

Bee City USA - Annapolis

Report on 2022

Pollinator Habitat Creation & Enhancement

The City also spent most of 2022 investigating installing pollinator gardens around the solar arrays at the Annapolis Solar Park. Please see the following information gathered.

1. Pollinator Garden Around Solar Arrays at Annapolis Solar Park: The City of Annapolis has approached Novis Renewables (the company operating the solar park) to gain their approval for the project and to see if they are willing to help with the costs involved.

- Usually when planting around solar arrays, up to 60% of the area would be planted with pollinator-friendly garden.
- o The estimate for the Annapolis Solar Park is approximately 48 acres will need to be planted (60% of 80 acres = 48 acres). The whole solar park is 80 acres and panels take up most of the park, so it is unclear how many total acres will be planted, but we are estimating at least 40 acres.
- Suggests planting meadow plants. These plants attract bees (bumble bees, solitary bees, honey bees), butterflies, and beetles. No mosquitos are attracted in addition to these beneficial insects.
- The seed mixes can greatly affect the overall cost of a pollinator garden as some seeds are very expensive.
- Can plant all native plants. Some plants will also attract different types of birds.
- It was suggested to plant annual rye and barley, which will help with stabilization; it also helps maintain the soil; and it will provide cover while the pollinator garden gets established.
- In addition to rye and barley, it was also suggested to plant clover.
- Pollinator garden.
 - o First year – sleeps – seeds establish root systems
 - o Second year – creeps – will get some flowers, but seeds still establishing roots
 - o Third year – leaps – flowers are established
- Maintenance will include spot-checking for invasives (April) – may also need to spot seed.
- o Mow once a year in winter
- Suggest putting up educational signage.

2. Organic Approach:

- Instead of burning off the grass, leave existing grass and put down seeds on top – will get approximately 25% pollinator garden to grass.
- Mow, aerate, and apply seeds in either March or September – repeat for three years (once yearly) – it will take approximately 3 years for the pollinator garden to establish itself.
- o The percentage of pollinator garden to grass will increase each year for the 3 years it will take for it to establish itself.
- Maintenance
 - o Will need 4 man-hours/acre, per year for spot-checking for invasives and volunteer trees (for 40 acres, this would be a total of 160 man-hours) – included in the cost estimate.
 - o Once yearly, or
 - o Mowing once a year will help keep trees out.
 - o If there are woody invasives, it will be necessary to manually remove these plants, which would involve paying for labor to do this.
 - o Check for invasives in April of each year
 - Once gardens are installed, the solar park can try to be certified through the State using the Maryland Department of Natural Resource's Pollinator Habitat Planning and Assessment Scorecard
 - Cost Estimate for 40 acres \$350,000 – \$400,000 (total for 3 years while the pollinator garden establishes itself) Total overall \$350,000 – \$400,000

3. Chemical Approach:

- Suggests using chemicals containing glyphosate to burn off the grass and prepare the site for planting. Can use a non-glyphosate chemical with less harmful effects, but those non-glyphosate chemicals don't work as well as glyphosate. Plant after one year of application of chemicals.
- Need one year of site prep – Spray in April, July, and September (spot treatments), then plant next year in April.
- May be able to get technical assistance from U.S. Fish and Wildlife Service.
- Once gardens are installed, the solar park can try to be certified through the State using the DNR's Pollinator Habitat Planning and Assessment Scorecard
- Cost Estimate For 40 Acres::

Seed costs: \$16,000 (may be able to get donated)+ Herbicide to prep for planting \$35,000 – \$45,000 + Seeding \$20,000 = Total overall \$80,000 – \$100,000 (first year – then annual mowing and spot treatments) • Maintenance o Spot-checking for invasives each spring (April) – may also need to spot-seed o Will use an herbicide to spot-treat – herbicide will be glyphosate or something similar o Mow once a year in winter – mowing once a year will help keep trees out and will allow for spot treatment of invasives. • Once gardens are installed, the solar park can try to be certified through the State using the Maryland Department of Natural Resource’s Pollinator Habitat Planning and Assessment Scorecard

How many volunteers helped with those projects?

136

Please check all that describe the habitats your affiliate helped to create or enhance last year with pollinator benefit in mind.

- Vegetable garden
- Meadow
- Pollinator-friendly lawn (with flowering clover, dandelions...)
- Other



Solar panels at Annapolis Solar Park. The grassy area around the panels could be turned into a pollinator garden.



Annapolis Solar Park. The City of Annapolis is researching installing a pollinator garden in green areas around the solar park.

Education & Outreach

- GreenScape is a volunteer effort that encourages individuals and organizations to plant and maintain flower and vegetable gardens in public spaces throughout the City of Annapolis. In the GreenScape initiative, the City provides plant materials, mulch, trash bags, and gloves. Then community members of all ages volunteer to plant, clean up and make a difference in the town where they live, work and recreate. In April and October of 2022, we included the attached flyer in the materials provided to participants. We also handed out seed packets for Black-Eyed Susan (the state flower).

How many pollinator-related events did your affiliate host or help with last year (in total)?

2

How many people attended those events (in total)?

136

Did your city council/county commission (highest elected body) issue a proclamation for National Pollinator Week last summer?

Please note: this is now an optional activity.

- No

Policies & Practices

What actions have you taken to make pest management practices more pollinator-friendly?

- Implemented or maintained a written IPM plan

Are efforts underway in your community to further reduce pesticide use in residential or business areas? This may include neighborhood-led efforts, outreach to landscapers, etc. If so, please describe.

In your city or campus, are any policy initiatives underway to further protect pollinators, people or waterways from pesticides?

Please describe actions by your affiliate to attend training on ecologically-based Integrated Pest Management and/or to review IPM plans and programs considered of high quality by Bee City USA?

Integrated Pest Management Plan: [IPM Policy.docx](#)

Recommended Native Plant List:

Recommended Native Plant Supplier List:

[Learn More](#)