

Small Gardens, Big Impact: Why Pollinator Gardens Matter

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We moved into a house with a grassy plain for a yard and a few non-native ornamental landscaping in front. Basically, a suburban moonscape devoid of vibrant animal life.

We found limited animal activity except

some sulfurs and cabbage white butterflies



few birds and sick bumble bees.



We decided we had to do better. We began that winter by planting native trees—hawthorn, arrowwood viburnum, white swamp oak, willow oak, redbud, and several red maples. That spring we planted native flowering plants and grasses in several locations both in the front and back yards. Key plants: big blue stem, Indian grass, giant purple hyssop, bergamot, purple and orange coneflowers, New England asters, goldenrod, and highbush blueberries.



Simple Steps, Big Impact

Planting just a few flowers and some new trees turned things around.



Wildlife Came Back

If you plant the plants pollinators need, they will find you; and so will everyone else.

Pollinators: Who are they?

BEES—Solitary
and Hive-based

Butterflies
and Moths

Birds

WASPS

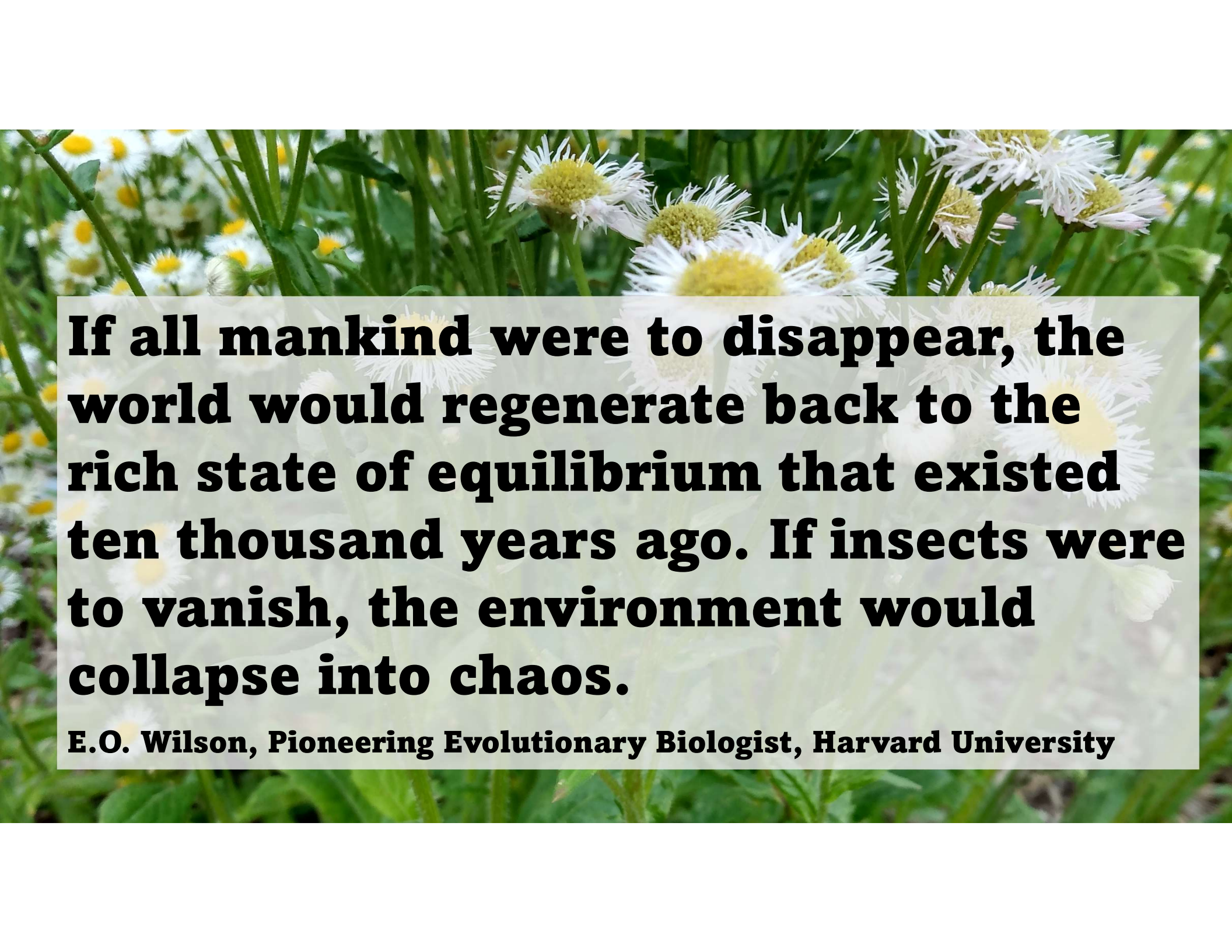
Mosquitoes

Beetles

Flies

ANTS

BATS

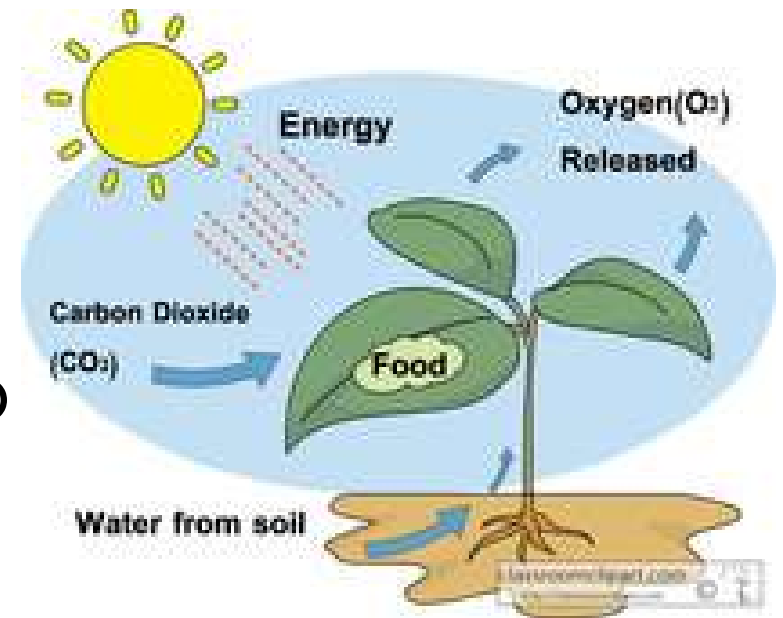


If all mankind were to disappear, the world would regenerate back to the rich state of equilibrium that existed ten thousand years ago. If insects were to vanish, the environment would collapse into chaos.

E.O. Wilson, Pioneering Evolutionary Biologist, Harvard University

Without plants, life as we know it would not exist for two reasons:

- 1) Plants give us oxygen.
- 2) Humans cannot harness the sun's energy directly into our bodies, but plants can.



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What do we mean by "native"?

Definition: a plant or animal that has evolved in a given place over a period of time sufficient to develop complex and essential relationships with the physical environment and other organisms in a given ecological community.

--*The Living Landscape*, Rick Darke and Doug Tallamy.



**Mutually
Beneficial
Relationships:**

Ecosystems



How Ecosystems Work

Building Specialized Relationships

- ❖ Diversity of Species
- ❖ Competition to Survive and Reproduce
- ❖ Yet, Mutually Beneficial Relationship Often Occur
 - Pollinators receive nectar and pollen they need to survive and reproduce.
 - Plants receive assistance in reproduction and seed distribution.

Generalists and Specialists

- ❖ GENERALISTS can find food from a variety of plant species.
Example:
Cabbage White Butterfly
- ❖ SPECIALISTS rely on host plants for one period during their life, usually at the larval state, what most of us call a caterpillar.
Example: Monarch Butterfly



All Ecosystems Are Fragile

All it takes are natural or human actions—habitat destruction and introduced species—to disrupt this fragile balance.



Why Pollinator Gardens Matter

OUR URGENT MISSION:

Humanity's challenge is to reduce its introduction of rapid environmental changes [including change caused by introduced species] that are currently causing extinctions to occur faster than the evolution of new species.

--*The Living Landscape*, Rick Darke and Doug Tallamy.
(brackets added)



If you plant the plants the pollinators need,
the pollinators will find you.
But where do you find the plants they need?



Local Plant Nurseries?

Buyer Beware

--Too many exotics (non-natives) for sale
--Too many cultivars (plants breed for traits not food for animals). Do not buy plants with scientific names written like:

- *Heuchera villosa* "Citronelle"
- *Heuchera x villosa*



Better Options

Local Native Plant Sales

Retail Plant Nurseries That Specialize in Native Plants

On-line Catalog Native Plant Retailers

Cautions:

Do Your Homework

Know What You Want To Buy Before You Shop

Final Thoughts

We can turn things around one garden at a time.

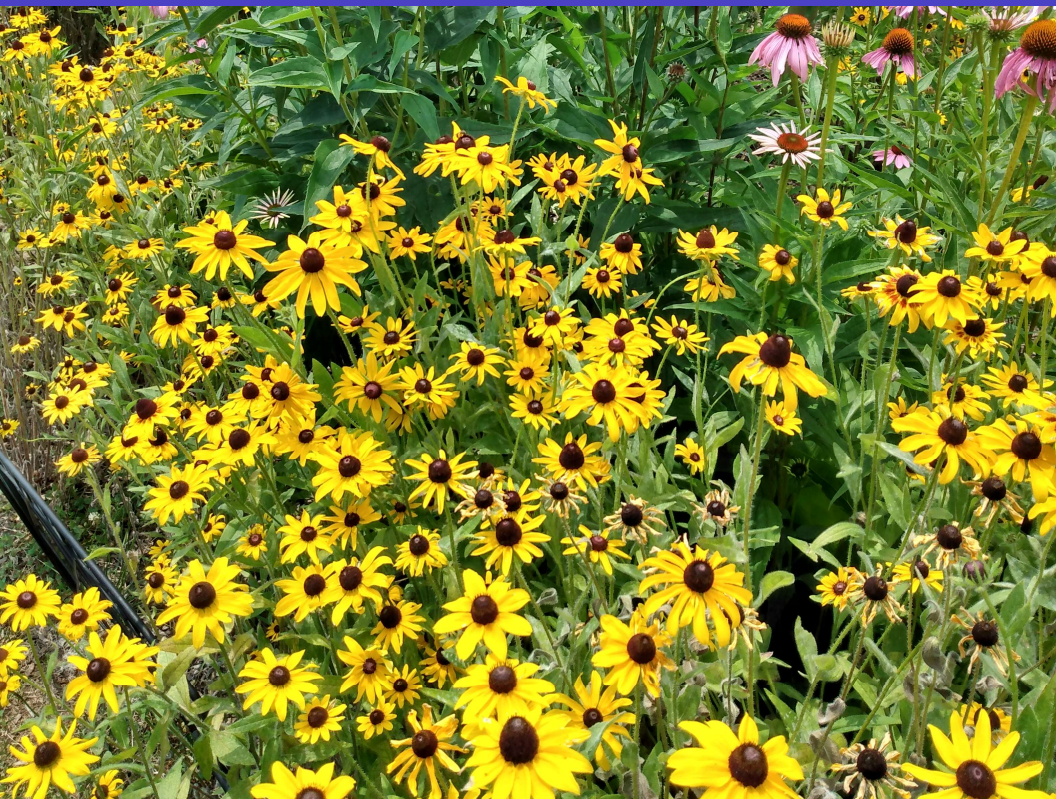
The size of your garden doesn't matter. You can have a positive impact even with a container garden.

Encourage your neighbors, friends, and local business to plant native for an even bigger impact.

Measure success by the number of pollinators and caterpillars you have.



Thank You!



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