



Turning a New Leaf Conference
Shepherdstown, West Virginia
November 16, 2013

Track B: Innovations in Urban Restoration

Session B.2 Role of Pollinators in Urban Habitat Restoration. Toni Burnham, urban beekeeper, Washington, DC

Pollinators and flowers have a very magnificent, diverse and complicated relationship. This complex natural phenomenon can be used as a tool to reach communities of lesser means, especially, poor, urban youth. This is important because *bees need friends*.

Challenges of Urban Bees

For pollinators, a meadow is like a marketplace of available flowers 'advertising' their nectar and pollen to sometimes specific and sometimes diverse audiences. Honey bees are considered unique compared to native American bees in that they are usually generalists, visiting a diverse range of flowers. However, fruit trees and most contractor choices have poor nutrition for bees. Flower color, flower smell, flower size, nectar nutrition content and time of year all affect pollinator choice. Honey bees will travel up to a 3 mile diameter in search of flowers. In a heavily urban environment, it is a challenge to provide pollen and nectar sources for honey bees.

Benefits of Urban Bees

Individually, native bees are more effective pollinators than the European honey bee. When European bees were brought to America in the late 1500s/early 1600s, a noticeable shock to the native populations was noted. Many experts pose the questions, "Could we get by [in the US] with native bees [for commercial and ecological pollination]?" Still, when honey bee colonies are introduced into an urban environment, it leads to increased crop yields. As the percent of land use increases with the increased trend in development, there is an increased need for pollinators

Challenges of Urban Beekeepers

Urban environments have extreme micro-local environments, meaning two neighboring rooftops can vary dramatically in terms of sunlight, temperature and humidity. Because of the nature of bees (stinging insects), urban beekeepers need to consider their neighbors and overcome the "freak factor". As a result of bad beekeepers, honey bees were banned in the District of Columbia and we just recently legalized in 2012. Cities have educated, forward-thinking people, though many still don't like bees or don't see the need. Additionally, there are many negative attitudes and misconceptions towards trees and bees. As a result, vandalism can occur.

The Need for Urban Bees

Despite the negative connotations of bees, there is great success in beekeeping and education in urban areas. The DC Beekeepers Alliance reaches out to schools in DC, allowing middle school students to handle bee boxes and learn about bees. Through their work, they have found that an experience can trump a fear and that the more comfortable people can be with bees, the more they will work to help them. Challenges still remain with encouraging the public to plant flowers and provide habitat for bees. "Bees connect people with place, and with each other, in an urban city" – Toni Burnham.

References – Bee Culture Magazine