

Flagging: Nature's Natural Pruning



Webster's Dictionary says that flagging is to signal with or as with a flag, which makes it a transitive verb. Also, as an intransitive verb it could mean to become limp, droop.

The second definition is close to nature's natural pruning. Natural pruning in nature can happen during a storm when branches or tips of branches are broken or torn from trees while leaving them in a healthy state. But probably the best example of natural pruning or flagging occurs as the result of egg laying by cicadas in the tips of tree branches.

The summer of 2021 saw the infestation of the seventeen-year periodical cicada Brood X invade many areas within fifteen eastern states. Beginning in early to mid-May these arthropods emerged from the ground where they had been living, maturing, sucking on fluids from the roots of trees, and building vast tunnels and cells in the ground below their host trees since 2004, the last infestation of Brood X.

The hoopla that came with the anticipation of these insects inspired naturalists to observe them emerging overnight, crawling up trees, and molting, then continuing to the top of their host tree leaving their pre-adult shells attached to the tree or on the ground under the tree. Two weeks after emerging and molting the males began to sing their deafening songs en masse, measured at 9 decibels. There were billions of cicadas throughout the fifteen-state area; therefore, they were everywhere, dead and alive.

All this occurred between early May to the end of June or early July, over a six-week period. Then there were more normal insect sounds. Now, the only visual evidence of this cycle of Brood X cicadas is what is called Flagging. Flagging is the name given to the dead tips of trees we are seeing now following the mating of the insects and subsequent egg laying in the small twigs or tips of tree branches by the female cicada. The eggs will hatch, and the nymphs will fall to the ground and burrow into the earth where they will spend seventeen years.

The tips of many tree branches were sawed open, and eggs deposited by the female cicada. Now the tips are drooping, have turned brown, and are dying because of egg laying. While

Webster's does not give an adequate definition for this end stage of the seventeen-year cycle, naturalists have given this natural pruning a name that is easily recognized. And not to fear – the trees are not dying; the damage is limited to the tips of these trees.

All is much quieter now as the seventeen-year periodical Brood X cicadas have all completed this seventeen-year cycle and are now adding nutrients to the soil. So, if you did not get the opportunity to experience this phenomenon up close and in person in 2021, there is always 2038 for the next emergence of the seventeen-year periodical cicada Brood X.

This article was authored by Mr. Clark Dixon of the Potomac Valley Master Naturalists. To find out more about our group, please visit our website at www.potomacaudubon.org/master-naturalists/.