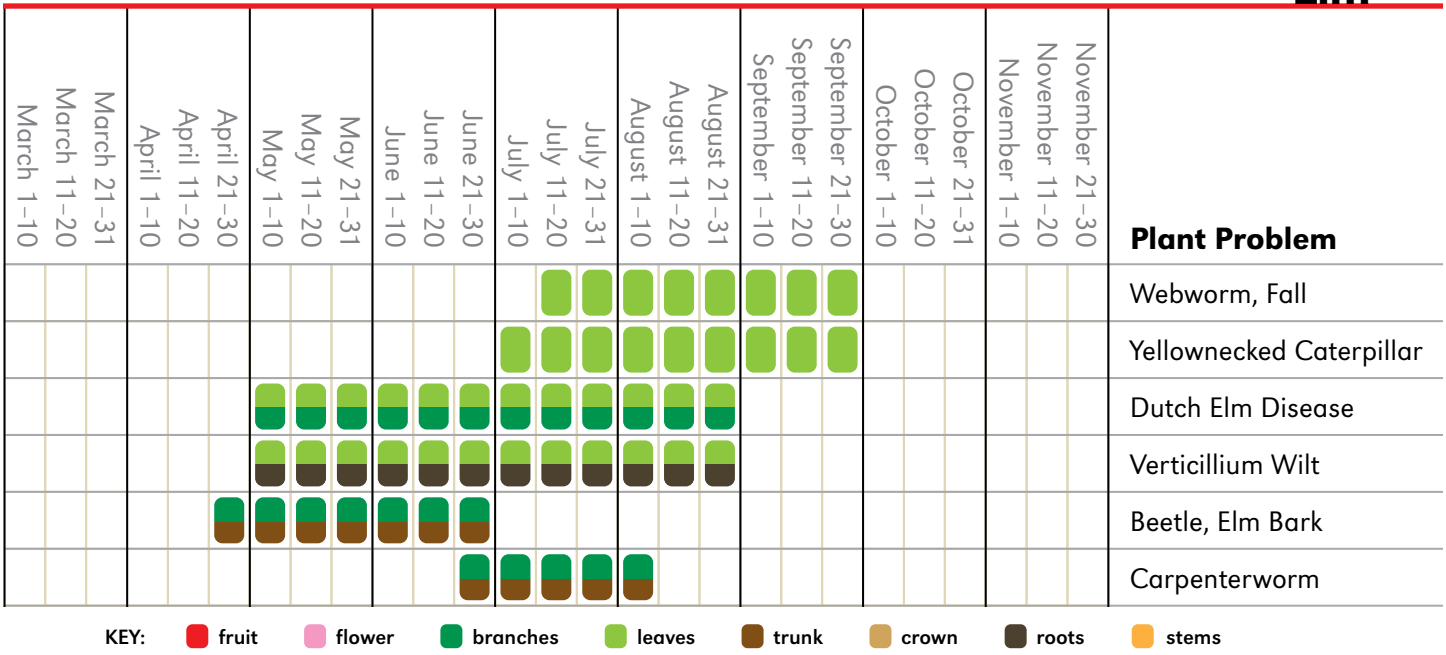
Pest Damage on

Elm

Plant Problem	March 1–10	March 11–20	March 21–31	April 1–10	April 11–20	April 21–30	May 1–10	May 11–20	May 21–31	June 1–10	June 11–20	June 21–30	July 1–10	July 11–20	July 21–31	August 1–10	August 11–20	August 21–31	September 1–10	September 11–20	September 21–30	October 1–10	October 11–20	October 21–31	November 1–10	November 11–20	November 21–30
Scale, European Elm										stems	stems	stems	stems	stems	stems	stems	stems	stems	stems	stems	stems						
Aphid, Giant Bark								leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves					
Aphid, Woolly Elm				leaves	leaves	leaves	leaves	leaves	leaves	leaves																	
Bacterial Leaf Scorch											leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves						
Cankerworms				leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves																
Elm Black Spot				leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves														
European Elm Flea Weevil							leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves												
Lace Bug, Elm						leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves						
Leaf Beetle, Elm										leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves									
Leafhoppers					leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves						
Leafminer, Elm						leaves	leaves	leaves	leaves	leaves																	
Leafroller, Fruittree						leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves									
Linden Looper					leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves														
Mites, Leaf Spindle Gall				leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves														
Scale, Elm Scurfy								leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves	leaves							
Spider Mites														leaves	leaves	leaves	leaves	leaves	leaves	leaves							
Twig Girdler Borer																	leaves	leaves	leaves	leaves	leaves						

KEY: fruit flower branches leaves trunk crown roots stems



Plant Problem	Signs/Symptoms	Treatment
Scale, European Elm 	Dark brown, adult hemispherical scales are attached to twigs, often in clusters; each is bordered by a white ovisac containing eggs. Nymphs attach to leaves in the summer.	Nymphs ("crawlers") hatch from ovisacs in late June-early July and crawl to foliage, where they feed on leaf undersides through the summer. In cases where infestations threaten tree health, apply a horticultural oil, insecticidal soap or contact insecticide to kill nymphs.
Aphid, Giant Bark 	Large, quarter-inch long, gray-brown, spotted, long-legged aphids in dense colonies on new twigs; many winged. Heavily infested branches may be stressed or wilted.	These aphids have many hosts and are most evident in late summer. Older established trees tolerate them well, but monitor newly planted trees. For severe infestations, dislodge aphids with a strong spray of water, or treat with a contact insecticide.
Aphid, Woolly Elm 	Leaves on branch tips become stunted and curled, and woolly aphids are packed inside them. Sticky honeydew and lady beetles are often present among the cottony masses of aphids.	Insecticidal treatment not often necessary, nor is it effective. Natural enemies often destroy colonies by early summer, and aphids migrate to alternate host plants. Spray leaf masses early with a strong jet of water from the garden hose to dislodge the aphids.

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Bacterial Leaf Scorch 	Irregular pattern of necrosis along the margin that is often accompanied by a chlorotic halo.	Prune out dead branches. Avoid water stress. Replace tree with non-susceptible host.
Cankerworms 	Ragged holes in leaves; only veins may remain. These "inchworms" are greenish, brown or black and move in a looping fashion. Some may hang from silken threads when disturbed.	Healthy trees tolerate considerable defoliation; treat only if severe and when cankerworms are abundant and small. Microbial insecticides are effective and safe alternatives to chemical insecticides, especially in situations where drift is a concern.
Elm Black Spot 	Small yellow lesions on the upper leaf surface as they unfold; white to light yellow halo surrounding lesion. Lesions rapidly expand and coalesce. Lesion may girdle petioles. Successive infections may cause witches' brooms.	Sanitation. Avoid overhead irrigation. Avoid overcrowing of tree.
European Elm Flea Weevil 	Siberian elm is preferred. Tiny brown adults riddle buds and leaves with numerous holes, while larvae are leafminers and make blotch mines. Severely damaged leaves turn brown.	Monitor for adults at bud-break through June. Large trees tolerate severe injury, but treat foliage of young trees with a contact or systemic insecticide. Where serious infestations occur annually, apply a systemic insecticide as a drench the previous late autumn.
Lace Bug, Elm 	Whitish-yellow flecks first on upper surfaces of leaves; eventually leaves become yellow or bronzy-brown. Leaf undersides with small, flattened, lacey bugs and tarry fecal spots.	The brownish nymphs cannot fly and are more easily controlled. A strong stream of slightly soapy water from a hose-end sprayer will dislodge and kill many. Other options include a spray oil, insecticidal soap, conventional insecticide, or systemic insecticide.

Plant Problem	Signs/Symptoms	Treatment
Leaf Beetle, Elm 	Small irregular holes in leaves as well as leaf skeletonization. Dull green beetles with black lines on wings present with yellowish larvae. Eggs in masses are bright yellow and pointed.	Damage is cumulative, as there are two generations. Monitor for yellow egg clusters or small larvae in May and regularly thereafter. Spray thoroughly as needed with neem oil, a horticultural spray oil, insecticidal soap, microbial insecticide or a contact insecticide.
Leafhoppers 	Leaves develop pale flecks, which in time spread densely over leaf surfaces. Leaves may turn yellow. Wedge shaped adults, nymphs and fecal spots are present on leaf undersides.	Nymphs cannot fly and are more easily controlled. A strong stream of slightly soapy water from a hose-end sprayer will dislodge and kill many. Other options include a horticultural spray oil, insecticidal soap, conventional insecticide, or systemic insecticide.
Leafminer, Elm 	In early spring, small blotches appear on leaves and enlarge as the tiny larvae feed within the internal leaf layer. Leaves can be completely mined and turn brown.	Control not often needed, as infestations tend to be spotty. This pest has natural enemies which keep it in check most years. If control is needed, apply a foliar systemic insecticide early when blotches are small and a serious outbreak is expected. Only one generation.
Leafroller, Fruittree 	Buds with holes, webbing and frass. Leaves rolled together with webbing and skeletonized or devoured. These green worms with shiny black heads wriggle violently when disturbed.	Rarely justifiable to control, as infestations tend to be spotty, and healthy trees tolerate even extensive defoliation. Should control be warranted, make several applications of a microbial insecticide, such as product containing *Bt* or spinosad.
Linden Looper 	Ragged holes in leaves; only veins may remain. These "inchworms" are yellow with 10 dark wavy lines along the top half of the body. They move in a looping fashion.	Healthy trees tolerate considerable defoliation; treat only if severe and when loopers are abundant and small. Microbial insecticides are effective when applied with thorough coverage and repeated; otherwise, apply a chemical insecticide according to label directions.

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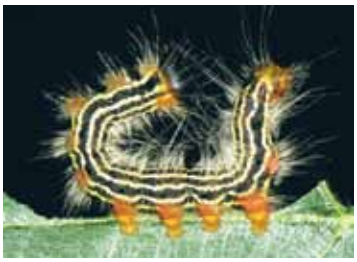
Mite, Leaf Spindle Gall (Eriophyid) 	Greenish or red, spindle shaped pouch galls on the upper surface of leaves, with openings on the undersides.	The galls are not at all harmful to host trees. There is no need to control the mites which cause formation of the galls in the spring.
Scale, Elm Scurfy 	Small, flat, pear shaped, dirty-white scales crowded on branches; heavy infestations look crusty. Plants are weakened, and dieback of twigs or branches may be evident.	Prune out heavily infested branches, as appropriate. Dormant-season oil sprays not as effective as treating newly hatched nymphs ("crawlers") in June. Monitor to detect crawlers and apply an oil spray, insecticidal soap or insecticide.
Spider Mites 	Leaves stippled or yellow with fine webbing on undersides of leaves. Tiny greenish mites moving beneath webbing. When foliage turns brown, mites may mass together at tips of stems.	Populations explode during prolonged hot, dry weather. Monitor in late July, checking undersides of leaves. Keep host plants well-watered. Dislodge colonies with a strong spray of water. Apply an insecticide/miticide if infestations become serious; repeat in 10 days.
Twig Girdler Borer 	In late summer, twigs about one-half inch in diameter are found on the ground. They are cleanly cut around the outside as if by a saw blade; the center of the stem shows where they break.	Gather and destroy severed twigs, as they contain eggs of this nuisance longhorned beetle pest. In cases where significant damage occurs annually and disfigures growth of young trees, spray with a residual insecticide when beetle activity is first detected.
Webworm, Fall 	A nest of webbing covers several leaves initially, then later envelops entire branches as caterpillars grow. Fuzzy, yellowish or brown caterpillars feed on leaves inside webbing.	Rake out nests, or dislodge with a powerful jet of soapy water from a power washer. Apply a microbial insecticide to control young caterpillars in small nests; larger nests are almost impenetrable with insecticidal sprays. Damage is more unsightly than serious.

Plant Problem	Signs/Symptoms	Treatment
Yellownecked Caterpillar 	Caterpillars have narrow, black and white stripes along the body and an orange-yellow "neck" behind the head. They feed in groups and raise their bodies up when disturbed.	Infestations are seldom serious, however, small trees and entire branches can be defoliated. Young caterpillars can be controlled with a microbial insecticide, a horticultural oil or an insecticidal soap. Do not treat mature caterpillars, as they soon cease feeding.
Dutch Elm Disease 	Leaves of individual branches turn yellow and wilt; leaves eventually turn brown; dark brown streaking in the sapwood.	Remove infected trees. Plant resistant varieties
Verticillium Wilt 	Small, yellow foliage. Leaf scorch. Slow growth. Dieback of shoots and branches. Sudden wilting and collapse of tree. Streaking of vascular tissue of wood.	Remove infected plants. Avoid root injury. Avoid water stress. Replace with non-suscpetible host.
Beetle, Elm Bark 	Numerous tiny holes in bark, usually densely clustered together in patches or bands on branches or the trunk. The bark is loose and has many narrow, linear galleries beneath.	Infestations are usually signs that the tree is in poor health and in rapid decline. Beetles also are vectors of Dutch elm disease. Destroy dead trees. For healthy trees, provide care to reduce stress; apply a residual insecticide to the bark in spring.
Carpenterworm 	Large, weepy, circular, exit holes usually at base of tree and in main branches. When adults emerge, pupal skins often protrude from holes. Some branches may be dead or stressed.	Since each carpenterworm maintains an open hole to the outside of the tree, inject an insecticide, or a slurry containing parasitic nematodes, or kill with a stiff wire. Apply a borer spray to the bark throughout the period of adult activity to prevent reinfestation.