## Nature's Best Hope Is All of US

## **Submitted by Betsy Fraser for Littleton Garden Club**

Nature's Best Hope. It's the title of one of Doug Tallamy's books. What's he talking about? Nature is struggling and needs help. Nature's Best Hope is.....YOU... and me. it's all of us! This was the message of Tallamy's presentation made at The Rocks in July.

Tallamy is a co-founder of the website www.homegrownnationalpark.org. The website encourages planting native plants and outlining ways, big and small, that all of us can help nature. Tallamy's presentation laid out the challenges that are impacting our natural world. From climate change, to unwise use of pesticides, to land fragmentation and development, to replacing native plants with plants from other parts of the world. All of these adversely impact the ecological relationships that are critical to keeping natural processes in balance and working. We humans are dependent on having these ecological relationships stay intact. And also, we humans can take actions and give nature support.

As an example of a natural process getting out of kilter, Tallamy spoke of the significant decline in the worldwide bird population. He cited scientific evidence of how a decrease in availability of soft green caterpillars is a root cause for the decline in bird populations. These caterpillars are the food source that a majority of birds feed their young. Due to the various environmental pressures, there's a big shortage of the caterpillars. Without enough of the caterpillars to feed the young, bird populations are declining rapidly.

Tallamy explained that soft, green caterpillars can be safely stuffed down the mouths of bird babies by their parents. It's how most birds feed their young. Hairy caterpillars and crunchy bugs would be injurious to the babies. Chickadees feed a single brood between 6,000-9,000 soft, green caterpillars from the time the eggs hatch until the young birds fledge the nest. Just image, a single brood of chickadees requires thousands of these caterpillars before they get out of the nest. The caterpillars are super nutritious for the young birds. Because caterpillars feed on green plants, they're loaded with carotenoids, a critical food component. Earth worms don't compare in their nutritional value.

What can we do to help increase the number of soft green caterpillars to support our local birds? A butterfly or moth lays its eggs on a plant, they hatch as caterpillars that feed on the leaves. For many caterpillars, the next stage involves dropping from the plant to the ground where they quickly burrow into the soil and form the pupa stage. Later, they evolve from the ground as the moth or butterfly and repeat the cycle. Along the way, in the caterpillar stage, they serve as the critical food source for raising baby birds.

Here's something we can do in northern New England to help. The caterpillars do best when they have a soft and safe landing to drop into from plants and trees. Think of the trees on your lawn and what's under them. It's probably grass that's regularly mowed or perhaps the earth has become bare and compacted. Neither are good for caterpillar survival and this is a contributing factor to the decline in the soft, green caterpillars. The solution? Put plantings around trees on lawns that provides a better habitat for the caterpillar to reach the next stage of development. Also, these plantings can look great as part of your landscaping.

I've got maple and oak trees on my lawn that are in need of understory plantings. Over time the ground under the maples has become bare and compacted and we regularly mow under the oaks. I'm

researching what kinds of plants will thrive under my trees. Candidates include things like hostas, azaleas and coral bells under the oaks and things like vinca minor or ferns under the maples.

What are other things that I can do and you can too? Tallamy says to use pesticides only when really needed and use them wisely and sparingly. Try to let bugs and caterpillars do their thing. Sure, our tendency is to dispatch them quickly when we spot them munching on a plant. But most don't do permanent damage and are likely a key food source for a critter up the food chain. Got hairy caterpillars? The birds won't usually eat them, but when they develop into the moth or butterfly stage, Tallamy explains that they become excellent bat food. And bats need our help too. Shopping for new plants? Buy plants that are native to our area or North America to best support local ecological systems. Find areas of your yard that you can "rewild." I notice that areas of the lawn that we no longer mow, or the hedgerow of trees growing on the edges of the lawn, are alive with pollinators and birds.

Tallamy's presentation was inspiring and probably like me, the audience left with a mental list of things we can do in our yards and gardens that can help nature. The goal now is to turn the mental lists to action. After all, we are Nature's Best Hope.

The Littleton Garden Club welcomes new members any time. Learn more about the club and our meetings at www.littletonnhgardenclub.org