

Douglas Tallamy: "Landscape for all creatures"

By Carola Lott

"Gardening is a way of showing you believe in tomorrow," said Douglas Tallamy Friday night at the Cary Institute for Ecosystem Studies. The head of the entomology department at University of Delaware, Tallamy began by describing what he called "the enormity of the human footprint."

Since 1960 the portions of the US landscape that have been turned into suburbia has increased 5909 percent and that is not a typo. While only 15 percent of the Amazon Basin has been logged, we have lost over 70 percent of the forests along our eastern seaboard and what remains is largely in isolated fragments. In next 50 years we will raze 75 million more acres for development.

Although many people feel we no longer need nature but can depend instead on technology, in fact all our cities require healthy ecosystems outside their limits for survival. Such healthy ecosystems require a diverse abundance of wildlife – plants, insects, birds and animals – what Tallamy calls "redundancy" so that if one particular species is lost there are others that can fill its role. Unfortunately more and more species are becoming extinct – and extinction is forever.

Today's landscapes are designed almost solely for their appearance, using plants that are almost identical to those used throughout the country. It has become almost impossible to distinguish a landscape in Florida from one in Maine – the same trees and shrubs are used in both and they are invariably alien species. While aliens may be fine for a while, once they adapt they often become



Douglas Tallamy. Photo courtesy of TimberPress.com.

is highly toxic to most other creatures (including ourselves if we were to eat a lot of it). But alien species have been in this country for such a short time - little more than 100 years - insects have not yet had a chance to adapt.

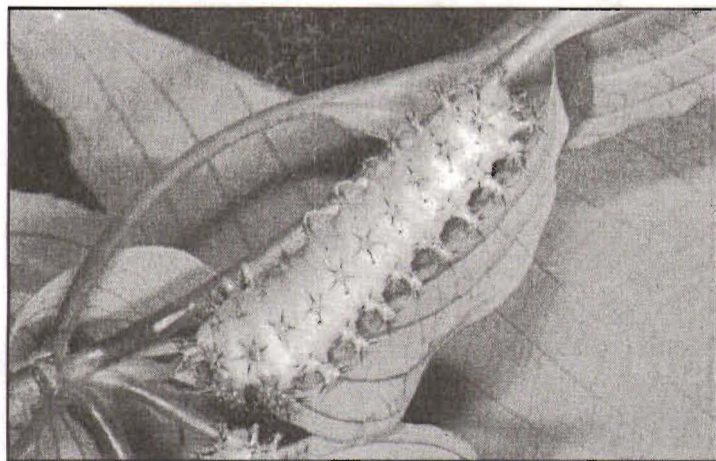
Ninety-six percent of birds feed their young on insects extremely high in protein. A number of animals also depend partly or entirely on insect protein for food. "A land without insects is a land without most forms of higher life," Tallamy said.

Tallamy said we still have a chance to do something before everything is lost. We can begin in our own backyards by putting plants back into suburban landscapes that were part of the original ecosystem. In short we should be trying to recreate the food webs that are native to our area and also create corridors to connect the fragments of these habitats.

Tallamy suggests that we follow his example and gradually replace parts of our lawns with plants that will provide food and habitat for a great variety of species. Tallamy's slides showed the rewards: stunning photographs of an amazing variety of caterpillars and butterflies, and the birds that

come to feed on them.

"Because we decide what plants we grow in our gardens, the responsibility for our nation's biodiversity lies largely with us." He listed trees in order of the number of Lepidoptera species they support. At the top of the list were oak, 534 species, willow, 456 species, prunus (black cherry), 456 species, birch, 413 species, crab apple, 311 species, and pine, 203 species.



invasive. Purple loosestrife, multiflora, the ubiquitous Phragmites and the mile-a-minute vine are but a few of many examples.

'Pest free' is considered an advantage by homeowners who opt for such plants as Russian Olive, Bradford pears and Norway maples—unattractive to most insects. Over many generations insects have adapted themselves to tolerate the toxins in certain specific plants. For example butterflies feed almost exclusively on milkweed that