



# Shore Stewards News

January 2010

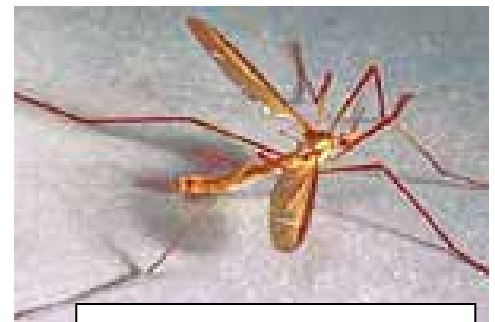
Skagit & Snohomish Counties

Issue No. 28

*This issue was written by Sharon Collman, WSU Educator, Snohomish County. Additional information and resources provided by Cheryl Lovato-Niles, Beach Watcher & Shore Stewards coordinator for Whatcom County. Resources in this newsletter were originally created for WSU Extension in Whatcom County.*

## What is the Problem with Crane Flies?

Crane flies are generally beneficial two-winged flies that look a bit like large mosquitoes. Despite their somewhat scary appearance, they don't bite, suck blood, or carry diseases. In fact, the adults are harmless and rather comical as they bounce around the landscape and off interior walls. They are also an important food source for birds and other wildlife. The aquatic larvae of many crane flies are indicators of good stream health, and become fish food. Other crane flies are decomposers and help break down decaying organic matter.



Adult crane fly photo from Ken Gray Photo Collection

Two species of crane fly have adapted to feeding on grasses and the roots of some plants. There have been cases where, over a period of several years, they became so numerous that lawns were completely stripped of grass. Bare soil, where there was once lawn, made good media headlines and had a strong impact on the minds of turf-conscious gardeners. Gardeners assume crane fly is the cause of any unhealthy looking lawn. However, serious damage only occurs to some lawns in an area; it often builds up over several years. The exception is when this crane fly is new to an area, or when it arrives with heavily infested sod. There is usually plenty of time to check lawns and intervene if the numbers begin to build. In fact, often even heavy infestations disappear because the eggs dry out or birds, parasitoids, and little organisms in the soil eat the larvae.

## Is there any Good News about Crane Flies?

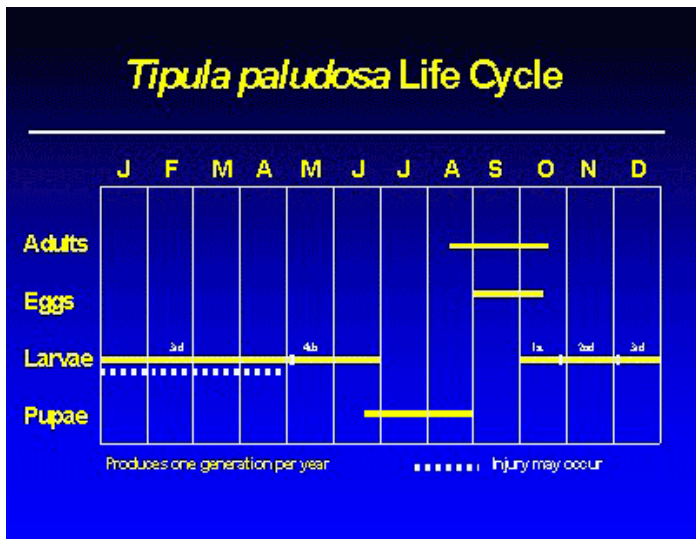
The adults and larvae are great bird food; starlings and robins often completely control lawn populations. There are also a lot of other natural enemies of the larvae that attack them through winter (e.g. native nematodes, microorganisms, parasitoids, frogs, and small insectivorous mammals). Adults are eaten by birds, bats, cats and yellowjackets, etc. Turf researchers in Washington and Oregon say, "Only one in ten lawns will get crane fly, and only one in 100 will need to be treated". With a little effort, you can tell if you have them (see the "numbers game" below) before they get way out of control.

## When Do I Look for Crane Fly Larva and Adults?

Larger larvae can be found in the top three inches (3") of turf (and sometimes in flower beds especially near the lawn) in spring. With a shovel, turn over the sod and look. Adults emerge and are weakly attracted to lights in late summer and early fall and may get into the house by mistake. There they soon die.



Look for the crane fly larvae from February - to mid May. Search in shaded or wet areas, or where lawn health is poor, yellowing or missing. If there are no larvae, then search for the real cause of the poor lawn health.



In August, when the adults emerge, the leathery, shiny pupa cases (leatherjackets) are an indicator of where crane fly larvae were living and where the next eggs are most likely to hatch.

The adults mate almost immediately after they emerge. The females lay most of their eggs before they make their first flights and that's why they can build up rapidly in one area. Once they are airborne, there is no reason to try to control them.

## What Do I Look For?

That's pretty easy. Just go out and look. The larvae are in the top three inches of sod, so just dig up a bit of sod and look through the roots and thatch for the blunt-ended, grayish-brown larvae. You can find a great picture of crane fly larvae at <https://web.gsc.edu/fs/jhamilton/tumblingcreek/images/insects/3936.94craneflylarv.jpg>.



Photos Courtesy of Todd Murray

## How Do I Determine if I have a Problem Population of Crane Flies

Even though that handful looks like a lot of crane fly larvae, it takes way more than this to do significant damage. The young larvae (on page 3) were picked up off the turf on a wet rainy day in February. They were just lounging around leisurely nibbling the grass. Dr. Gwen

Stahnke at WSU Extension Puyallup Research Station says she's seen a healthy turf on good soil suffer NO significant damage from as many as 80 larvae per square foot. (Yes, she counted them all!). On the other hand, on poor soil with unhealthy grass, only 12 larvae have caused damage. Obviously, the key here is to start growing healthy grass that will not be severely damaged by a few crane flies. Please visit [Crane Fly Management](http://whatcom.wsu.edu/cranefly/CFsampling.htm) at <http://whatcom.wsu.edu/cranefly/CFsampling.htm>.



## How Many is Too Many?

The turf and entomology experts at Oregon State University and Washington State University have established the guidelines below through research and experience. Turf people have pretty high standards for commercial turf and golf courses, so if they are comfortable with these numbers, we can relax in the assurance that it will serve as accurate guidelines for home lawns.

Average number of crane flies per foot <sup>2</sup>	Your Decision
0 to 25	Do nothing; fertilize appropriately. May need to treat if turf is young, not well established or with poor root structure.
25 to 50	If your lawn is vigorous and healthy, do nothing. Decisions are based on the health of the turf, your personal tolerance, location and use of the turf
50 to 80	Treat crane fly problem. Look towards long-term solutions, such as replacing problem areas with a <a href="#">turf alternative species</a> .

Make sure that the pesticides will not run downhill to streets where they can move to storm drains and on to streams. Birds, small mammals or pets may eat the dead contaminated larvae that come to the surface. So if the damage is not severe hold off.

## Resources

- 1. Crane Fly Frequently Asked Questions**, WSU Extension, Whatcom County: <http://whatcom.wsu.edu/cranefly/faq.htm>
- 2. They May Be Leatherjackets, But They Don't Drive Harleys**, Craig MacConnell, WSU Extension, Whatcom County: <http://whatcom.wsu.edu/cranefly/articles/MacConnell-harleys.htm>
- 3. Integrated Pest Management Prescription: European Crane Fly**, Thurston County Public Health and Social Services. <http://www.co.thurston.wa.us/health/ehipm/pdf/Crane%20fly.pdf>

## Up Coming Events

### Energizing Older Homes

Tuesday, Feb. 9, 5:30-6:30pm  
Oak Harbor City Hall, Oak Harbor



Come find out how to make a home built between 1950 and 1980, or any home more energy efficient and affordable. You can save energy, save money, and save on your carbon emissions making this a win for everyone.

Ted Clifton, 2009 Green Built Award Winner, will share how his designs, builds and remodels for energy efficiency homes can qualify a home for Federal tax credits.

John Hastings, an energy advisor with PSE's Home Print program, won the Zero Energy Home of the Year award in 2009 and has been recognized by the Federal Dept of Energy and NAHB Research Center for his work on Whidbey Island. He will share his tips on weatherization and conservation.

For more information call 279-4762.

### Beach Watcher Lecture Series

Fridays, 7:00 – 8:30 PM  
Anacortes Library  
1220 10th Street  
Anacortes, WA

The next presentation in the lecture series is coming up on February 12. Come listen to Mark Carson from the University of Washington School of Oceanography speak on the *Impacts and consequences of accumulating carbon dioxide in our oceans*. Future topics will include, *What can Puget Sound Aggregating Anemones teach us about the bleaching of tropical coral reefs?*, and *Tidal power testing in the Puget Sound*.



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Your Shore Steward Interim Coordinator is Chris Betchley, (360) 428-4270 ext 223, [christineb@co.skagit.wa.us](mailto:christineb@co.skagit.wa.us).*