

# Riparian strip (Bande riveraine)

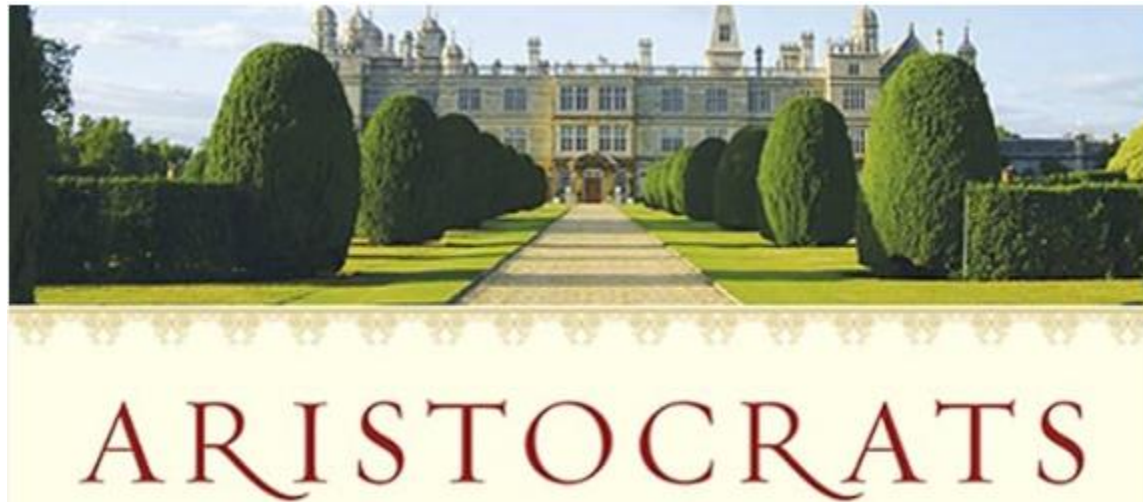
Paramount importance for the subsistence of our lakes.

# Lawn : our love/hate relationship



# A Little bit of history ....

- Where does our obsession with the “perfect lawn” come from?



England: a country where the cool and rainy climate favors this type of culture

# What happened next...?

- Indeed, it was the English Aristocrats who emigrated to the United States around the 18th century who wanted to recreate the large green meadows of their native England for which they were nostalgic. At that time, you had to be very wealthy \$\$\$\$ to install this type of decorative culture.
- The White House in Washington as well as the prestigious American universities followed.
- At this point, the “perfect” lawn became a symbol of wealth and luxury and even an indicator of social class.





# Bad boys arrived...pesticides and fertilizers

- In 1928, Scott's Company a company which produces lawn products, is implementing a major marketing campaign, from east to west of the United States. We are selling an image and a dream, named "the green and perfect lawn" to which the majority subscribe for the image that is sold to them.
- In 1940, the first selective herbicide was invented by the American army (Orange Agent, i.e. 2-4D). It is subsequently adapted and marketed in different forms for lawn maintenance.





NOW a helpful winter program for your lawn

1. Where Crabgrass or Grubs a problem  
Apply new HALTS this winter

2. Where neither is a problem  
Apply TURF BUILDER to enjoy  
more months of green grass



**Stops crabgrass before it starts**

HALTS destroys up to 95% of next year's Crabgrass—kills the seed as it germinates.

Also grub-proofs the soil. Forestalls possible damage next year by root-eating grubs, chaffer larvae, other soil insects.

Apply HALTS just once—early winter is good time.

HALTS is clean, granular, easily applied with the accurate Scott's Spreader.

1,000 sq ft bag - \$4.95    5,000 sq ft (2 bags) - \$17.95  
2,500 sq ft bag - 9.95    25,000 sq ft (10 bags) - 87.00

**Keeps grass greener in winter**

TURF BUILDER® application in November or December will help your grass stay greener. The wondrous protein-building quality of TURF BUILDER insures growth of stronger roots.

Complete, controlled, prolonged feeding—dust-free and odorless.

Power-packed TURF BUILDER is so light in weight anyone easily handles the large bag.

89th Anniversary Sale Prices  
extended to December 31

2,500 sq ft - - - - - \$2.75  
5,000 sq ft bag - - - - - 4.50 **SALE**  
10,000 sq ft (2 bags) - - 8.85 **\$8.30**  
50,000 sq ft (10 bags) - 39.50 **36.50**

Scott's . . . first in lawns

**Increases your craftsmanship**

The accurate Scott's Spreader makes your efforts count for more—assures professional results, saves time, too. Now use all 4 seasons to get a better lawn.

The modern streamlined Scott's Spreader has rugged construction—built to last for years.

89th Anniversary Sale saves you \$2 to \$5.

	Regular	SALE	SAVE
No 20—Smaller lawn	\$12.95	\$10.95	\$2.00
No 35—Most popular	16.95	13.95	3.00
No 75—Suburban model	24.95	19.95	5.00

**Wards off snow mold damage**

SCUTL® controls winter fungus causing snow mold.

This fungus becomes active at temperatures close to freezing and in presence of abundant moisture. Result is tattered gray, blotched patches of grass, often visible just after snow has melted.

Apply SCUTL in late November or early December. Repeat in February if lots of rain and melting snow.

Easy treatment with Scott's Spreader. In winter, makes no difference if grass is wet or dry.

2,500 sq ft bag - - - - - \$ 3.45  
5,000 sq ft bag - - - - - 5.95  
50,000 sq ft (10 bags) - - - \$2.50



51st YEAR SPECIAL WINTER EDITION No. 586  
**Lawn Care.**

**Has crabgrass overrun your lawn?**

You can squeeze it this winter with new preventive treatment . . . grub-proof soil, too

MANY modern health treatments are designed to protect you, to prevent trouble. The Salk vaccine is a spectacular example. Polio isn't magically made to vanish from the face of the earth. Rather, wise use of the new preventive measure makes possible its almost complete control.

Crabgrass is the great crippler of lawns. In recent years lawn owners have had good help in stopping crabgrass after it started. But Scott's Research staff was determined to develop a product to nip the invasion before it started. This was no simple undertaking.

Each maturing crabgrass plant throws off hundreds of seeds. Some of these sprout the next year. Others may lurk in the soil for years before sprouting.

Now, after eight years of intensive research, Scott's proudly announces a way to destroy up to 95% of the sprouting seeds. It is by winter application of the new product described on the inside pages.

The same treatment destroys grubs, other soil insects. This means they can't destroy grass roots and don't attract foraging moles and skunks.

Beautiful lawns will be much easier to achieve now that a new winter treatment can be part of your crabgrass control program.



# Grass and Clover



- It also kills clover which, at the time, was considered a beneficial plant for the lawn, and which still is. Growing a lawn without clover, in a climate unsuitable for ornamental lawn grasses, allows the sale in large quantities of herbicides, insecticides, fungicides and synthetic fertilizers, because it becomes a constant battle to keep your lawn perfect.
- The 1970s saw the start of a drastic increase in the use of pesticides and synthetic fertilizers on lawns in the United States and Canada, peaking in the 1980s and 1990s.



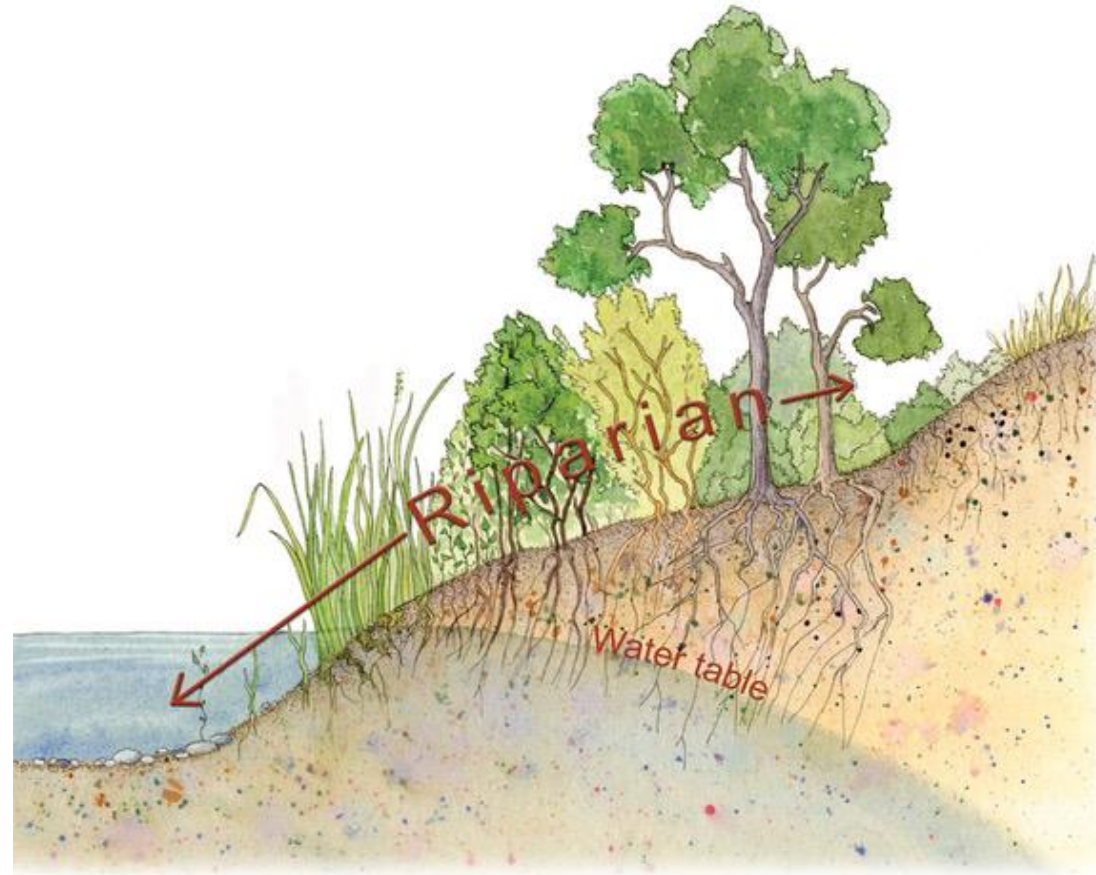
# Conclusion about having the perfect « LAWN »

- And that's a brief summary of the history of the “perfect” lawn, the expectations created by industry and advertising. After more than 50 years of this intense regime, everything is now called into question: toxicity of pesticides, decline in pollinator populations, blue algae caused by fertilizers, production of greenhouse gases, high consumption of water, the perfect lawn composed almost exclusively of grasses cannot survive without the consequences that we know and which go against our basic environmental needs
- AND REMEMBER THIS.....

A perfect lawn is silent  
A wild garden sings.

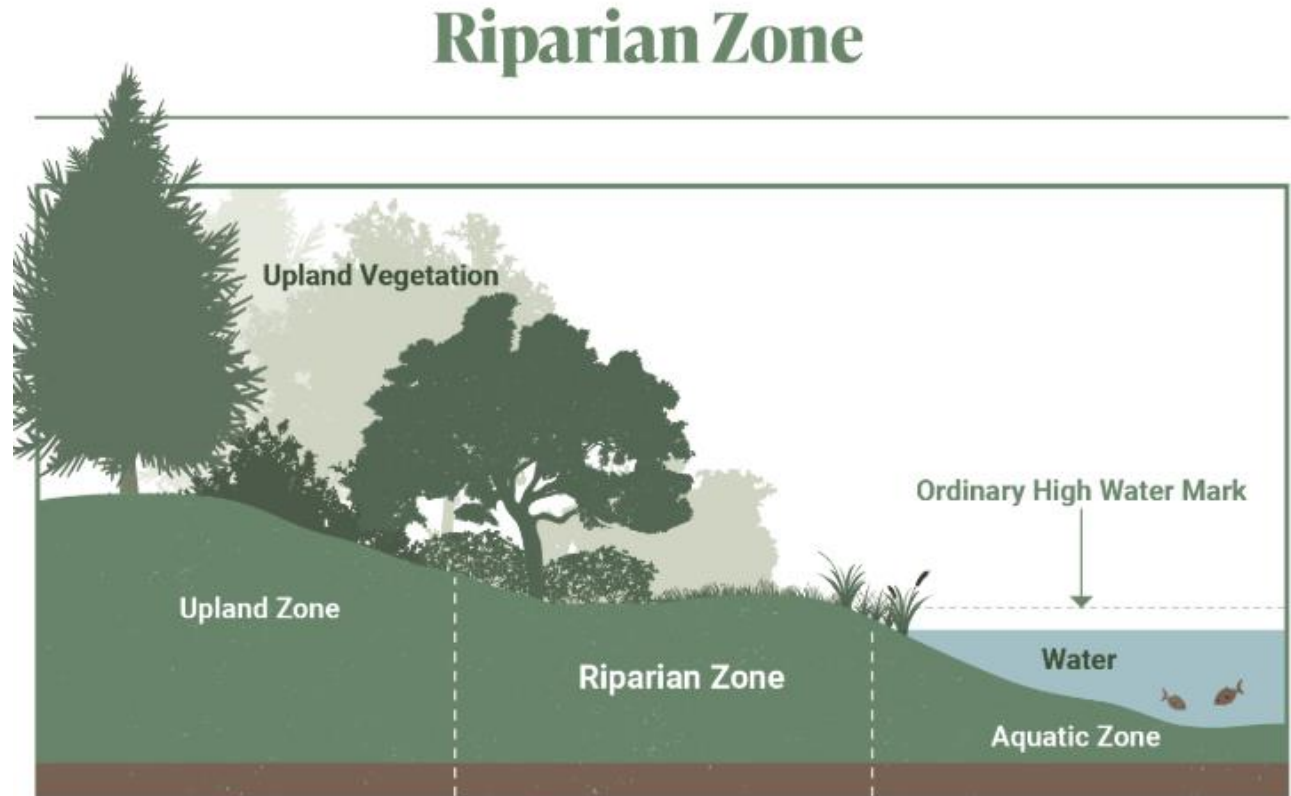


# Role played by the Riparain strip



## Riparian layers:

- Upland Zone :Uplands are drier and only wet for a short periods after it rains or snows.
- Riparian Zone : is the vegetation adjacent, or next to, surface waters (easily recognized riparian zones include floodplain forests along rivers and streams, the shrubby fringes of lakes, ponds, and streams, sedge- and grass-dominated meadows, as well as damp, braided channels of headwater streams)
- Aquatic Zone : is an ecosystem in and around a body of water







# Defining the issue



- Riparian zones are among the most structurally diverse and naturally dynamic ecosystems in the Northeast. Part upland, part wetland, they frequently hold the greatest diversity of species of any habitat in our region and are considered by some scientists to be more sensitive to environmental change than any other ecosystem.
- The benefits of riparian zones to wildlife are far reaching. For example, riparian zones serve as travel corridors, help protect and enhance aquatic habitat, and provide structurally complex habitats themselves.
- A recent report indicated that 90% of wildlife species in the Northeast use riparian habitats. Benefits extend beyond wildlife as well.
- Riparian zones slow floodwaters and help to protect water quality by reducing erosion and modifying runoff before it enters streams, ponds, and wetlands.

# Riparian ... and aquatic ecosystems

- Riparian zones may serve as travel corridors, funneling wildlife as they move from place to place in search of food or shelter. White-tailed deer and predators, such as foxes and coyotes are good examples. Otters and mink are two species that are closely tied to aquatic habitats, but spend much of their time in the riparian zone. Both, however, occasionally make brief forays into surrounding uplands
- Removal of streamside vegetation, it may take from several years (in the case of shrubs) to decades (in the case of a tree canopy) before vegetation develops enough to once again have a shading and thus cooling effect. Removing streamside cover in a small area, especially in the headwaters, can affect much larger portions of the watershed as warm water is transported downstream. In contrast, cool, spring-fed streams, can help to mitigate effects of lost streamside shading further downstream.
- Trees and shrubs, whether leaning over and shading the surface or partially submerged along lake and pond shores, create important habitat for many fish.

# Problems

\* Turbidity: beyond possible implications in human health, can also affect the natural equilibrium of aquatic ecosystems. Suspended solids can obstruct the natural movement and migrations of aquatic populations. Also, water can get warmer as a consequence of an increasing concentration of suspended particles in the water body. This results in a lower amount of dissolved oxygen in water, directly affecting the ability of aquatic organisms to survive.

\*Sedimentation: typically refers to deposition of fine materials.

\* Eutrophication: The increase in nutrient supply from human activities usually results in an increase in the biological production that occurs in the lake.



# Help !!! What we should do ...

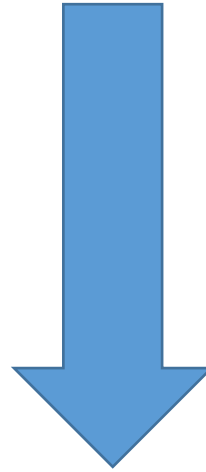
- RESTORE OUR RIPARIAN STRIPS

HOW ?

Using native plants ( Trees, shrubs and perennials that are suitable for riparian strips ... don't forget to check the hardiness zone )

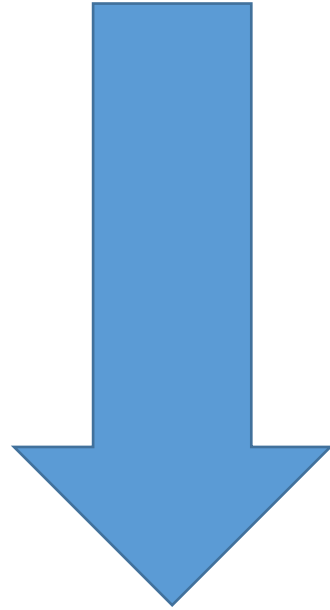


GOING FROM THIS





TO THIS ( 14 YEARS LATER ...)

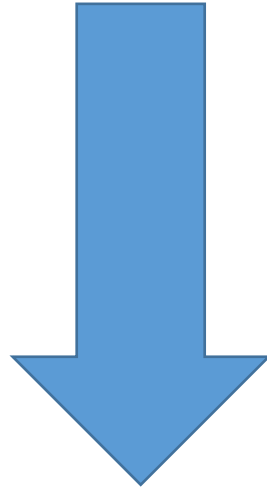








GOING FROM THIS







TO THIS ( 9 YEARS AFTER)





# NATURAL RIPARIAN STRIP VS NON EXISTENT ONE





# MORE EXAMPLES



# TREES-SHRUBS-PERENNIALS

## TREES :

- *Betula alleghaniensis* ( Yellow Birch)
- *Betula populifolia* ( Grey Birch)
- *Mélèze laracin* ( Eastern Larch)
- *Quercus rubra* ( Red Oak)

## SHRUBS :

- *Alnus incana ssp. Rugosa* (Speckled Alder)
- *Aronia melanocarpa* (Black Chokeberry)
- *Cornus stolonifera* (Red Dogwood)
- *Diervilla lonicera* (Dwarf Bush-honeysuckle)
- *Myrica gale* (Sweet gale)
- *Physocarpus opulifolius* (Eastern Ninebark)

## PERENNIALS

- *Chelone glabra* (White Turtlehead)
- *Eupatorium maculatum* (Joe-pye-weed)
- *Iris versicolor* ( iris)
- *Rudbeckia lacinata* (cutleaf coneflower)
- *Solidago canadensis* (Canadian goldenrod)
- *Veronicastrum virginicum* (Culver's root)
- *Epilobium angustifolium* (Fireweed)



# Yellow Birch





# Grey Birch





# Easter Larch





# Red Oak





# Speckled Alder



# Black chokeberry





# American Dogwood





# Dwarf bush honeysuckle





# Sweet gale





# Eastern ninebark





# White turtlehead



# Joe pye weed





# Iris





# Green headed coneflower



# Canadian goldenrod





# Culver's root



# Fireweed

