

Pollination Fast Facts: Educators & Students

What do pollinators mean to educators and students?

Some people think only of allergies when they hear the word pollen. But pollination, the transfer of pollen grains to fertilize the seed-producing ovaries of flowers, is an essential part of a healthy ecosystem. Pollinators play a key role in the production of more than 150 food crops in the U.S, such as apples, alfalfa, almonds, blueberries, cranberries, kiwis, melons, pears, plums, and squash.



Bees are the primary pollinators. However, about 200,000 invertebrate species, (bees, moths, butterflies, beetles, and flies) serve as pollinators, as well as about 1,000 species of vertebrates (birds, mammals and reptiles). In the U.S., the annual benefit of managed honey bees to consumers is estimated at nearly \$20 billion. The services provided by native pollinators contribute to the productivity of crops as well as to the survival and reproduction of many native plants.

What is pollination and who does it?

Pollination is a vital stage in the life cycle of all flowering plants. When pollen is moved within a flower or carried from one flower to another of the same species, it leads to fertilization. This transfer of pollen is necessary for healthy and productive native and agricultural ecosystems. Adequate pollination ensures that a plant will produce full-bodied fruit and a full set of fertile seeds. With no pollination at all, many of the foods we eat would no longer be available. The plants that many wild creatures rely on for food or shelter would also disappear. More than 80% of all flowering plant species need the help of animals to move their heavy pollen grains from plant to plant for fertilization.

What Can You Do for Pollinators?

Educate others about their place and purpose in the ecosystem and the services that they provide for the environment. Integrate pollinators into your curriculum.

- **Teach** *Nature's Partners*, an inquiry learning-based curriculum for young people in 4th through 6th grades.
- Use activities for both formal and informal educational settings.
- **Involve** young people in service learning opportunities so that they can contribute to their communities.
- Adapt the *Nature's Partners* curriculum in any way that works best for teachers and youth leaders.
- Reference the curriculum link at http://www.pollinator.org/education