Pollinator Call: Meeting Minutes

July 12, 2021

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- Bloom Calendar
 - This does not include newly installed species that bean blooming March 20th this year: https://icap.sustainability.illinois.edu/files/projectupdate/6291/red%20oak%20rain%20 garden.jpg
- ... [[Missed this part]]
- Dorner drive retention pond will be converted from a Low-Mow area to a high-quality species this fall
 - Track change in mosquitos with these changes to the landscape ??
- RORG will have programs
 - Education Program (Purdue) Rainscaping
 - 15-hour how to build a rain garden course (available state-wide)
- Extension Collaboration Grant
 - Soil science help planners and engineers plan rain gardens
 - General extension grant: We can use it towards whatever is interesting or fits with the goal. There is nothing *specific* we need to do, except for reaching out to UIUC researchers, when using the grant. Ultimate goal is to make a rain research water toolkit (??)
 - Target Groups: Researchers/Planners, Mayors, and Academic
 - To justify funding and reasoning as to why individuals need to purchase certain things such as different plants
 - End product: Website
 - Layne, Eliana, and Margaret are working on this right now (setting up the architecture)
 - Toolkit is looking towards where in-person can go in terms of these resources
- Demonstration Rain Garden
 - Runs along the North and West perimeter of the fence line, halfway south on Lincoln from Windsor and Curtis
 - Near by the Student Sustainability Farm (??)
 - Has been there awhile
- Rain Gardens Purpose
 - Ashland Stillwell, Geo Survey Scientist, Margaret
 - Opportunistic vs Wholistic planning
 - Opportunistic = "Maybe this will work"
 - Wholistic = Analyzing and understanding existing soils to see how well a future rain garden will do
 - Trying to predict how well soil will work for a rain garden
 - Barriers in Green Infrastructure
 - Mosquitos

- Economics / Eco Benefits
- Trying to create comprehensive products for communities
- Related to F&S:
 - No funding for gardening (primarily staff), launching campus landscape planning process to justify additional staffing/training
 - Stormwater management (utility fee for pipes, not utility fees or rain gardens)
- Related to Adam:
 - Related to solar farm project (sites that do not need to have pollinator habitats in order to operate, but can have additional and related benefits from them)
 - Collaborators in Iowa for _____ strips for soil erosion and reducing run off (including better more diverse pollinator habitats, there are more benefits than ONLY using tall grasses, and there is a marginal cost difference)
 - Ongoing Research with Students (Question from Morgan):
 - Similar project with Solar Stuff
 - Trouble having enough independent sites to make conclusions
 - Trouble having control sites to compare them too
 - Mowed
 - Detention areas
 - IDEA: Research project working with a ____ coordinator that can do sampling at certain times and in a thoughtful way to collect "real data"
 - Real research project not just a demonstration
 - o Community Science
 - Connecting it with BeeBlitz/BeeSpotter would be a great idea
 - ICAP Take Aways
 - Resilience
 - Champaign & Urbana do not communicate well about rain water
 - Using Green Infrastructure as a community wide initiative for benefits
- Arboretum
 - \circ $\ \$ RORG is related/working with the Arboretum
 - Eliana was a "stakeholder" (??)
 - Layne and Eliana would like to work to create more Green Infrastructure
 - Brent Lewis at F&S that works with them too
 - in charge of Tree Campus community
 - Plans will finalize conceptual design and funding is there
 - Plans have been at the high-level, not specific down to the detail of which plantings will be included
 - Recycling bins
- Dr. May Berenbaum
 - Pollinatarium
 - Worked with master gardeners, landscapers, etc.
 - BeeBlitz was held recently
 - Red Bison team has done a renovation there Demonstration sites have been slightly abandoned, but the new focus is between the Red Bison land and the Pollinatarium

- New sign by the prairie on Florida-Orchard (Bee Campus USA)
 - Primarily about being a bee campus
- Insectocology Class Lincoln did his sampling at the Pollinatarium
- What can we do?
 - Map of green infrastructure updated
 - Reach out to the storm water partnership
 - Used to have a google map (on the iCAP Portal)
 - Started by Eliana Brown and Dr. Fulton 12 years ago
 - Idea of doing a BioBlitz
 - Faculty members interested in helping get this set up?
 - At the last BeeBlitz, they asked for expert _____ in identifying other species than honey & bumble bees.
 - Depends on the goal. Are you trying to identify different species or another goal?
 - Xerces Society has a protocol where they have a checklist system where you do a set distance radius and you track how many you see (and what species)
 - o Some collaborators on the Solar project is doing this
 - A lot of data out there for using this protocol approach (from Xerces)
 - o "Quantity is its own quality" -Adam
 - "2 people spend X amount of time going Y distance"
 - Could be done across different sites, or multiple times in one site in a single day
 - Could have a 30 min 1 hour long training session that would teach people what they need to know in order to do it
 - Where would the results go or be used?
 - Advantage of BeeSpotter is that it's a repository (based off of photos, not check boxes)
 - Collection of standardized photos for AI training
 - Michael! The tech supporter for all things 😇
 - Need a programmer and need an identifier (or someone who can organize the data)
 - Across Midwest and into Minnesota is using this protocol, they are not experts which is why they're using it
 - Strength: If you can't take a picture of a bumblebee or another pollinator flying, you can at least tally it.
 - If there was funding, are there any groups interested in taking this on a project?
 - Students may want money, but they also need a certain skill set.
 - Skill set needed for BeeSpotter
 - Entomology 468 course is enough skill needed for the Xerces protocol
 - Is this something that will be valuable to stakeholders making decisions for rain gardens?
 - Is it worth writing & applying to grants for this stuff?

- Aid them in implementing a specific thing
- To give to mayors to make decisions in rain garden use
- Balance between maintenance person taking care of a 3 to 5 species rain garden
 - Depends on resources available to take care of the rain garden, too many species is hard to take care of
 - Balance maintenance and biodiversity What is the happy medium?
 - As RORG volunteers became more knowledgeable, the number of species grew as well. (Garden grew with the volunteers)
 - IPollinator?
- Suspect that there will be a lot of grad student interest (May and Adam have both experienced a larger demand from students who want training in landscape/conservation efforts/biodiversity maintenance/etc.)
 - Adam: Millers Lab students work in similar projects
- Classes
 - Eliana would love to interact with any classes
 - May taught entomology, wanted to teach in person but needed to meet COVID-19 restrictions & setbacks
 - o Lincoln helped
 - List of classes for pollinator focused courses
 - o IB 105 Env Biology
 - IB 335 Systematics of Plant
 - o IB 329 Animal Behavior
 - IB 444 Insect Ecology
 - IB 451 Conservation Biology
 - IB 526 Seminar in Entomology (rotates among faculty)
 - IB 468 Class and _____ of Insects (will be this fall)
 - Adam has ~3 students that want to collect pollinators
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- Primary Barriers
 - Funding
 - Training
 - NOT Interest
- NEXT ACTION ITEMS:
 - Layne and Eliana will follow up with Adam for 468 students
 - Pause a bit, think a bit, and discuss a next meeting
 - o If something else comes to mind, reach out to Eliana or Morgan
 - Touchbase in approx. 6 months (January)