iCAP Team Recommendation

Name of iCAP Team: Land and Water

iCAP Team Chair and Vice-Chair: Carmen Ugarte and Jonathon Mosley

Date submitted to iWG: 12/7/22

Recommendation title: Monarchs Need Milkweed

For internal use only: Date reviewed by iCAP Working Group:

Specific actions/policy recommendation:

The Land and Water iCAP Team recommends the plantings of milkweed (*Asclepias syriaca, A. incarnata, A. tuberosa*), across the UIUC campus in order to support migratory Monarch Butterfly populations. Plantings could be introduced into existing landscape beds and/or smaller milkweed specific planting beds, as well as in designated low mow zones and prairies.

Suggested unit/department to address implementation:

F&S Grounds

Rationale for recommendation:

As of late July, 2022, Monarch butterflies were listed as Endangered in the state of Illinois. Not only are these pollinators vital to the health of our environment, but they are cherished as the Illinois State Insect. Monarch butterflies depend on milkweed for their survival and growth. It is the only plant they utilize to lay their eggs and it is their sole food source during the caterpillar stage. Without milkweed, monarch butterflies face extinction. We feel that investing in large scale planting of native milkweed across campus will support this iconic species as it is now listed under the endangered status.

Connection to iCAP goals:

The recommendation directly relates to iCAP Objective 4.2.2: Increase the number of ground-level pollinator-friendly landscaping areas on campus by 50% from the FY19 baseline by April 2024. The presence of milkweed will not only attract Monarch butterflies, but as a native flowering plant, it will attract and contribute to the well-being of other pollinators on campus.

Perceived challenges:

Herbicides and pesticides are a major threat to milkweed as well as the organisms that are ingesting it. The milkweed may look the same, but chemicals sink into the fibers of the leaves (an irreversible

process) which kills off any monarch caterpillars using the habitat structure. This is because these chemicals poison their only food source. The same goes for any insect 'spraying', as seemingly controlled larvicides used commonly for mosquitoes are carried in the wind toward nearby plants.

Many times, new milkweed installations can be mowed down in error. This human interference can be addressed with plans for educational bulletins and simple signage. Communication with Grounds employees will be vital in protecting sprouting milkweed from being mowed. In addition, placing milkweed into intentional planting beds will assist with presenting them as formal and reduce the incidence of being mowed over.

Anticipated timeline of implementation:

The first step is to work with F&S to locate suitable locations during Fall / Winter of 2022 (we have attached our proposed locations which were selected after conducting a milkweed survey). With locations set, an RSO could be identified and plants purchased to be grown in spring 2023 for planting in late spring 2023. If a landscape contractor is funding, plantings would be installed in spring 2023 as well.

Anticipated budget (identify if cost is up-front or continuous):

Costs associated with buying live milkweed and milkweed seed will be low to moderate. Packs of seeds are much cheaper than live plant sales. There is an inherent tradeoff for the time it will take to grow these habitat patches. If seeds were pursued, an RSO interested in native planting should be engaged to grow the plants in the greenhouses. This would incur greenhouse costs as well. Student volunteer labor also might be a potential delivery method, though they would need F&S Grounds assistance. Assuming smaller 6' x 6' new planting beds, costs could be approximately $400 per planting. If plugs were pursued, they could be purchased to be installed by a landscape contractor. Associated costs would be closer to $700, but would guarantee plantings to be installed, and for their potential replacement up to a year after installation. We would recommend at least an initial test pilot of 10 plots. This would equate to an initial funding of $4000 to $7000. If successful, the Land and Water group will propose more locations in the future.

Individual comments are required from each SWATeam member (one or two sentences):

Team Member Name	Team Member's Comments
Carmen Ugarte	I support this initiative to increase pollinator friendly vegetation. This will ultimately contribute to enhance pollinator diversity and monarch populations.
Jonathon Mosley	I support this recommendation.

Nikki Palella	I support this recommendation to assist our monarch butterflies and restore their cultural impact on the U of I landscape.
Brent Lewis	I support this initiative to increase our pollinator diversity and monarch populations.
Emily Heaton	I support the recommendation and look forward to more milkweed on campus.
Maria Chu	This is a very good initiative to the pollinators in UIUC. I support this initiative.
Kavya Mula	I support this recommendation and believe it is crucial in aiding the Monarch population!
Therese Egner	I support this recommendation to promote our biodiversity and address the decrease in Monarch butterflies.
Mickey Castigador	I support this recommendation! I hope it aids in the recovery of the Monarch population.
Betsy Liggett	I support this recommendation to increase the campus' pollinator friendly landscapes and help the Monarch butterflies thrive.

Further explanation and background (can be supplied in an attachment):

Proposed locations at specified Low Mow Zones & prairies are attached. We are starting with a proposal of ten sites; 8 in existing low mow and prairie areas, and 2 on the main campus.

Comments from consultation group (if any; these can be anonymous):
