



The Fairfax County Tree Commission
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Fairfax, Virginia 22035
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January 23, 2015

Chairman and Members, Fairfax County Board of Supervisors
12000 Government Center Parkway
Fairfax, VA 22305

Dear Madame Chairman and Members of the Fairfax County Board of Supervisors:

The Fairfax County Tree Commission provides the attached resolution about the county's fall cankerworm spray program (FCW) for your consideration. The Commissioners heard from representatives of groups advocating an end to the spraying and from Troy Shaw, head of the Forest Pest Management Branch of the Urban Forest Management Division. We also participated in a meeting of the Environmental Advisory Council (EQAC) about FCW, consulted at length with Keith Cline, head of Urban Forest Management, and researched this important subject.

While the Commission wishes spraying were unnecessary, we believe that the current program is a safe and cost effective means to prevent a serious FCW outbreak and the resultant tree loss. With further study and the use of volunteers, we hope that the FCW threat will be reduced or that we can find reasonable, natural alternatives to prevent a major outbreak.

Sincerely yours,

Robert Vickers, Chairman
Fairfax County Tree Commission

Fall Cankerworm Spraying Resolution of the Fairfax County Tree Commission

1. Whereas, Fairfax County's urban forest is stressed by fragmentation, climate change, disturbance and soil compaction from construction, over-browsing by white-tailed deer, invasive plant species, excessive stormwater runoff, and air and water pollution;
2. Whereas, concentrated attacks by Fall Cankerworm (FCW), a native species of moth that, in its caterpillar stage in spring, may defoliate and even kill native hardwood trees:
 - US Forest Service states: "Successive defoliation can weaken trees and result in reduced growth, branch dieback and some tree mortality, especially if trees suffer from additional stresses such as drought, overstocked stands or poor site conditions";¹
 - Virginia Department of Forestry states: "The real problem is the defoliation they [FCW] can cause. Typically, one year of heavy defoliation will not greatly harm an otherwise healthy tree, but with two or three straight years of heavy defoliation, tree death becomes much more common."²
3. Whereas, the county has a reasonable plan that is consistent with generally accepted practices, that effectively addresses FCW in limited areas, and that property owners can opt out of:
 - The plan is based on up-to-date, annual field monitoring by Urban Forest Management Division (UFMD) of locations where FCW populations are likely to result in defoliation; in 2014, 2,000 acres (0.8% of the county and 0.95% of its tree canopy) were sprayed; the county has sprayed only four times in the last 15 years;
 - The spray blocks are small (generally 100 acres or less) and helicopters control dispersal of the agent using GPS coordinates; a 200-ft. buffer is maintained between canopy edge and the helicopter's path, minimizing drift and open areas are not sprayed; property owners, including the Fairfax County Park Authority, receive two written notices about planned spraying and can easily opt out of the spraying;
4. Whereas, the agent used, *Bacillus thuringiensis* var. *kurstaki* (Btk), is a naturally occurring bacterium, applied in low doses, and effective:
 - Btk, which is certified for organic gardens under USDA's National Organic Program, is sprayed once in low concentration, persists for two weeks or less, is washed away by rain, does not adhere to the undersides of leaves, and is destroyed by ultra-violet light;
 - Btk kills caterpillars during a specific and short time of their development; older caterpillars survive; birds can safely ingest dead and dying caterpillars; and caterpillars are plentiful in nearby areas;
5. Whereas, when a tree, defoliated and weakened by disease and/or insects, dies, a replacement tree requires decades to reach maturity and to provide the shade, beauty, wildlife food and protection, and other needed ecological benefits;
6. Whereas, UFMD staff believe that the FCW program helps to curtail spraying by individual homeowners who consider FCW a nuisance and who could use highly toxic, long-lasting pesticides;
7. Whereas, the county is considering several interventions that may reduce the need for future spraying including:
 - A pilot community tree-banding campaign in Mt. Vernon District in 2014 to monitor and capture FCWs;

¹ W. Ciesla and C. Asaro, "Fall Cankerworm," Forest Insect & Disease Leaflet 182, April 2013.

² Virginia Department of Forestry Press Release, April 8, 2014.

- Distributing chickadee boxes since birds are natural springtime predators of FCW and chickadees are prodigious consumers, eating 300-500 a day.

THEREFORE BE IT RESOLVED that the Fairfax County Tree Commission urges the county to:

1. Retain its targeted and limited spray program because the benefits for trees outweigh the costs;
2. Match selected parcels that have "opted out" of recommended spraying to parcels that are sprayed and recruit graduate students to monitor, analyze, and report on the impact on tree defoliation and mortality for three years;
3. Evaluate the pilot sticky banding campaign and, if effective, budget sufficient monies in spring of 2015 to substantially increase the program in 2015-2016;
4. Reach out to volunteers, including neighborhood groups and environmental experts, to help monitor the long-term impact of Btk spraying; ensure that all other reasonable alternatives are used to prevent and mitigate FCW outbreaks.