



# A Monarch's View of the City

## Urban Monarch Landscape Conservation Design

**Monarch Butterfly** populations are in peril. Each year, the population is estimated by the size of the total habitat monarchs occupy over the winter in Mexico. This year's monarch population was estimated to cover 4.01 hectares (9.91 acres).

Preliminary research results from an effort led by the U.S. Geological Survey indicate that stabilizing monarch populations requires a conservation strategy across all land types to adequately minimize extinction risk. With over 80% of people living in urban areas, we believe there are unprecedented opportunities in cities to connect people with nature through monarch and pollinator conservation.

To work in urban areas, we have to understand: the potential number of stems of milkweed in urban areas; where to focus conservation to achieve the best social and ecological results; and how to engage various urban sectors in monarch conservation. The Urban Monarch Landscape Conservation Design (LCD) Project addresses all of these questions.

### What is an LCD?

A Landscape Conservation Design is both a process and a product.

It is a stakeholder-based conservation planning process that helps: 1) define desired future conditions; 2) weigh and select strategies to align actions; 3) map high priority opportunities on the landscape; 4) model scenarios and tradeoffs; and 5) implement, evaluate, and refine adaptive management.

It is a product—or conservation plan—that is science-based, spatially explicit, has measurable objectives (in this case, potential monarch habitat by urban land use type), and includes



Tagged monarch on purple coneflower at Minnesota Valley NWR By Joanna Gilkeson USFWS

community engagement and implementation strategies.

### Products

This project will have four major products:

- A completed geospatial model with social and biological mapping classifications replicable in any metropolitan area or town within the monarch migratory pathway. Guidance will be presented in a “how-to” framework describing the Urban Monarch LCD process and related engagement strategies for urban land use categories. This template will be but ready for review October 2016 and completed by January 2017.

- Four map-based LCDs for pilot metropolitan areas in Austin, TX, Chicago, IL, Kansas City, KS/MO, and Minneapolis/St. Paul, MN. These planning tools will include: potential milkweed/habitat contribution; location of conservation opportunity areas; implementation strategies by land use class; and description of

ecological and social benefits.

Working models will be created by Fall 2016.

- Proof of concept projects in each city will inform gaps in the model and test engagement strategies. Projects are varied based on geographic location and focus on biological, social and ecological data collection in each city. Completed by September 2016.
- A workshop will be held to engage urban communities within the migratory pathway to get feedback on the model that informs future urban monarch LCDs (October 2016).

### For more information

John Rogner, LCC Coordinator  
[John\\_Rogner@fws.gov](mailto:John_Rogner@fws.gov)  
(847) 608-3100, ext. 32048

Abigail Derby-Lewis, Principal Investigator, The Field Museum  
[aderby@fieldmuseum.org](mailto:aderby@fieldmuseum.org)  
(312) 665 7488

U.S. Fish & Wildlife Service  
March 2016