



Plants for the Landscape: Native or Exotic



ROSE HISKES

Entomology

The Connecticut Agricultural Experiment Station

New Haven, CT





- Definitions
- Tallamy's Work on Biodiversity
- Examples of CT Biodiversity
- Well Behaved Exotics
- Some Conclusions





DEFINITIONS

- Native – already growing here when European settlers arrived.
Cultivars.
- Exotic – plants Europeans brought with them and others that have been introduced since.





Exotic vs Invasive

- **INVASIVE** plants are
 - non-native (or alien) to the ecosystem under consideration **and**
 - plants whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

- Not all exotics are **INVASIVE**.





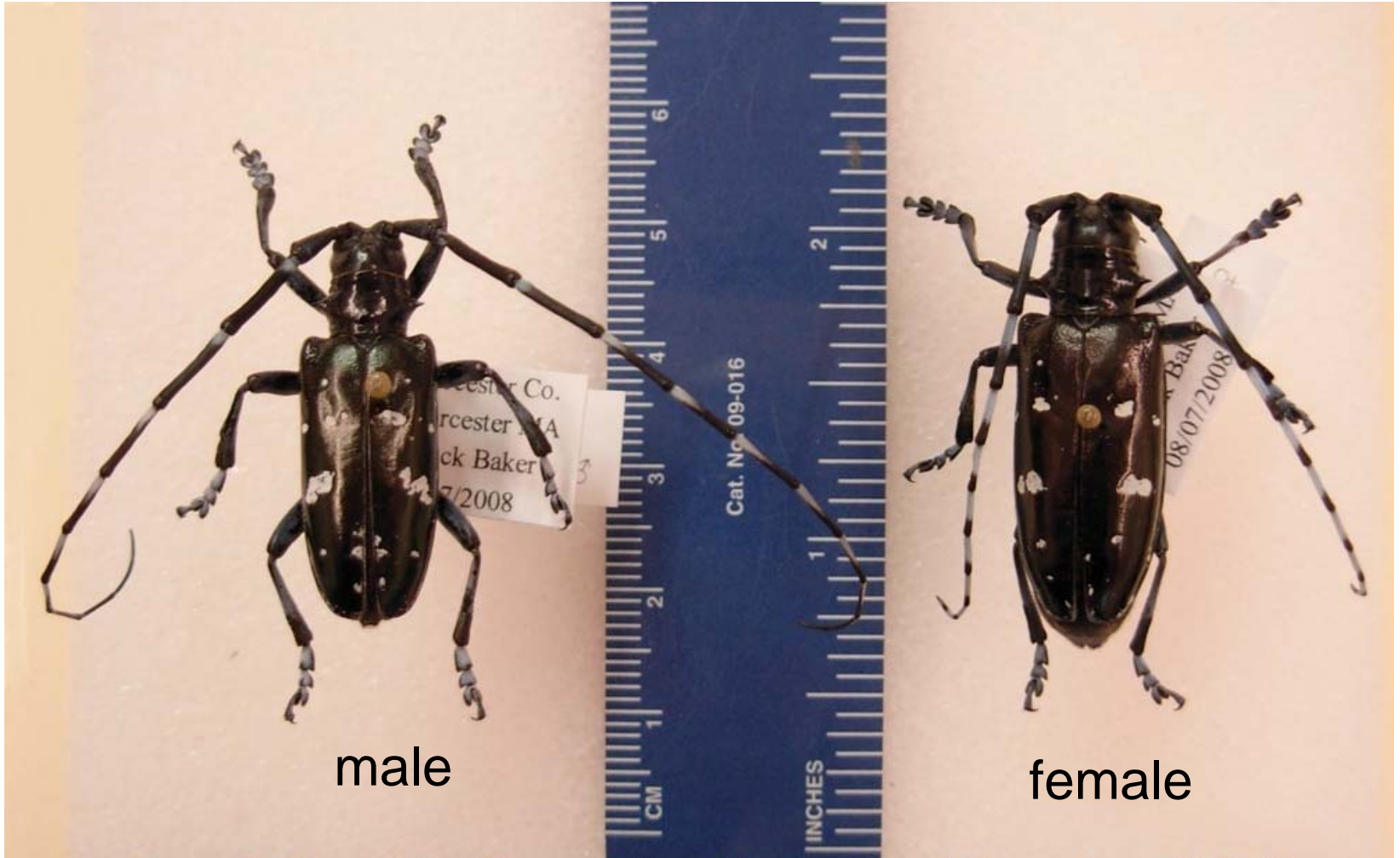
Natives Can Behave Invasively

- Red maples at the Bovenzi Land Trust in Worcester
- Poison Ivy
- Greenbriar





Asian Longhorned Beetle



male

female



Adults emerge in July, feed, mate, lay eggs and die.





Tallamy's Work

BIODIVERSITY DECREASING

- Doug Tallamy, researcher at the University of Delaware, states “the wild creatures we enjoy. . . . will not be here in the future if we take away their food and the places they live.”
- CT has 584 species listed as being endangered, threatened or of special concern
- Scientists estimate that we are losing 3 species per hour worldwide (DEP Wildlife Division)





NO PLACE TO HIDE

- Humans have disturbed much of the land in the U.S.
 - 4 million linear miles of public roads, plus
 - driveways, parking lots and sidewalks
 - by 1986 over 69 million acres were managed urban and suburban landscapes
- What 'natural' land remains is so fragmented and filled with invasive species it is of little use to wildlife.





RESTORATION ECOLOGY

- Suburban landscapes, if filled with a diversity of native plants, can fill the void to some extent
 - Remove invasive plant species and plant natives.
 - Larger wildlife such as cougar, gray wolf and ivory-billed woodpecker can not survive in such small areas.





A **NEW** Way to Look at Gardening

- Choose plants that native bugs will feed on
(native ornamentals)
 - then songbirds will have something to eat
 - then hawks will have something to eat, etc.





Connecticut Biodiversity

Black Swallowtail



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Shadblow

Serviceberry

Amelanchier

- Tree shrub.
- Deciduous.
- Excellent fall foliage color. Vivid orange to red.





- blooms before leaves
- suckers if happy
- sun, prefers moist soil
- fruit great for birds





Viburnum

Viburnum spp.

- Very diverse group of flowering shrubs with fruits of many colors.

- *carlesii* - Koreanspice

- *opulus* - European

Cranberrybush

- *plicatum* var. *tomentosum* –

Doublefile

- NATIVES

- *V. dentatum* Arrowwood

- *V. lentago* Nannyberry

- sun; well-drained, acidic soil







Summersweet - *Clethra alnifolia*

- slow growth, oval form
- fragrant flowers July – August, white or pink
- prune late winter
- sun to part shade
- tolerates wet feet





Buttonbush, *Cephalanthus occidentalis*

- deciduous shrub
- grows 3 – 6 ft. tall
- open loose habit

- white, 1 inch, ball-shaped flowers June – August, some fragrance

- opposite leaves are glossy dark green, up to 6 in. long. 2 in. wide

- likes moist soils



PEARL CRESCENT



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Adult Food





Larval Food









Red Spotted Purple

Adults eat rotted fruit,
aphid honeydew,
carrion, dung





Larval Food





Mustard Sallow





Witchhazel

Hamamelis spp.

CARY AWARD WINNER

- 15 - 20' x equal width; vase-shaped; medium growth rate; yellow or red fragrant flowers early or late winter
- sun to part shade; acidic, well-drained soil





Eastern Bluebird

Visit our Bird & Butterfly Garden
at Lockwood Farm.





Nectar feeding Horse Fly



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An Endangered Species



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BUMBLE BEE



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CAES- Spring Open House 2010

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Well Behaved Exotics

Stewartia koreana





Japanese Umbrella Pine



CONCLUSIONS

TALLAMY does make a convincing argument, however:

AESTHETICS: highbush blueberry does not do the same thing in the landscape that burning bush does. Be prepared for an open, shaggier look to your landscape.

Nurserymen are developing cultivars of natives that have tighter, more compact growth habits.

INVASIVES: As I remove them from my property, I am planting natives. Make small changes at first.

EXOTICS: I am not ready to completely give up on my exotics.



What should I plant?

Joe-pye weed	Goldenrod
Asters	Morning glory
Violets	Sedges
Sunflowers	Coral honeysuckle
Native geraniums	Black-eyed susan
Iris	Evening primrose
Milkweeds	Verbena
Beardtongue	Blackberries, raspberries



Woody Plants

Good Insect Food

Poplar, Cottonwood	Blueberry, cranberry
Willow	Maple, boxelder
Cherry, Plum	Elm
Birch	Pine
Oak	Hickory
Crabapple	Hawthorn



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