

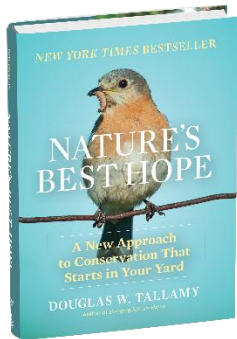
Nature's Best Hope: A New Approach to Conservation That Starts in Your Yard

Douglas W. Tallamy

Timber Press, Portland, Oregon 2019

214 pages

Book review by Karen Marshall, KWOE Board member and newsletter editor



If you think climate change is the number one threat to the planet, think again.

Douglas Tallamy, an entomologist at the University of Delaware, observes that insects are a large part of the diet, either directly or indirectly, of reptiles, birds, rodents and on up through the food chain. In Tallamy's words, "Plants, in essence, enable animals to eat sunlight." Unfortunately, not all plants are equal in their ability to provide sustenance for insects. Tallamy reveals the unbreakable link between native plant species and native wildlife—native insects cannot, or will not, eat alien plants. When native plants disappear, the insects disappear, impoverishing the food source for birds and other animals.

In an interview in the April 2020 issue of *Smithsonian Magazine*, Tallamy estimates that the worldwide population of arthropods, chiefly insects, has declined by 45 percent from preindustrial times.

If "bugs" brings the biting and stinging variety to mind, think again. Tallamy's specialty is the caterpillar whose weight and nutritional value is equal to that of 200 aphids. A typical baby bird eats a full meal thirty to forty times a day while nesting. Observations of warbler pairs recorded over 800 caterpillars brought to the nest each day. Obviously, the distance the parent bird has to travel to obtain and deliver food to the nest is a crucial factor in the survival of the nestlings.

For homeowners who dislike the sight of caterpillars munching on the leaves of their trees, Tallamy



recommends his Ten-Step Program: "Take ten steps back from the trunk and all your insect problems go away."

Across North American biomes keystone species, representing about 14 percent of plants, comprise 90 percent of insect food and keep the food web healthy. The most important are four genera of native trees: oaks, poplars, willows and cherries. But also hickory, chestnut elms, cottonwood and birches. Other native vegetation includes joe-

pye weed, aster, marsh marigold, skunk cabbage, snakeweed and goldenrod several of which support native bees.

Tallamy stresses that, going forward, natural habitats need to be saved or created where humans work, live, farm or play.

Through this process, biological corridors can both connect small isolated areas and their inhabitants and provide places which in themselves sustainably support entire life cycles of local biodiversity. Most of these potential corridors are in private ownership and are currently dominated by landscaped lawns that are mostly devoid of biological activity and contain introduced ornamental plants and gardens to elevate the quest for status in the neighborhood. Tallamy calls his biological corridors project Homegrown National Parks.

[Sidebar]: Tallamy asks property owners to add only one criterion to their preferences for choosing landscape plants – whether a plant is native.

Fortunately, there is a search tool developed by the National Wildlife Foundation for those seeking to identify woody and herbaceous plant genera native to their locality in terms of their ability to host caterpillars. Simply enter your postal code in the Native Plant Finder ([http://www.nwforg/NativePlant Finder](http://www.nwforg/NativePlantFinder)). Audubon has created a similar website, Plants for Birds (<https://www.audubon.org/native-plants>). Tallamy's book also includes a section on the restoration of native bees.