## Why a 70% Native Plant Campaign? What you can do!



# NATIVE PLANTS BUILD ECOSYSTEM HEALTH-THEY FEED & SHELTER BIRDS, BUTTERFLIES & BEES

We are inspired by <u>Dr. Desirée L. Narango's</u> research which supports this claim.

Dr. Narango, research scientist at UMass Amherst, found that in order for chickadees to find the 6,000 to 9,000 caterpillars they need to raise their young, 70% of the plant foliage within 50 yards of their nest must be <u>native</u> to the area.

While some might feel that caterpillars are "yucky," they are an important part of the life cycle of butterfly and moth pollinators, and are essential food for other animals in Earth's ecosystem, not just chickadees. Over 440 North American bird species feed on insects throughout the year.

"Caterpillars play an outsize role in our ecosystems because they are nutritious, soft, and edible," adds Meredith Gallogly of <u>Grow Native Massachusetts</u>. "They eat plants, which gather nutrients via photosynthesis, and then birds eat them, moving all that energy up the food chain."

#### Easy and effective things you can do:

#### 1. Plant a native tree!

- Use this <u>list</u> to find native tree species that will thrive on your site, add beauty, AND feed native birds and insects. For example, a native sugar maple (*Acer saccharum*) supports at least 271 species of butterflies and moths in Massachusetts, while a non-native Norway maple (*Acer platanoides*) supports only six!
- Ask the <u>Greenfield DPW</u> for a free tree for the tree belt or your front yard. And consider adding a tree to your side or back yard.
- Create a multi-level landscape--shrink your lawn! Lawns take up millions of acres but offer little to the ecosystem.
  - Replace your lawn with trees, shrubs, groundcovers, native flowers, and vegetables.
  - One easy way is to edge the lawn you keep with native shrubs to increase native plant foliage and begin to shade out your lawn.
  - Leave leaf litter under trees and shrubs so caterpillars and other insects will have a place to pupate and overwinter, and birds will have places to forage for food.

#### 3. Be a Lazy Gardener--mow less and rake less.

- If you have lawn, mow less with blade at least 3" high to let flowers bloom and turn your lawn into a food pantry for native pollinators.
- In spring, mow half your lawn one week and half the next.
- Mow even less in summer to keep it lush.

**P.S.** Remove and replace <u>non-native invasive plants!</u> They do not support insects native to our area and can outcompete and crowd out valuable native plants, taking up precious space.

#### JOIN national and local efforts:

- Homegrown National Park. Make a commitment to join a national effort to build habitat in the USA--and expand native habitat where you live. Tell Doug Tallamy you are with him!
- **Greening Greenfield's 70% campaign** Sign up and learn with us... More research is being done every day!



We lost 3 billion birds in North America (29%) since 1970. The cause? Lack of food and habitat, and the presence of pesticides.

--New York Times, 2019

### Dr. Desirée L. Narango says...

- Over 440 bird species rely on insects to feed their young. Insects are >95% of a chickadee's diet during the breeding season.
- Chickadees feed their chicks caterpillars because they are soft and very high in calories, protein and antioxidants.
  Caterpillars are part of the lifecycle of moths and butterflies.
- Native songbirds prefer native plants that support the most insects. Chickadees have fewer fledglings if their nest is surrounded by non-native plants that supply little insect food.
- More than 90% of our planteating insects are <u>specialists</u>--so <u>what you plant matters!</u> Think diversity!

"To create bird habitat at home--aim for more than 70% native plant foliage."

"Pollinators are essential for the continued existence of 80% of all plants... The act of planting native species is essential to the life around us."

> --<u>Doug Tallamy</u>, author of Bringing Nature Home and Nature's Best Hope