

February 3, 2017

**TO:** David Campbell, City Manager

**FROM:** Jennifer Wills, Parks & Recreation Director

**SUBJECT:** Addressing Aphid Infestation Complaints within the Urban Forest

As part of City Council's 2017 work plan, the department has been tasked with providing a solution which will address the aphid infestation complaints within the City's Urban Forest. In 2012, the Longview City Council suspended the use of Imadclorpride as a chemical form of aphid control on trees within the Urban Forest. In conjunction with this change in aphid control Council directed the Parks Board to develop a plan to remove and replace birch trees within the system. At the time of the removal recommendation, there were 924 birch trees in the inventory. That number has been reduced to 701 which constitutes 4.03% of the entire urban forest.

During the two year birch tree removal program, the three person crew was directed to remove 100 birch trees in both 2013 and 2014. The plan called for priority removal and replacement to be concentrated in areas from which, historically, the most aphid complaints have occurred. The Parks Department has noted the following history of treatment and calls:

Year	Inventory	# Treated	# Removed	# Complaints
2016	701	0	2	21
2015	703	0	8	5
2014	711	0	100	23
2013	811	0	100	32
2012	911	4	13	31
2011	924	838	14	54
2010	938	873		

The removal program was suspended in 2015 and 2016 to assess the levels of complaints by citizens. 2015 did see a significant decrease in complaints, however call levels increased in 2016 and included additional complaints comprising of species other than birch, such as basswood and linden. Aphids are species specific and so a birch aphid would not be found on a basswood. Urban Forestry research provides data which shows the removal of a birch tree would not have an effect on the aphid infestation on a different species of tree. Additionally, once a specific aphid variety living in a certain species of tree is removed, they do not migrate to another type of tree near by. In addition to being species specific, aphid

levels and infestation are affected by weather and precipitation so it can fluctuate from year to year.

Prior to the birch tree removal and replacement program, citizens could apply for a removal permit through the Parks Department. The city would incur the costs of removal of the tree and the citizen would pay for the tree replacement and associated materials at \$200.00. This program was suspended during the implementation of the removal program.

The Urban Forest Management Plan includes an adopted Tree Removal Policy which provides removal criteria to insure the future of the existence of the City's tree resources by planting as many or more trees than must be removed to infection, death, hazardous condition, nuisance, or construction. The birch trees do not fall under one of the criteria with which to remove the tree. Per Council direction additional removals or the reinstatement of the removal permit could be enacted.

At the start of the birch tree removal program the City Council approved the Parks Board's recommendation to suspend using Imidacloprid (Merit®) as a chemical form of aphid control on City birch trees. Imidacloprid is a granular systemic insecticide that is applied on the ground at the base of a tree, watered in, and taken up by the roots and moved internally through plant tissues to kill insects eating on those tissues. Historically, the Parks Division scheduled the application process to broadly treat all of the birch trees with the hope that wet weather or homeowners would help to water in the granular material. This broad spectrum approach was costly in product and labor time and not always as effective as the product has proven to be because of the amount of variables in application.

The history of aphid management and birch tree removals was discussed during the January Parks and Recreation Advisory Board meeting. Curt Nedved and I informed the board of our desire to take measures to begin once again addressing the complaints of our citizens regarding the aphids. We stated that the birch trees do not meet the adopted tree removal criteria. The trees are healthy and many are large enough to help make an impact on our goal to increase the City's canopy coverage. In addition to the health of the birch trees, as indicated above, complaints were not limited to birch species specific and thus would not be addressed with more birch removals.

Curt presented the option of once again introducing the use of Imidacloprid (Merit®) but on a far smaller scale. We would like to address each individual citizen's complaint with the use of the insecticide and take responsibility for the application, watering, and monitoring of the chemical. The hope is that our management of the application will accomplish two goals. The first goal being the successful application in a timely manner to insure proper coverage and implementation of the product. The second goal is to provide quality customer service to our citizens in addressing their complaints with action.

The Parks and Recreation Advisory Board has recommended to move forward with the insecticide use on a case by case basis with an evaluation of the implementation and successfulness at the end of the year.