COOL- AND WARM-SEASON INSECT PESTS

INSECT	WHERE TO FIND THEM	DAMAGE SYMPTOMS	CONTROL PRACTICES
Warm-season insect pests			
Cutworms/Armyworms *Scouting: Soap flush*	Warm-season grasses	Turf clipped at soil level; large bare areas	1. treat late in day. 2. do not mow or remove clippings for 1-3 days; 3. may be present from early spring to late fall
Fire ants	Warm-season grasses	Unsightly mounds that may damage mowers, painful stings a problem in high-traffic areas	1. control in spring and fall when workers forage for food; 2. labor-intensive mound treatments are most effective; 3. use continuous control once you start; 4. do not disturb mounds in treatment; 5. use baits before using contact insecticides (they return baits to mound)
Mole crickets *Scouting: Soap flush*	Bahiagrass, close-cut turf	Tunneling, dieback, thin spots	1. treat in June/July when eggs hatch; 2. follow-up treatments usually needed; 3. Watch adults in March/April to pinpoint egg hatch areas
Ground pearls *Scouting: Dig 2-4 in. in soil, sift and look for "pearls"*	Bermudagrass, centipedegrass	Yellowing, turf dieback, no new regrowth the following season	1. no known effective controls; 2. manage for turf tolerance; 3. irrigate during dry weather
Southern chinch bugs *Scouting: Look for nymphs under leaf sheath; use a cylinder pressed into ground, filled with water, to watch for floating bugs*	All warm-season grasses, especially St. Augustinegrass	Yellowed turf, turning reddish brown	1. avoid overfertilizing; 2. manage thatch; 3. irrigate in dry spells; 4. apply pesticides with plenty of water; 5. multiple treatments often needed
Twolined spittlebugs *Scouting: Look for spittle masses near base of plant; count nymphs in spittle masses*	Warm-season grasses	Yellowed turf, unsightly "spittle masses"	1. control adults on ornamentals like hollies; 2. treat on cloudy days when bugs are higher up on turf; 3. start monitoring in early summer
White grubs *Scouting: Dig sod squares 4- to 6-in. deep to detect grubs (will be closer to surface after rain)*	Warm-season grasses	Drought stress and turf dieback, may attract hungry moles or skunks	1. treatments most effective late Aug./early Sept.; 2. grubs like low-cut, high maintenance turf; 3. avoid ornamentals attractive to adult Japanese beetles or green June beetles
Bermudagrass mites *Scouting: Use hand lens to see small worm-like mites on grass and under leaf sheath*	Bermudagrass	Yellowing of leaf tips, then shortened internodes for tufted growth, death	1. irrigate during dry spells; 2. proper fertilization helps turf outgrow damage; 3. use resistant cultivars; 4. multiple treatments often needed
Bees & wasps	All turf types	Holes, mounds, tunneling in turf, visible flying insects	1. maintain healthy, lush turf; 2. mulch under shrubs and trees and keep it fresh to discourage nesting

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Cool-season insect pests			
Japanese beetle	Sandy, loamy soils	Soil samples to count population	1. determine species; 2. target and time controls accordingly; 3. water in grub insecticide thoroughly in irrigated turf
European chafer	Poorly irrigated turf	Soil samples to count and identify population	1. determine species; 2. less susceptible to insecticides than most other grub species; 3. target and time controls accordingly; 4. water in grub insecticide thoroughly
Oriental beetle	Turf in the Northeast United States	Look in hot/dry soils a few weeks ahead of Japanese beetles	1. less susceptible to insecticides so time carefully; 2. may need a followup treatment; 3. water in grub insecticide thoroughly
Asiatic garden beetle	Turf in the northeast United States	Soil samples to find tiny grubs	1. may be less sensitive to many turf insecticides and can establish in place of other grubs controlled by these products; 2. just a nuisance, but that could change; 3. water in grub insecticide thoroughly
Northern masked chafers	Roots and organic matter	Look for broken off roots or damage to root hairs	1. determine species; 2. target and time controls accordingly; 3. most turf insecticides work reasonably well
Little billbug	Turf in eastern and midwestern United States	Target emergence from hibernating sites before they lay eggs	1. determine species and appropriate timing; 2. target emergence; 3. can use degree-day model; 4. applications at larvae stage not as successful
Bluegrass billbug	Predominant species in eastern United States	Target emergence from hibernation before they lay eggs	1. determine species and timing; 2. target emergence; 3. can use degree-day model; 4. applications at larvae stage not as successful; 5. may use endophyte-enhanced turf cultivars
Uneven billbug	Turf in eastern United States	Active adults in early spring and late fall	1. determine species and timing; 2. target emergence; 3. treat accordingly; 4. applications at larvae stage not as successful
Denver billbug	Turf in Rocky Mountains and northern Plains states	May overwinter as medium/large larvae or adults	1. determine species and timing; 2. target emergence; 3. treat accordingly; 4. applications at larvae stage not as successful
Hairy chinch bugs	Midwest and mid-Atlantic areas	Damage occurs when turf has heat or moisture stress	1. identify chinch bugs; 2. apply appropriate insecticides; 3. damage may still remain, especially if turf is in summer dormancy; 4. may use endophyte-enhanced turf cultivars
Webworms	Several species in northern United States	Damage may be severe or sporadic; may not need attention	1. treatments most effective 2 to 3 weeks after peak moth flight; 2. timing reaches small, susceptible caterpillars as they become active; 3. endophyte-enhanced turf cultivars are resistant to some species

* Check with your county cooperative extension agent for insecticide recommendations