

# Landscapes for Life!

## Landscape Design with Native Plants

### Saving our Natural Heritage... and the Planet!

November 9, 2019

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LANDSERVE, LLC...Landscapes for life!  
Landscape Architecture & Consulting

## Introduction:

Here to discuss:  
**A new and timely way to Landscape - with Native Plants - and why its so important.**

For:  
**Private Landowners, Land Managers, Landscape Designers and Contractors, Growers, Retail/Wholesale, Ecologists...Everyone!**

## Background...


**1955**  
-Life begins in the country on grandfather's tree farm between Chicago & Milwaukee.  
-Develop interest & love for nature (and "earth").

**1968**  
-With "Baby Boomers" comes rapid development (Urban Sprawl).  
-Began developing concern for wildlife & the environment as natural places disappear.

**1970-1974**  
-The "Modern Environmental Movement" begins.  
-Work weekends for father's Lawn Care service. Earned basic Hort. knowledge.

**1980**  
-Earn Degree in Landscape Architecture.  
-Help build family business into largest Landscape firm in the nation specializing in high-end residential projects. Did well...But wanted to answer a higher calling to save our wildlife.

**2003 - Present**  
-Sold home to purchase vacant farm land. Began restoring back to pre-European settlement Oak-Hickory Savannah ecology.  
-Presently combining skills to create "long-term sustainable" landscapes fulfilling my client's needs for function & aesthetics while providing wildlife habitat that enriches and protects the environment.



## Why should We Care about Wildlife?

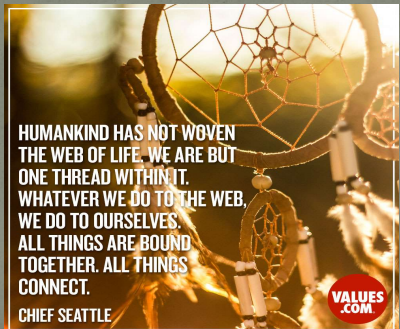
### 'Ecosystem Services'

### It gives us all this...for FREE!

WHAT DO WE GET FROM ECOSYSTEMS?

<b>PROVISIONING SERVICES</b>	food	wood	medicines	energy	fibers
<b>REGULATING SERVICES</b>	water filtration	waste decomposition	crop pollination	climate regulation	disease control
<b>CULTURAL SERVICES</b>	aesthetic	spiritual	personal growth	recreation and fun	

## The Web of Life



HUMANKIND HAS NOT WOVEN THE WEB OF LIFE. WE ARE BUT ONE THREAD WITHIN IT. WHATEVER WE DO TO THE WEB WE DO TO OURSELVES. ALL THINGS ARE BOUND TOGETHER. ALL THINGS CONNECT.

CHIEF SEATTLE

VALUES.COM

## Ecosystem Services

Wildlife adds invaluable interest, beauty and experiences to our world:



## America's Environmental Track Record since 1970 (Beginning of 'Modern Environmental Movement')

1970 - 'Earth Day' first celebrated / EPA formed / Clean Air Act established/ Climate Change threat discovered (M.I.T.)

1972 - Clean Water Act established.

1973 - DDT Insecticide use banned. Recovery begins for the Bald Eagle (was down to 700 breeding pairs!), Peregrine Falcon, Brown Pelican, and other creatures endangered by its use.

1973 - Endangered Species Act established - to protect endangered & threatened plant and animals species...and their Habitat.

• The U. S. has enacted and implemented the world's most effective conservation laws!

• Hundreds of *Environmental Organizations* have been formed since then.

## How is Wildlife fairing today?

Nearly 1/3 of 1300 federally protected plants & animals are in perilous decline and at risk of extinction!

The world has lost 58% of its wildlife populations within the last forty years! (WWF)

Rusty-patched Bumble Bee



Poweshiek Skipperling



Eastern Fringed



Prairie Orchid



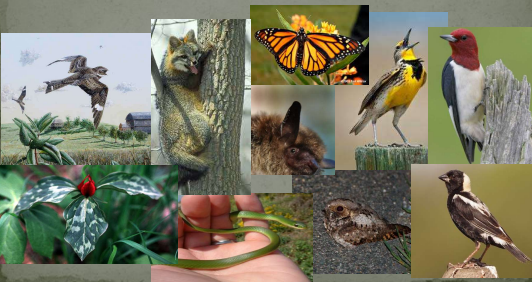
Florida Emerald Dragonfly

Whooping Crane



## Once Common - Wildlife in Decline

Bob-O-Link, Common nighthawk, Monarch butterfly, Eastern lark, Gray fox, Little Brown bat, Smooth Green snake, Red-headed woodpecker, Red trillium, Whip-poor-will, Wood thrush, etc, etc, etc.



*"Without habitat, there is no wildlife.  
Without wildlife, there is no healthy  
functioning of the Ecosystem Services  
upon which all humans depend!"*

-Steve Irwin



## The Problem? Habitat Loss-caused by:

- Deforestation
- Urbanization
- Habitat Fragmentation
- Pollution
- Climate Change
- Exotic/Invasive Plants and Animal Species
- Diseases shipped-in with Exotic Species
- Over-hunting and Fishing



Levittown First Planned Community or 'Subdivision' (Nassau County, Long Island 1947)

A common link? All from *human disturbances*...Therefore, it up to us to correct this problem!

## What is 'Wildlife Habitat'?

Its what wildlife depends on for survival.  
Its "home". ... and Native plants play the most critical role.

Defined as Four Basic Needs:

- Food
- Water
- Shelter
- Places to raise their young





## Why should we Care about Wildlife?



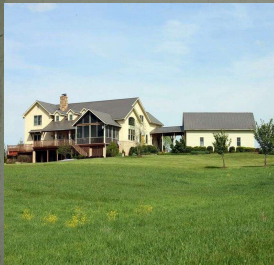
Perhaps its simply the right thing to do!

## The “Green” Industry

## What can/should we do about saving our environment?

**We can help Restore the Environment by  
*Landscaping...with Native Plants!***

By replacing just 30% of mowed lawns - with Native Plants - we can restore Twelve Million Acres of Wildlife Habitat...Let's make it 50%!



## Landscape Design & Sustainability

## Replacing lawn with Native Plants is a good start...

How landscapes are arranged and managed will likely determine their long-term success ("true sustainability").

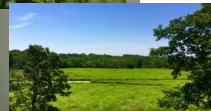
## "Cultural" Sustainability...

THE most important factor determining a landscape's long-term success!

**Facts to consider:**

- The majority of the U.S. population (over 85%) now resides in cities or suburbs... and only recognizes conventional, "neat and orderly landscapes" as the "norm". Therefore...
- Landscapes that look too wild and overgrown to the untrained eye – like those designed for "ecological benefit" often do – are vulnerable to compromise or replacement with traditional landscaping using familiar, non-native and often invasive ornamental species. Moreover...
- People move from their homes (landscapes) several times in their lifetime, which greatly increases the chances of landscape replacement by the next owner. Therefore...
- For native landscapes to have longevity necessary for habitat, they must appeal to multiple owners over many years.
- To be "truly sustainable", most landscapes should maintain a degree of "neatness and order" considerate of public perception.

## NOTICE!



TOYOTA OF LYNN  
PO BOX 127  
LYNN, MA 01908  
361-704959

*To: Mr. and Mrs. [unclear]  
730 [unclear] St.  
Lake Forest, IL 60045*

**Description of property:**

Tax key: *661 H 40003 3 302529 0004 4*

**Lynn, WA, Walworth County**

*Date: 9/16/08*

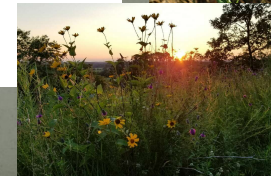
**Dad Sir,**

You are hereby officially notified to destroy the thistles growing on your property.

If you cannot do so within fifteen (15) days of the receipt of this notice, I have no way to find out the weeds and the soil shall become as on the property, to be collected the following spring in other towns are collected.

Please growns yourself accordingly.


*David J. Field*  
David J. Field  
Weed Commissioner



### **“Neat & Orderly” Native Landscapes?-Yes!**

Native species diversity is necessary, but confusing to the “untrained eye”...  
**Arrange it and Maintain it!**

- Use flowering forbs as you would a traditional perennial border arrangement.
- Plant forbs, grasses, etc. behind low (native) hedges or shrub masses. Do not allow plants to hang over circulation routes such as walks, driveways, lawn edges, etc.
- Trees and shrubs that drop fruit, seeds, nuts, leaves, etc. are often considered “messy” - Plant them away from circulation routes, parking areas, outdoor living areas, roof gutters, etc., where they will be less apt to “annoy”.
- Arrange individual species in “groups” and allow more space “between” each group. This makes the landscape easier to “read” and identify the true “weeds” from the native plants in keeping the beds tended.
- Select native perennials (Grasses, Sedges, Ferns & Forbs) carefully to allow “headroom” for them to grow up and out but not through the bottoms or sides of branches of adjacent trees and shrubs.



### **“Context-sensitive” Landscapes**

Traditional Architecture-“Complimentary” Design-100% Native Plants!



‘Italian Renaissance’ Architecture: Gate House - J. Ogden Armour Estate

### **Sustainable Landscape? Be ‘Context-sensitive’**

Learn to Identify & Compliment Basic Architectural Styles



### **Practice “Context-sensitivity” with Native Landscapes-Its ‘Green’...and it “Fits”**

Replicate the ‘Pre-settlement’ Natural History of the Land...Research the Public Land Survey System (PLSS)



...Our Land - 1836

### **Locally-sourced ‘Hard’ Materials...add Beauty while Reducing your Carbon Footprint**



### **Native means “Regionally” Native!**

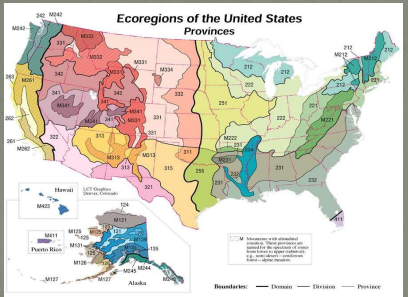
Only by restoring the native plant species of a particular region, can we successfully restore its wildlife! Those particular places are called ‘Ecoregions’.

A true native species is one that occurs naturally in a particular region’s ecosystem, and/or habitat, and was present prior to European settlement.



### 'Eco-regions' of the U.S.

Areas with similar **Climate, Geology and Soils** are the *main factors* that determine the plant and animal species of a particular Ecosystem and Region.



**Ecoregions of the United States**  
Provinces

Our Region: the 'Eastern Broadleaf Forest' (#222)

### Plants Native to Our Eco-region? Start Here!




### Plants Native to this Region? Start Here!



### Easy Native 'Re-design' Solution...Replace Exotic & Invasive species with Native Plants with Similar Form & Traits!



### Ready to Landscape?

#### Begin with a "Framework" of Native Trees... the most valuable plants in the landscape!

- **Trees:** Offer more "ecological benefits" than other plants (Oaks are habitat for up to 534 species of Lepidoptera (Butterflies & Moths), plus many other creatures.
- **Trees:** Are least likely of all plants to be removed by successive landowners (often for "emotional" and/or "legal" reasons). As such, they are the *most Sustainable plants!*
- **Trees:** Perform more functions in a designed landscape than any other plants. They frame and screen views; add scale; provide shelter from the elements-sun, wind, noise, dust, etc. That's economic value as well!
- **Trees:** Live longer than all other plants.

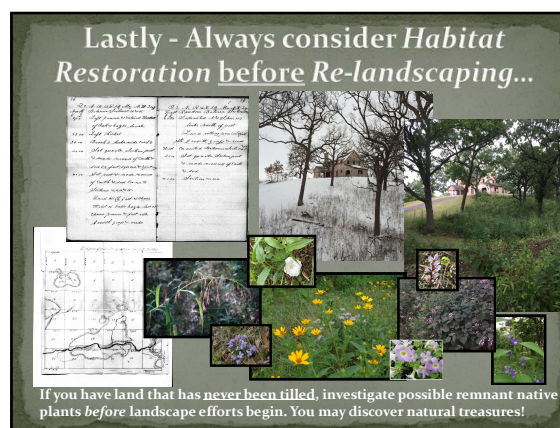
### A Few Regionally Native Trees











Next Presentation to Follow...



## Wildlife...the "Canary in the Coal Mine"



Canary Resuscitator...

## Our Prairie...



## Social Responses to Natural Landscaping

Landmark Studies by Joan Nassauer, Professor of Landscape Architecture -University of Michigan(1997). What she discovered...



Article by Joan Iverson  
Nassauer - Wild Ones Journal  
#24 - Fall 2011

- "Our culture teaches us to look at nature as an ideal picture..."
- "If a natural landscape looks picturesque, we think it has high quality. If its not neat, orderly, and pretty as a picture its thought of as low quality."
- "The way we landscape is a reflection of ourselves." That's us in the front yard-all day, every day!
- "The Dominant Culture in North America is that a neat, orderly landscape is a sign of neighborliness, hard work, and pride - which translates to: mowed lawn, trimmed shrubs, and tended beds."
- "(Some)Lawn needed" (from Roadside View to Yard).

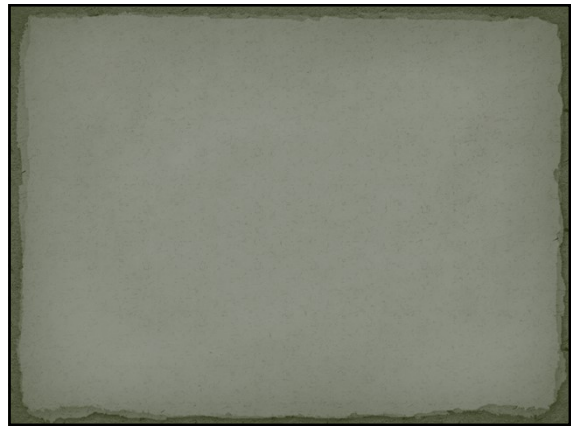
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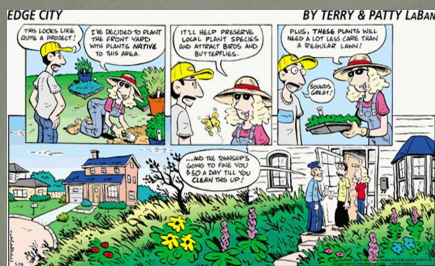
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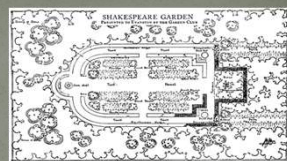
## Native Landscapes & Public Perception... Not always "Sustainable"



## Landscape Architect who made a living designing with Native Plants...



Jens Jensen (1943)



Formal Garden



## Ecosystem Services

Wildlife plays a vital role in ecosystems (That's our environment as well).  
In fact, we can't live without it!

**'Predators'** - keep other animal populations in balance; (Hawks control pigeons - Snakes eat rodents)  
**'Herbivores'** - manage vegetation; (Squirrels "plant" Acorns/Oak s - Caterpillars feed most birds)  
**'Decomposers'** - recycle organic matter; (Vultures, Slugs, etc - Clean up and create organic matter)



