# Pollinator Habitat on a Tight Budget

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### **NASA Langley Research Center**

1894

683

- Located in Hampton, VA
- 764 acres near the Chesapeake Bay
- ~3,500 employees
- NASA's first Center and oldest property. Just celebrated 100 years of operation.





### Pollinator Habitat Reality for Many Federal Agencies

Most Natural Resource mangers want to increase pollinator habitat. In a world of shrinking budgets and competition for land resources, it simply doesn't become a funding priority.

This means we have to get creative to increase pollinator habitats and plan ahead.



### Quick summary of project:

- In 2011, LaRC created a historical garden (20'x20') featuring native plants including milkweed varieties. Unfortunately, the nearby building was being demolished in 2017 and the garden was not being maintained.
- The Environmental Branch wanted to save the extensive beds of milkweed/other key plants, and began outreach. A group of 6 volunteers formed.
- A new pollinator bed location was selected and a 30'x30' area was prepared. The milkweed and other pollinator plants were transplanted in 2017 prior to demolition in the area.
  - Paver bricks, a bird bath and other items were also salvaged and moved to the new bed.
- In 2018, the pollinator bed was completed with more plants, topsoil, mulch, and edge fencing all done by volunteers.

### Challenges

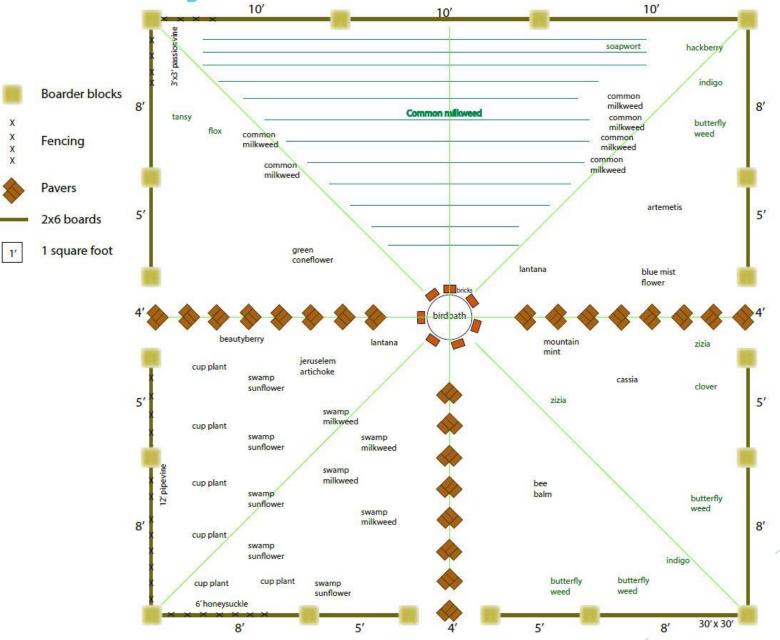
- Old garden was overgrown and needed to be weeded before plants could be transplanted, just so we could access the 'good' plants
- Carefully relocating plants across the Center plants had to be potted, then replanted in the cooler season
- Heavy workload for 6 volunteers





Old pollinator garden before weeding

### Waystation Layout - 30'x30'



### **Topsoil and Planting**













### 'Bee' Thankful for Volunteers







### Successes

Milkweed transplant success rate was about 90%.

- Key to transplanting milkweed was careful digging of the roots with a trench technique
- Increased pollinator garden size by 500 feet!
- No more overcrowding New garden has plenty of space for future growth.
- New garden is located near the LaRC community garden and will increase pollination for other plants
- Plants at old garden were too dense and overgrown. We potted several plants and gave them away to 50+ LaRC personnel who were interested in pollinator habitats.
- Being certified as Waystation through Monarch Watch.



### **Cost Breakdown**

- Clearing the 30'x 30' plot, roughening surface, remove Bermuda = \$239.25
- Milkweed transplant = Free (volunteer)
- Deliver topsoil and mulch = \$210.00
  - Spreading labor was free. Grounds contractor let us borrow hand tools.
- Adding additional pollinator plants = Free (brought in from home gardens from volunteers)
- Edge fencing = \$104.50
- Monarch Way Station Certification and Sign = \$40.95

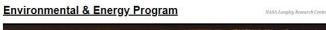
Total Cost for New Garden = \$594.70

Countless volunteer hours and new 900 sq ft. bed for pollinators = PRICELESS!

## Keys to Low Budget Program

- Effective environmental outreach before you ask for volunteers. Create excitement first!!
  - Recurring blog page
  - Months before we wanted volunteers for this action we:
    - Ran articles on wildlife, monarchs, environmental benefits of pollinators, native plants
    - Held a bee keeping lunch and learn
    - Held a tour to a local learning garden
  - Earth Day and Arbor Day events/activities
  - Environmental trainings
  - Allows you to identify some potential volunteers







Ater Quality Management Energy Program Contacts Blog

### Category Archives: Nature

### \*\*\*DO NOT FEED WILDLIFE ON CENTER\*\*\*

on June 21, 2018 by pvandyke

\*\*\*DO NOT FEED WILDLIFE ON CENTER\*\*\* For many of us it's human nature to want to help animals. Feeding wildlife can seem like the right thing to do, especially if an animal is young, alone, or possibly injured. The truth is ... <u>Continue reading →</u>

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Lunch and Learn: Beekeeping

ed on March 30, 2018 by Ande Reminipton

Please join us in the NACA Room (IESE, B2102) on Monday, April 9 from 12pm-1pm for a lunch and learn opportunity in recognition of Earth Day! LaRC's own Scott Bartram will be presenting on beekeping. The presentation will begin at ... <u>Continue reading ---</u> Postein In Series, Nature I Comments Off

EVEN, MALLEY COMMERTS ON

### All Earth Day and Arbor Day 2018 Events at LaRC

Posted on March 27, 2018 by Ande Remington

NASA Langley has many events planned for this year's Earth Day and Arbor Day celebrations! Earth Day is an annual event, celebrated worldwide on April 22, where events are held to demonstrate support for environmental protection. Arbor Day is observed each...<u>Continue reading --i</u>

Posted in Energy Conservation, Event, Nature, Waste, Water Quality | Comments Of

### New! Education on LaRC's Wildlife

Posted on February 20, 2018 by Ande Remington

LaRC has a wide variety of wildlife, including birds, mammals, native plants, and more. Now, you can meet some of LaRC's wildlife stars! To learn more about LaRC's wildlife, the Environmental Office will be publishing one-page fact sheets that provide ... <u>Continue</u> reading \_\_\_\_\_

Posted in <u>Nature</u> | Tagged <u>animals\_deer, education, environment, environmental, fun fact, mammal, nature, natural, outreach, resources, wildlife | Comments Off</u>

### Clean the Bay Day 2017

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### **Keys to Low Budget Program**

- Federal mindset is usually large scale. We tend to do big actions, but small actions are ok.
  - Every bit of small pollinator habitat helps.
- Reward your volunteers.
  - Run a story on your internal website
  - Environmental Stewardship awards given out by senior leadership
- Other ways to help on a tight budget:
  - Limit use of pesticides on your property
  - Adjust mowing schedules, designate no-mow areas
  - Provide continuous outreach and education throughout year

### Keys to Low Budget Program

Integrated Natural Resource Management Planning

- Have small pollinator projects planned and ready to go, so if money opens up you can quickly execute
- Don't forget about the trees.

If you are a federal property, look into funding from the sale of recyclables. That money can typically only be spent on pollution prevention and environmental-related activities. May be a source of funding for pollinator projects.

### Monarchs have moved in!



### Zebra Swallowtails!



### **BEES!**



