



North American Pollinator Protection Campaign

WILDLIFE FACT SHEET

HUNTING AND FISHING

The North American Pollinator Protection Campaign (NAPPC) is a tri-national collaboration of diverse partners working to protect pollinators and raise the profile of pollinator issues.

The mission of the NAPPC is to encourage and support actions to benefit the health of pollinating species in North America.

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For more information about how to help pollinators or to make a tax-deductible contribution for pollinator protection, please contact us at: www.NAPPC.org or www.coevolution.org.

*NAPPC is coordinated by the
Coevolution Institute.*

Pollinators are an essential but unrecognized ingredient to successful hunting and fishing. North American upland game birds including sage-grouse, pheasants, wild turkey and quail depend on seeds and fruits from pollinated flowers. Adults and larvae of pollinators including butterflies, moths, flies, beetles, bees and wasps are eaten by birds. Nesting game birds feed nestlings insect grubs crucial to the survival of their chicks. Research demonstrates grouse chick diets contain 40 families of insects and over 30 species of forbs, including pollinators and their plants. Young turkey poults chase down and eat insects from the time they hatch. Insects make up more than 90%, as reported by the Wild Turkey Federation. Doves, pheasants, partridges, and turkeys depend upon seeds, fruits and berries from the handiwork of pollinators visiting flowering plants. Native plants provide essential shelter, cover and nesting sites for game birds and mammals.



Game animals including deer, elk, moose and bear are among the mammals that directly benefit from the activities of bees and other pollinators. Staple foods for white-tail and mule deer include nuts and acorns, while they graze on grasses, sedges and ferns. Elk graze on elkweed, pine needles, various grasses, clover, lupines, willows,

Service berry and aquatic plants. Moose feed on grasses and sedges, mosses, lichens, various forbs, tree bark and leaves. They are especially fond of Cottonwood, willows Mountain Ash, Alaska Rose, currants, Service berry and cranberry. Grizzly bears and black bears are omnivorous, eating plants, animals and carrion. Forbs, roots, tubers, grasses, berries and other fruits, vegetation and insects comprise most of their diets. Pine nuts, insect nests, and starchy roots are crucial for bears building up fat reserves before their winter hibernation.



What You Can Do:

Pollinators are in decline throughout their ranges partly as a result of habitat loss and invasive species.

You can help pollinators, wildlife, and native plants in simple ways:

- Contact your legislators to tell them that you support measures to protect wild lands from development and to restore native habitats.
- Work with local and regional community groups to reduce the negative effects of urban sprawl and create pollinator habitat.
- Give to pollinator issues at www.pollinator.org

**Pollinators,
wildlife, plants,
and your friends
at NAPPC
Thank You!**

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Freshwater game fish (bass, trout, perch, crappie, bluegills) include insects in their diets. Flies, beetles, wasps, bees, butterflies, Caddisflies, Dobsonflies, Fishflies, Mayflies and Stoneflies are eaten by fish. U.S. fishermen remained constant between the mid-1990's and 2001, while hunters dropped 7 percent to 13 million. Revenues from hunting and fishing licenses have dropped. There is less money available to state game and habitat restoration programs from hunting licenses. Hunting habitats have been lost, but another reason for hunting declines may be an urbanized population losing touch with lands and native wildlife, especially hunting, fishing and "wildcrafting" foods from public and private lands.



Outdoorsmen can conserve pollinators by planting or protecting their pollen and nectar resources, and nesting sites. Hunting and fishing organizations understand they are guardians of wildlife and habitats. Conservationists and land managers know hunters and fishermen protect lands, plants and animals in every U.S. habitat. US citizens spend more than \$60 billion dollars each year on fishing, hunting and observing wildlife (US Census 1996). Approximately \$49 billion is likely due to insects. Insect pollinators are a critical food for many birds, fish and mammalian species.

On August 16, 2007 President George W. Bush signed an executive order, the "Facilitation of Hunting Heritage and Wildlife Conservation" to enhance hunting opportunities and the use of hunting in management planning. It directs agencies (Department of the Interior and Department of Agriculture) to facilitate hunting opportunities on public lands under their stewardship. <http://www.whitehouse.gov/news/releases/2007/08/20070817.html>

Conserving pollinators directly helps hunters and fishermen by supporting game stocks and making long-term protection of wildlife habitats possible.

References:

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- Losey, J.E. and M. Vaughan. 2006. The Economic Value of Ecological Services Provided by Insects. BioScience 56(4): 311 - 323.*
- Committee on the Status of Pollinators in North America. Status of Pollinators in North America. 2007. The National Academies Press, Washington, DC., p. 307

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