Pollinator Habitat on a Tight Budget

NASA Langley Research Center
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NASA Langley Research Center

- 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 managers 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
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
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!