

# RESTORING NEWTOWN'S NATURAL FLORA BY REMOVING INVASIVE PLANTS

Working at Orchard Hill Nature Center





# Everything in Nature is Connected

“When one tugs at a single thing in nature, he finds it attached to the rest of the world.” John Muir

“Conservation is a state of harmony between men and land.”  
Aldo Leopold

# What Do We Mean by Native Plants?

- Native plants are ones that were found here before Europeans settled in Connecticut.
- They produce few seeds, thereby avoiding competition with the mother plant.



# Why are Native Plants Important?



White Oak

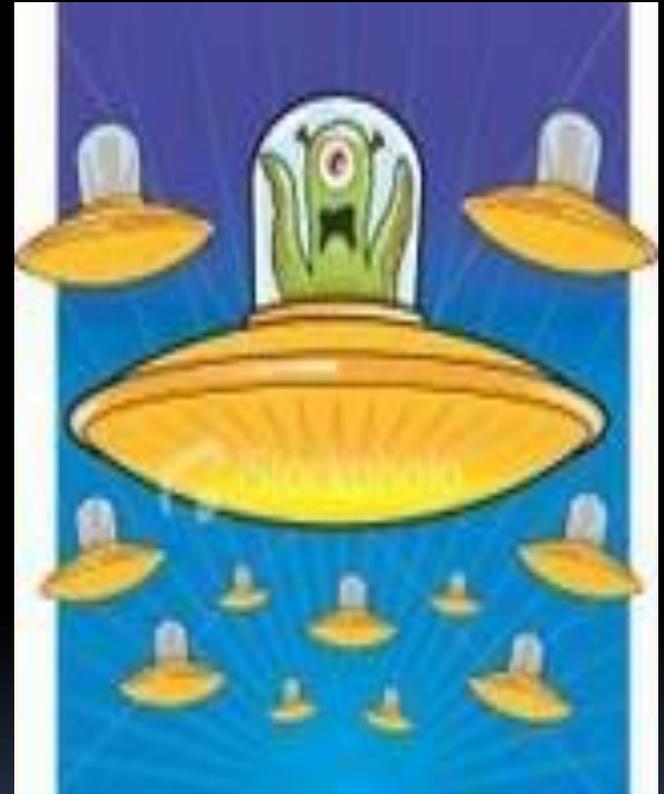
- Native plants play an important role in sustaining other parts of their ecosystem.
- Other plants and animals may depend on them for their survival.



Barn Owls

# What are Invasive Plants?

- Invasive plants are plants that displace native plants in natural areas.
- In other words, they tend to “take over”.



# How Do Invasives Spread So Quickly?



Garlic Mustard

- They produce abundant fruit and seeds.
- Seeds are spread by birds, wind, water, people and vehicles.
- Some even secrete chemicals which are bad for other natural plants!

# How Did Invasives Get Here?

- Some non-native plants were brought to the United States for agricultural, medicinal and ornamental purposes.
- Some of these have become invasive, but not all.



# Some Invasives Were Brought Here To Plant Along the Roads



Autumn Olive

- Some were imported to be used as a source of food for birds or to act as a buffer along road sides.

# Why is it That Many Invasives are So Pretty?

- Often the reason that they were brought here is because they were thought to be attractive.



Multi-Flora Rose

# Many Invasives Were Brought Here for Ornamental Use.



- Some Barberry plants are still being sold in nurseries.
- Buyers may not know that these plants can spread outside of their yards.

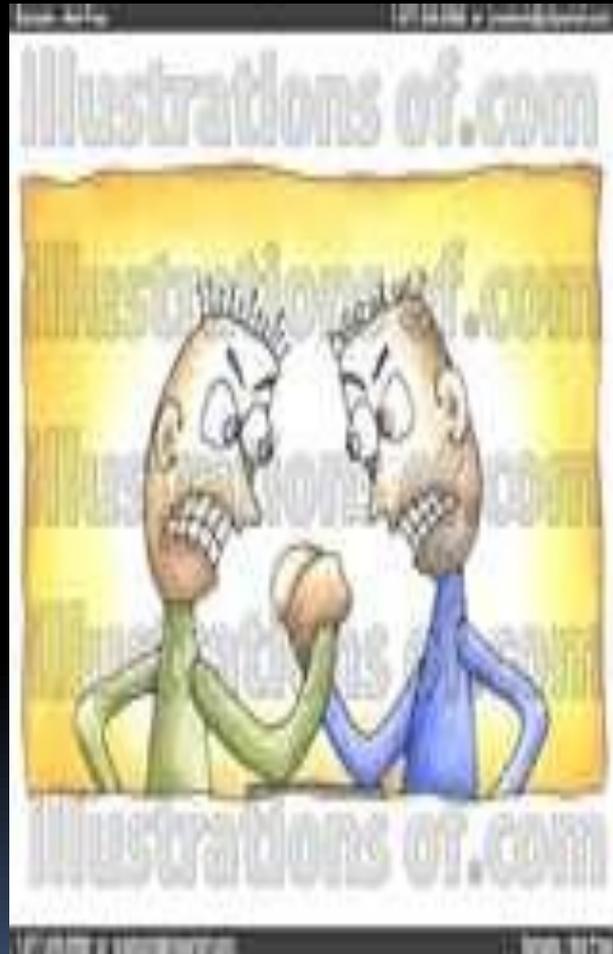
# When These Plants Got Here, Why Did They Take Over?

- One reason is that in their new environment they have no natural enemies, things like insects which keep them in check.



Releasing weevils

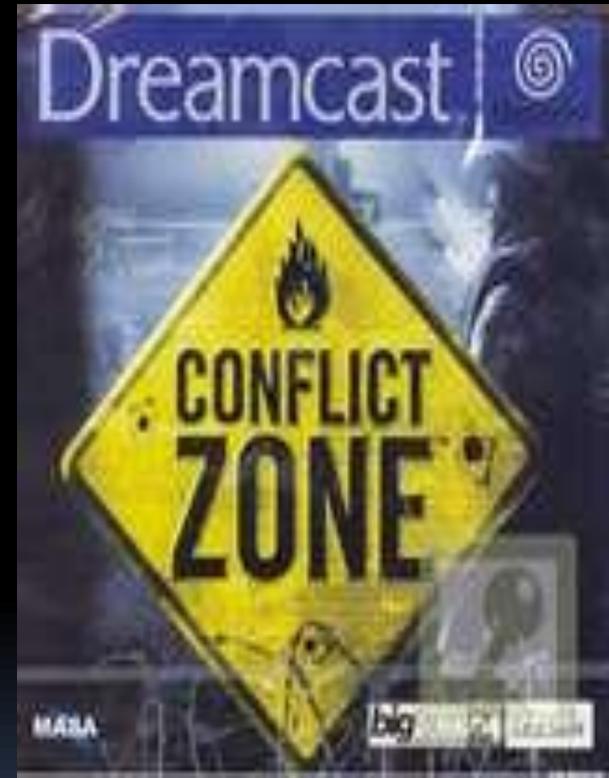
# So It's Invasives vs Natives?



- Yes, it does seem that way.
- In some places invasives and natives can live together, but invasives are often winning the battle.

# Why Is This Battle Important?

- Gain for invasive = loss for natives.
- Loss of natives=loss of biodiversity.
- Loss of biodiversity = many species of plants and animals at risk.



# What are Some Common Invasives in Newtown?



Burning Bush at  
Deep Brook

- The most common invasives in Newtown include barberry, garlic mustard, bittersweet, autumn olive, Japanese knotweed, burning bush, multi-flora rose and mile-a-minute.
- There are others, some more common and more noxious than others. New ones seem to appear more frequently as time goes on.

# Barberry

Shrub, 2 – 8 feet tall.

Thin, straight thorns.

Leaves are up to 1" long, wedge-shaped.

Pale yellow flowers in drooping clusters of 2-5 mid-spring to early summer.

Berries ripen to bright red in fall.



Barberry tagged for  
removal and piled up  
after removal,  
Orchard Hill Nature  
Center



# Garlic Mustard

Biennial.

Strongly toothed,  
triangular leaves.

Secretes chemical  
compounds that inhibit  
seed germination of other  
species.



# Bittersweet Vine

Prolific grower.

Can girdle and kill trees.



USDA/USFS

# Bittersweet Brings Down Trees

This site near Route 25 was cleared of trees in which bittersweet had caused them to die.



# Results of Storm Alfred

The portions of this tree that had been covered with bittersweet were the portions that came down!



# Trees Are Important Because They Absorb Carbon (Carbon Dioxide)

- “Because trees absorb carbon, our forests are the best shield to counteract climate change. “  
(EPA quote)
- Our forests and trees must be protected.



# Autumn Olive

Shrub, up to 20 feet tall.

Silvery underside of leaves.

Alternate, 1" wide leaves.

Small, yellowish flowers in May and June.

Fruits are red, juicy and edible and ripen from September to November.

Birds like the seeds and spread them where they germinate easily.



# Burning Bush

Also called Winged  
Euonymous.

Shrub, up to 20' tall.

Four corky ridges along  
stems.

Leaves turn bright  
crimson in fall.

Has been used as  
ornamental planting.



# Multiflora Rose

Multi-stemmed, thorny shrub that grows up to 15' tall.

Arching canes with stiff, curved thorns.

Small white to pinkish 5-petaled flowers in clusters in spring.

Fruit are small, red rose hips that remain throughout winter.



# Japanese Knotweed

Shrub to 10' tall.

Stems swollen at leaf junction.

Leaves 6" long.

Often found near water sources.

White plume-like flowers in fall.



# Mile-A-Minute Vine

Stems and underside of leaves have fine barbs.

Triangular leaves alternate along stems.

Can grow 6" per day.

Should be reported to Land Use office.



# Is Poison Ivy an Invasive?

No, poison ivy is not an invasive.

However, you need to avoid it if at all possible!!

Learning to recognize it is a big help.

“Leaves of three, let it be.”



# Invasives are a Problem in Newtown

Bittersweet, autumn olive as well as the other invasives discussed in this presentation can be seen around town on both private and public property.



# And You Can Be Part of the Solution

Recent invasive removal volunteers at work.



# Here's How to Get Started.



- Since invasives are everywhere, you probably have some in your own yard. (We do too!)
- We all need to be aware but not to be overwhelmed.
- Start small.

# Restoring Native Plants Will Help

Reducing invasives and then planting native plants in your own yard is a great place to start.

There are many sources of information: Garden Clubs, nurseries, the internet.



# Be Part of a Neighborhood Group

- Neighbors can be very effective if working together.
- Work parties can be fun!
- Yards ,road sides and open spaces can be greatly improved.



# Work with a Group on Town Open Space Lands

The Conservation Commission has a sub-committee of volunteers who reduce invasives on town-owned land.

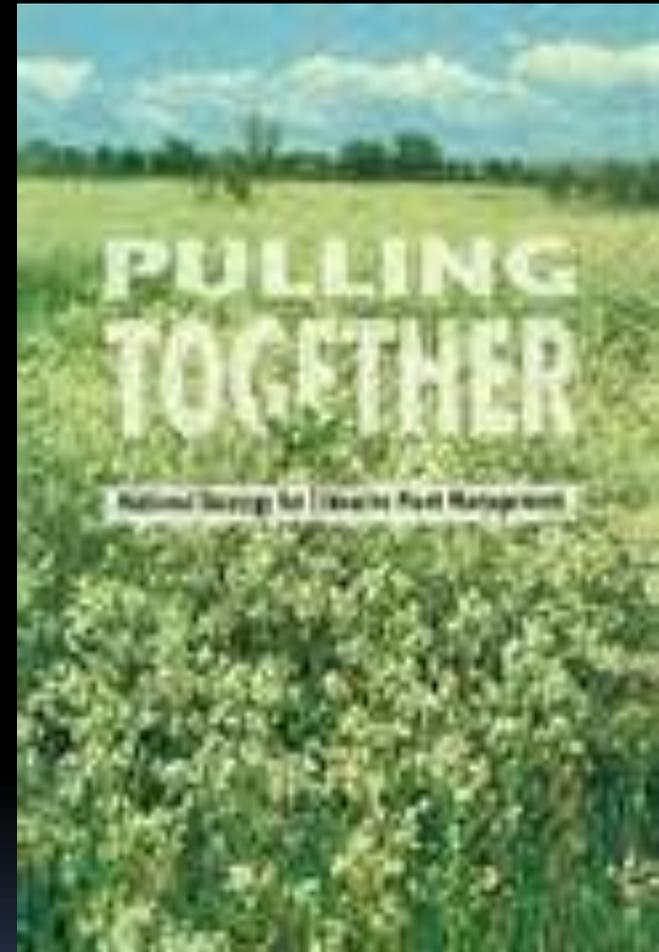
Work parties offer an opportunity to meet some wonderful people as well as the chance to experience some of Newtown's beautiful open space areas.

This group takes a well-deserved break after working in Rocky Glen State Park.



# We Can Help You

- The Conservation Commission is trying to reduce invasives with the support of town officials and employees.
- Work parties were established in 2010 and will continue into spring of 2011 and beyond.
- We need your help and we are willing to educate and train you.
- Call the Land Use Office, 270 – 4276, to obtain more information.



# Pulling Together Is The Answer!!



A Last Thought -

# The Land Belongs to Future Generations

- “We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect.”  
Aldo Leopold.
- “We do not inherit the earth from our ancestors, we borrow it from our children.”  
Native American proverb

Prepared by the  
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