

## LIFE or DEATH ?

“West Windsor is about to be Invaded - Again,” was the headline for a Letter to the Editor in the local newspaper, fall 2014. The letter was referring to the expected invasion of an exotic insect – Emerald Ash Borer – or EAB. However, unlike the “War of the Worlds” Martians or even the Beatles band, our area was not the landing place for this invasion.

The EAB was brought to the United States in 2002, first appearing in southeast Michigan. Since then the species has rapidly flown east, leaving barren streetscapes and denuded forests in their wake. Over the past decade, untold millions of Ash trees have perished. However, the Ash trees are not the only species to perish. The EAB’s direct impact is upon Ash trees but the deforestation seems to expand the EAB’s victim list to include humans!

It's no secret that plants play an essential role in the health and well-being of our planet. But a recent study suggests that if the trees around us are removed, it may incur an unexpected and tragic expense - human lives.

A U.S. Forest Service team, led by Geoffrey Donovan, Phd., analyzed the effect that the wide spread loss of Ash trees could be having, if any, on human health. The researchers examined mortality data from 1,296 counties where Ash Borers are present, comparing pre-invasion figures to those after the massive tree loss, from 1990 to 2007. After adjusting their findings for demographic variables, like education and income, the researchers discovered a devastating correlation - the loss of trees aligned with more human deaths. From their study, published in the *American Journal of Preventive Medicine*: There was an increase in mortality related to cardiovascular and lower respiratory-tract illness in counties infested with the Emerald Ash Borer. The magnitude of this effect was greater as infestation progressed and in counties with above-average median household income. Across the 15 states in the study area, the borer was associated with an additional 6,113 deaths related to illness of the lower respiratory system, and 15,080 cardiovascular-related deaths.

In an interview with PBS News Hour, Donovan says, "Not only do they (trees) do the things we would expect like shade our houses and make our neighborhoods more beautiful, but maybe they do something more fundamental. Maybe trees are not only essential for the natural environment but just as essential for our well-being."

If you are faced with the prospect of removing your Ash tree(s) in the near future, this study strongly suggests that you should include replacement of the tree(s) in your plans. It may be a matter of LIFE or DEATH.

Sources:

[http://www.ajpmonline.org/article/S0749-3797\(12\)00804-5/abstract](http://www.ajpmonline.org/article/S0749-3797(12)00804-5/abstract)

<http://www.pbs.org/newshour/rundown/how-closely-can-tree-health-be-tied-to-human-health-debate-continues/>