

ATTRACTING NATIVE POLLINATORS

An April 16th *Record Searchlight* front page story, “A Buzz Over a Hive Fee Plan,” details beekeepers’ responses to a proposed fee. Its purpose: to study colony collapse disorder, the latest grave threat to imported European honeybees. Not mentioned are California’s nearly 2,000 species of native bees – also pollinators. The Xerces Society’s *Attracting Native Pollinators: Protecting North America’s Bees and Butterflies*, by Eric Mader et.al. (372pp., Storey Publishers, 2011) describes the benefits, needs, lifestyles, and methods for making allies of these 2,000.

Pollinators allow much of the food humans need to survive, including a diet beyond meat and wind-pollinated grains -- the fruits and vegetables that provide most of our vitamins and minerals. They allow berries for birds and bears, willows to stabilize stream banks. They’re necessary for trees, shrubs and wildflowers to reproduce. They provide fibers (cotton, flax), oil crops (biofuel) and beautiful flowering plants that lift our souls.

A 2003 estimate values them at \$18 billion to \$27 billion; if you include cattle raised on alfalfa, you can double that. Native bees alone are worth three billion a year.

If they’re to be our allies, though, they’ll need our help, since they’re in trouble too. The chief causes are degradation, fragmentation and loss of habitat, poisoning by pesticides, diseases and parasites.

Currently agriculture, much of it monoculture, covers 36% of the earth’s surface. Add a vast acreage of sterile

turfgrass, asphalt, concrete, buildings, more pesticides poured onto our lawns than our farms, and you can picture what's left for the bees and the butterflies. The Chinese hand-pollinate apples: their native pollinators gone, honeybees wiped out by pesticides.

Birds, bats and mammals all pollinate, but the vast majority are insects, with bees the most important. 70% are solitary ground nesters; the others nest in cavities.

Fortunately their needs are simple: flower-rich foraging areas, sheltering, overwintering, nesting and egg laying areas, and a pesticide-free environment. And if you meet the bees' needs, you'll have met those of other insect pollinators as well.

Most of the book describes these pollinators and how to help them out.

Start with benign neglect. Leave patches of bare ground, dead trees, weeds, wild corridors along ditches, fencerows, hedgerows, windbreaks, streamsides, roadsides. The bigger the better, but bees and butterflies will use even the smallest bits. Utility easements along power and gas lines, because often unmowed and free of tall trees, already provide five million acres of habitat.

Attract what's local: natives can pollinate 100% of a crop if you leave 30% of the total land untouched, and this may even increase profits.

To create new habitat, look to roadsides, the campuses of schools, businesses and industry, as well as your yards. Mimic natural areas. Reduce turfgrass and grow native flowering meadows and prairies, ecolawns and roofs. If you spray, do it when insects are inactive, flowers not in bloom. On farms and in gardens grow cover crops, avoid

monoculture; in orchards create flowering understories, burn and mow leaving areas untouched, plow as shallowly as you can.

To establish pollinator habitat from scratch, choose south slopes with few trees. Clean the ground thoroughly – the bees will return. Make piles of logs and rocks and plant vines. Mass single species of native flowers, and have at least three blooming in each season. Plant flowers of different shapes, sizes, colors and heights. Some exotics will work, but avoid showy blooms, often void of either nectar or pollen.

Filled with gorgeous color plates, this book gives sample pollinator garden plans, regional plant lists, photos of bees and butterflies. It includes ideas for educators and parents. Looking just at the many photos, a kid might mistake it for child's play. It's that handsome.