

APPROVED  
VILLAGE OF LAKE ZURICH  
TREE COMMISSION  
Virtual  
September 7, 2021 6:30 PM

- A. CALL TO ORDER  
The meeting was called to order by Chairman Garrison at 6:30 PM
- B. ROLL CALL-Present were Scott Garrison, Tony Harper, Kurt Hansen, Kevin Scheiwiller, Mary Kozub and Village Liaison Shawn Walkington.
- C. PUBLIC COMMENT- None
- D. APPROVAL OF MINUTES – Commissioner Hansen motioned to approve the minutes from August 10 seconded by Commissioner Harper. All were in favor.
- E. OLD BUSINESS- None
- F. MANAGEMENT PLAN- Commission discussed updating tree inventory. Commissioner Hansen will put together list of questions on what we need for new program. Commission would like to have a staff member attend a meeting to discuss software update
- G. Memorial Tree- Commissioner Kozub got prices on getting a plaque and Commissioner Scheiwiller got a price on a tree. Liaison Walkington will give the prices to staff for approval.
- H. NEW BUSINESS- Chairman Garrison thanked Commissioner Harper for his Drip Line article.
- I. ADJOURNMENT – Motion was made by Commissioner Kozub, seconded by Commissioner Harper to adjourn the meeting. Voice votes, AYES have it. MOTION CARRIED  
Meeting was adjourned at 7:30 PM.

Respectfully submitted: Shawn Walkington

Approved by: Scott Garrison  
Scott Garrison Chairman

Date: 10/5/21

# THE DRIP LINE: A Missive for Those Interested in the Urban Forest

2021 September. Volume 2. Issue 9.

## A TREE IDENTIFICATION APP:

There have been times, say, in the past and occurring at least once a week, when this individual would take the name of technology in vain for a variety of reasons, not the least of which was the disjunction between my mind and that of software programmers. The app below is not one of those disjunctions but rather a connection; plant identification made simple.

Picture This [A plant ID app]:

[play.google.com/store/apps/details?id=cn.danatech.xingseus&hl=en\\_US&gl=US&utm\\_medium=email&utm\\_source=other&utm\\_campaign=opencourse.GdeNrllIeSROyIACtiVvg.announcements-opencourse.GdeNrllIeSROyIACtiVvg.PysxQVf-SeeB2uTnuJ85dw](https://play.google.com/store/apps/details?id=cn.danatech.xingseus&hl=en_US&gl=US&utm_medium=email&utm_source=other&utm_campaign=opencourse.GdeNrllIeSROyIACtiVvg.announcements-opencourse.GdeNrllIeSROyIACtiVvg.PysxQVf-SeeB2uTnuJ85dw)

## TRADE OFFS:

### DROUGHT AND THE URBAN FOREST:

In northern Illinois we are currently experiencing drought conditions. Trees in the urban forest are more vulnerable than those in native forests as they very often are “standalones”, i.e. trees by themselves; there is no canopy sharing and consequently transpiration rate can increase resulting in water loss. A number of years ago I noticed that the clumped distribution of trees in the local forest preserve, better described as a parkland in places, allowed those clumped trees to withstand drought (and heat) better than singletons. From the perspective of drought resistance, increasing canopy extent makes sense; plant more trees. However, enhance canopy cover may well be an Ax Maker’s Gift. Please continue reading.

### DROUGHT’S [PARTIALLY] EVIL TWIN, FIRE:

Percolation theory is not a topic foremost in the thoughts of the average person. It is a branch of mathematics that is used to analyze the cascade movement of a given process through a particular environment. Consider a grid of trees and empty spaces; how full does the grid have to be before a fire started on one side of the grid can spread through the entire grid? Percolation theory gives the answer, slightly less than 60% of the grid cells have to be occupied by trees. Now consider the street grid of most suburbs. While increased canopy cover is a clear hedge against drought, it may also increase the probability of the spread of fire. For a clear discussion of the effects of urbanization on fire risk, see Slide #4 in the link below, but the entire set of seven slides is worth a look.

Fire Risk a la Descarte:

<file:///C:/Users/ajdha/Downloads/Descartes%20Wildfire%20Webinar%20Intro%20Slides.pdf>

## BALANCE:

The Ax Makers Gift then is the fact that on the one hand increased canopy coverage will reduce the effects of drought while on the other hand the risk of the spread of fire will increase with increasing

canopy cover. Note: The dry conditions necessary for the spread of fire will be reduced by increased canopy, but if the canopy itself is dry, then what??!! Clearly, there is a balance, probably a shifting balance, to be considered. Things are not simple!

#### BACK TO BIODIVERSITY:

It is difficult to imagine an ecosystem without a full suite of producers and consumers; it is the system as a whole that should be considered as a functional unit. Consequently, the animals of the urban forest are of prime importance as well as the trees. The difference, however, is that the urban forest is a managed forest, and some animals of the endemic forest that can become residents of the urban forest have to be monitored; a case in point being cowbirds. Cowbirds are parasites and are able to induce other bird species to rear cowbird young. With more cowbird offspring and less young of other species, bird diversity is reduced. In turn this loss of bird diversity affects seed dispersal, not a major concern in the urban forest, and changes the recruitment of a variety of food sources, a huge urban forest concern. As many biological communities have top-down control, releasing that control by reducing the number of insect predators can potentially allow prey species populations to expand. If the prey species in question are herbivorous, then more pressure is placed on the plant communities. In the case of the urban forest, one can imagine significantly more insect herbivory on urban forest trees with reduced predation on those insects.

#### FYI:

The following book consists of a series of chapter 'tree topics', e.g. They Seem to Be Immortal, The Holocene, and my favorite, Kiss Your Ash Good-Bye, respectively covering sequoias, how different our tree environment is from past environments, and the effects of invasive pests. There are seven chapters in all, the author's writing is clear but a bit travel-loggy in nature; at times a bit off-putting for a reader who likes to get to the point, but this book is definitely worthy of a serious look.

St. George Z. 2020. The Journeys of Trees: A Story About Forests, People, and the Future. New York: W. W. Norton & Company, Inc.

#### DRIP LINE POLICY & PERSPECTIVE:

The intent of this embryonic publication is to inform about pertinent issues regarding the urban forest. This intent is broad-based, and specific selection of what is or is not to appear in THE DRIP LINE will remain solely in the hands of the staff....that would be me, Tony Harper. Also note that every effort will be made to keep the length of this missive to one page, back-to-back.

The ecological perspective of this missive is bio-cultural, i.e. that we are part of the environmental system, the earth-system/world-system complex. As a consequence, there can be no us-versus-them stance with respect to what is and what is not *natural*; we, among the organisms of the world, are all part of the same system. As a further consequence, the topics reported on here will have the perspective of holism. Further, and this is mildly heretical, this missive takes the perspective that conservation efforts are short-term and stop-gap at best; conservation efforts, as important as they are, do NOT address the roots of our 21<sup>st</sup> Century environmental problems *per se*. These problems are *wicked* problems in the academic sense of the word, and as a result, they will require interdisciplinary efforts for their resolution, i.e. the efforts not only of ecologists and environmentalists but of economists, members of the business community, and more generally of the L.Z. populace (and beyond) at large.