



# Schools, Pollinators, and You!

Kids love bugs! Your school is a living laboratory where students can learn through observation and hands-on learning. These skills are developed through the Pollinator Partnership (P2) Education Programs that emphasize language arts and math requirements as well as science curriculum, all developed to the highest education standards.

P2 has created free hands-on learning materials for you and your school to build a school garden, and connect to other schools to encourage pollinator education and enrich classroom education. Resources available for free on www.pollinator.org include standards based curricula, lesson plans, posters, and much more!



## Why should educators and students care about pollinators?

Pollinators bring us nearly 1 of every 3 bites of food we eat and are vital in the reproduction of nearly 80% of the flowering plants on the planet. Our food, our forests, our farms and our future need good pollinator-friendly practices – and school is a great place to start.

### What is pollination and who are the pollinators?

Pollination happens when pollen is moved within flowers or carried from flower to flower by the wind, by water or in some cases through self-pollination and by pollinating animals such as birds, bees, bats, butterflies, moths, beetles, or other animals.

#### What does pollination do?

The transfer of pollen in and between flowers of the same species leads to fertilization, and successful seed and fruit production for plants. Pollination ensures that a plant will produce full-bodied fruit and a full set of viable seeds, and in some cases it increases genetic diversity to strengthen the genetic make-up of the plant.



#### Why does pollination matter to us?

Worldwide, roughly 1,000 of the 1,200 plant species grown for food, beverages, fibers, spices, and medicines need to be pollinated by animals in order to produce the goods on which we depend.

Foods and beverages produced with the help of pollinators include apples, blueberries, chocolate, coffee, melons, peaches, pumpkins, vanilla, and almonds, to name a few.

In the U.S., pollination by honey bees, native bees, and other insects produces \$40 billion worth of products annually.

#### Are pollinators in trouble?

Worldwide there is disturbing evidence that pollinating animals have suffered from loss of habitat, chemical misuse, introduced and invasive plant and animal species, and diseases and parasites.

Many pollinators are federally "listed species," meaning that there is evidence of their disappearance in natural areas.

The U.S. has lost over 50% of its managed honey bee colonies over the past 20 years.

A lack of research has hindered our knowledge about the status of pollinators.

Whenever we look closely at pollinator populations, we see problems – the monarch butterfly migration across North America is showing extremely low overwintering numbers, and at least 10 different bumble bee species in the U.S. are not being spotted with normal frequency, in fact 4 appear to have disappeared from their normal ranges.





- Plant a pollinator garden or buffer to provide habitat and forage for local pollinating animals.
- Reduce or eliminate your use of pesticides, and
  if you must use them, follow directions carefully.
   The way you apply and dispose of a pesticide can
  make a big difference for pollinators!
- Educate yourself about the native pollinators in your area, and view them as your ally in making a green and sustainable world.
- Make wise consumer choices; purchase organic produce, local honey, native plants and locally produced fibers whenever possible.
- Join P2 to increase public awareness about the importance of protecting pollinators.

