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## Monthly Lawn Care Tips

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### **FEBRUARY: Crane Fly Maintenance**

In western Washington, one insect creates turf-damaging problems that may require treatment, the European crane fly (*Tipula paludosa*). As adults they resemble giant mosquitoes, but the crane fly does not sting, bite, damage structures, or pose any threat to humans and pets.



Rumors about crane flies may cause gardeners to overreact, but significant damage occurs only when larvae densities are above 25 to 50 per square foot. Well established, vigorous lawns have been known to have 50 larvae per square foot without showing damage. Birds and a dry autumn will often keep crane flies below damaging numbers. More than 100 species of birds feed on crane fly larvae; starlings love them and can greatly reduce populations. Another natural enemy of crane fly larvae is the ground beetle.

The common crane fly (*T. oleracea*) is a fairly new pest and is considered to be a problem in our area, but has not been widely seen yet. This species has two generations per year. Adults emerge in March/April and September. To determine if you need to take action, monitor in fall and late winter when this species' larvae are active.

### **Life Cycle of the European Crane Fly**

Crane fly infestations occur primarily in damp locations with abundant vegetation. Adult European crane flies emerge from lawns in mid-August to late September, mate, lay eggs in the soil and die in a few days. The eggs require moist conditions for survival and will die if the soil dries out. In the fall, gray-brown, worm-like larvae hatch and develop a tough skin, and are sometimes referred to as "leatherjackets." During the day, they feed on roots within one and a half inches of the surface, while on moist nights or wet, cloudy days they feed closer to the surface or emerge to feed on root crowns. During cold winters, they go dormant, although in warm winters they may stay active through January. In late February to April, they feed heavily again. They stop feeding in May and are inactive in the soil until they emerge as adults in August. Then the cycle begins again. **You cannot control European crane flies by applying pesticides in the late**

spring or summer, as the adults will not damage a lawn; it is the larval stage that causes damage.

### ***Do You Have a European Crane Fly Problem?***



Outbreaks of crane fly are inconsistent from year to year. The timing of their life cycle is dependent on weather, especially on temperature. Monitoring is essential to determine if you have a problem, and monitoring before damage becomes apparent is the only way to prevent lawn damage.

European crane fly damage appears as sparse or brown areas on the lawn in May or June, after the larvae have stopped feeding. These thin areas are susceptible to weed invasion. **At this point, the damage is already done, and applying pesticides is not useful.** Common crane fly damage appears in January or February. The first year of invasion is usually the worst. If the lawn is healthy, crane flies are only a problem for a year or two before natural enemies keep populations under control.

### ***Monitoring***

To determine the number of larvae, survey the lawn in early spring when the grass begins to grow (February to March) or when the weather is consistently warm. This is when larvae become active. Randomly select several 6 inch by 6 inch areas in the lawn. Cut to two inches deep and turn over onto a tarp. Tear the samples apart, especially the thatch layer. Count the grayish-brown, three-quarter to one inch long larvae. (Later, repair the damage you do taking the samples by filling in holes with soil and seed.)

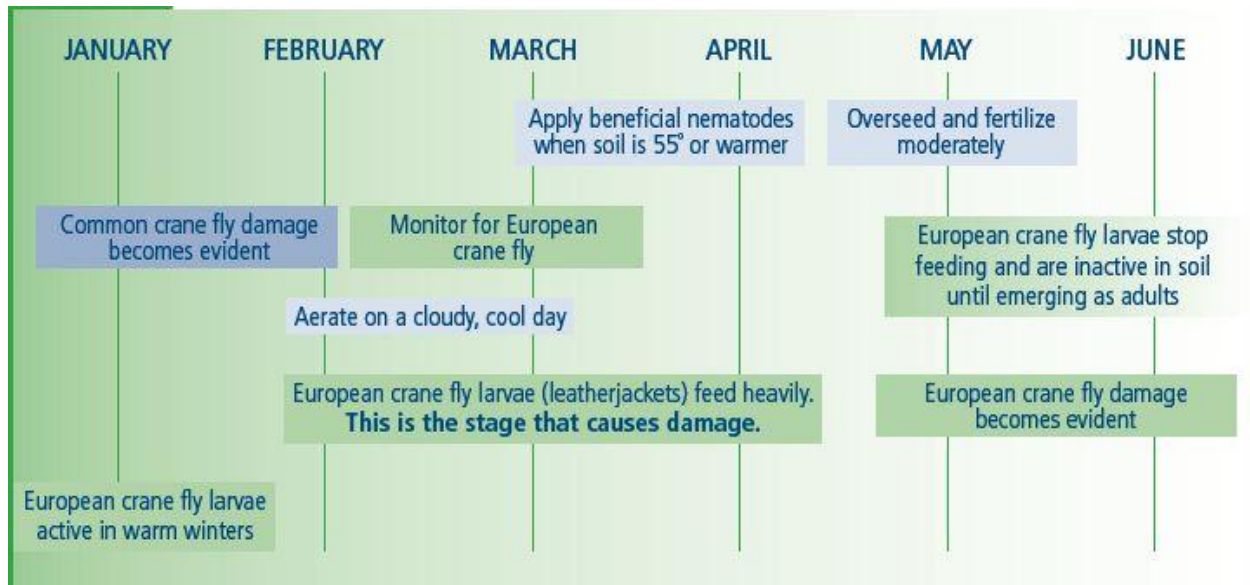


Larvae will usually be found at the base of the grass layer or very close to the top of the soil. Multiply the number of larvae in each sample by four. This gives you the number of larvae per square foot. Use the average to make decisions about the lawn. If there are less than 25 grubs per square foot, no treatment is necessary. For levels between 25 and 50 per square foot, increase nutrient levels and continue to monitor every two weeks. If levels exceed 50 grubs per square foot, damage may be



significant and treatment is appropriate.

Here is a good timeline to review.



Winter was mild and damp thus not killing off some of the larvae as a hard freeze generally will. It is expected for the crane fly population to be greater than normal this year. For that reason, be sure to monitor your yard to minimize any potential damage that may be caused by a crane fly infestation.

Natural Concept Landscaping Company, Inc. will do lawn inspections and offers crane fly treatments as preventative measures to keep your lawn healthy and beautiful. Treatment for infestation needs to occur within the next 30-45 days. If you notice anything different in your lawn, please be sure to contact us immediately.