Imperiled Butterfly Conservation & Management

Program Overview: Professional training program designed to strengthen the capacity of institutions and their staff to play a strategic role in the emergent and increasingly important field of insect conservation biology, with a targeted focus on imperiled butterfly recovery.

Objectives:

1) improve staff practices through technical training, resources, and mentoring

2) promote broader information resource exchange between professionals and institutions

3) foster increased interaction and collaboration among professionals and institutions

4) strengthen institutional ability to develop new or improve existing butterfly conservation programs.

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- Initiate new and expand/strengthen existing projects
    - Research
    - Education and outreach
    - Captive breeding
    - Monitoring
    - Citizen science
- Develop new partnerships with state and federal wildlife agencies
- Publish existing case studies and program data
    - Journal of Insect Conservation

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New Proposal

This three year research project will generate critical information for the effective population management of multiple imperiled butterfly species, including several currently in captive breeding programs at institutions served by the IMLS.

The specific objectives of the project are to:

1) Analyze the genetic diversity and population structure of six imperiled butterfly species;

2) Screen existing populations for the presence of *Wolbachia* infection; and

3) Develop conservation recommendations based on the research findings.

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In meeting these objectives, the project will allow us to address the following critical <u>research questions</u>:

- What is the current genetic diversity within and genetic differentiation between extant populations, and how are these levels impacted by population size, spatial fragmentation and management actions?

- To what extent have existing captive populations effectively captured the available genetic variation present in the founder populations?

- Is *Wolbachia* infection present in sampled populations?

- To what extent do captive populations pose the risk of reducing the effective population size of extant populations via introduction of *Wolbachia*?

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Where do we go from here?

What is the next step?

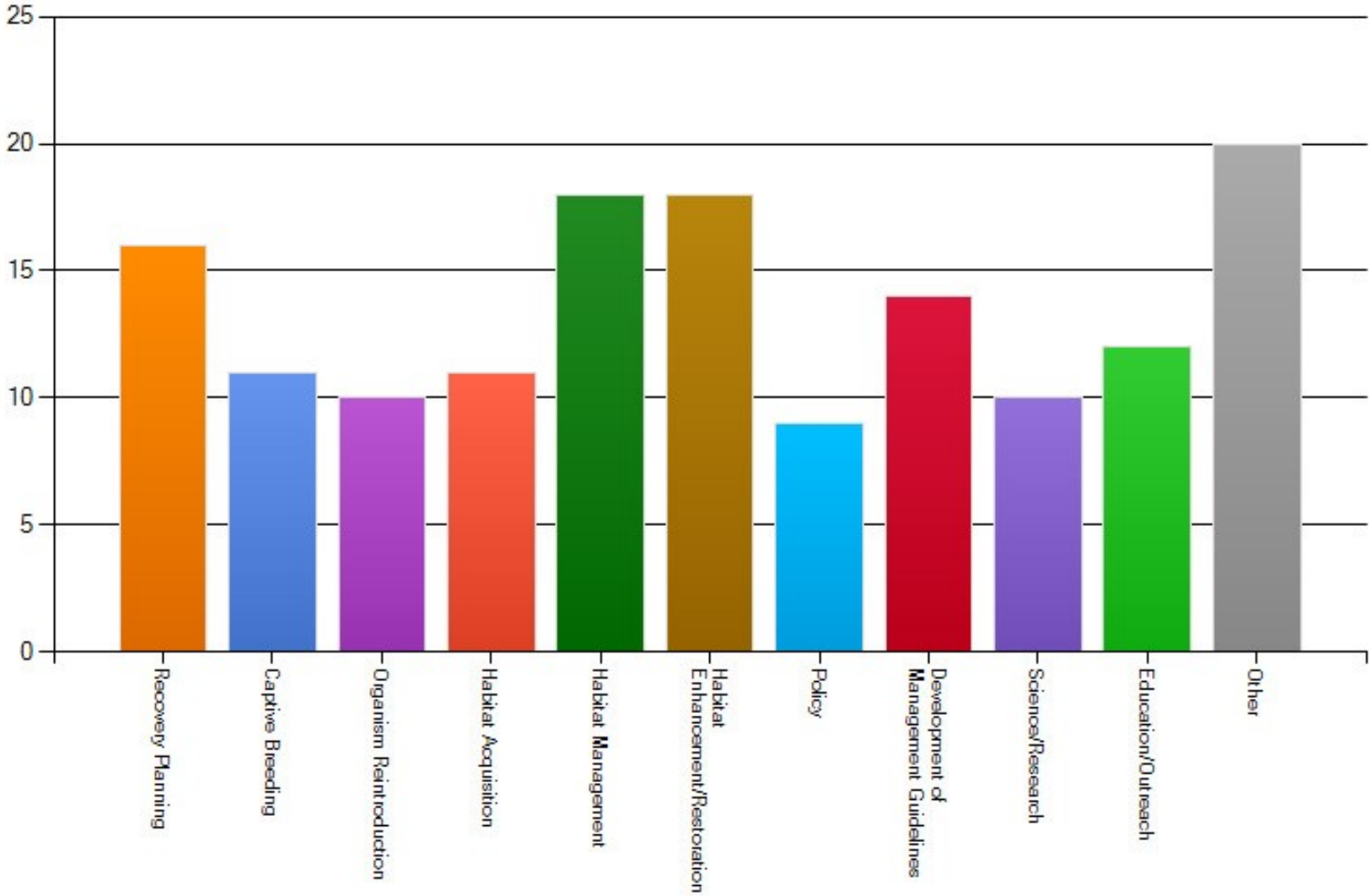
Want to go back to IMLS in 2011 with phase 2

Want to present professional development program at FWS national training center

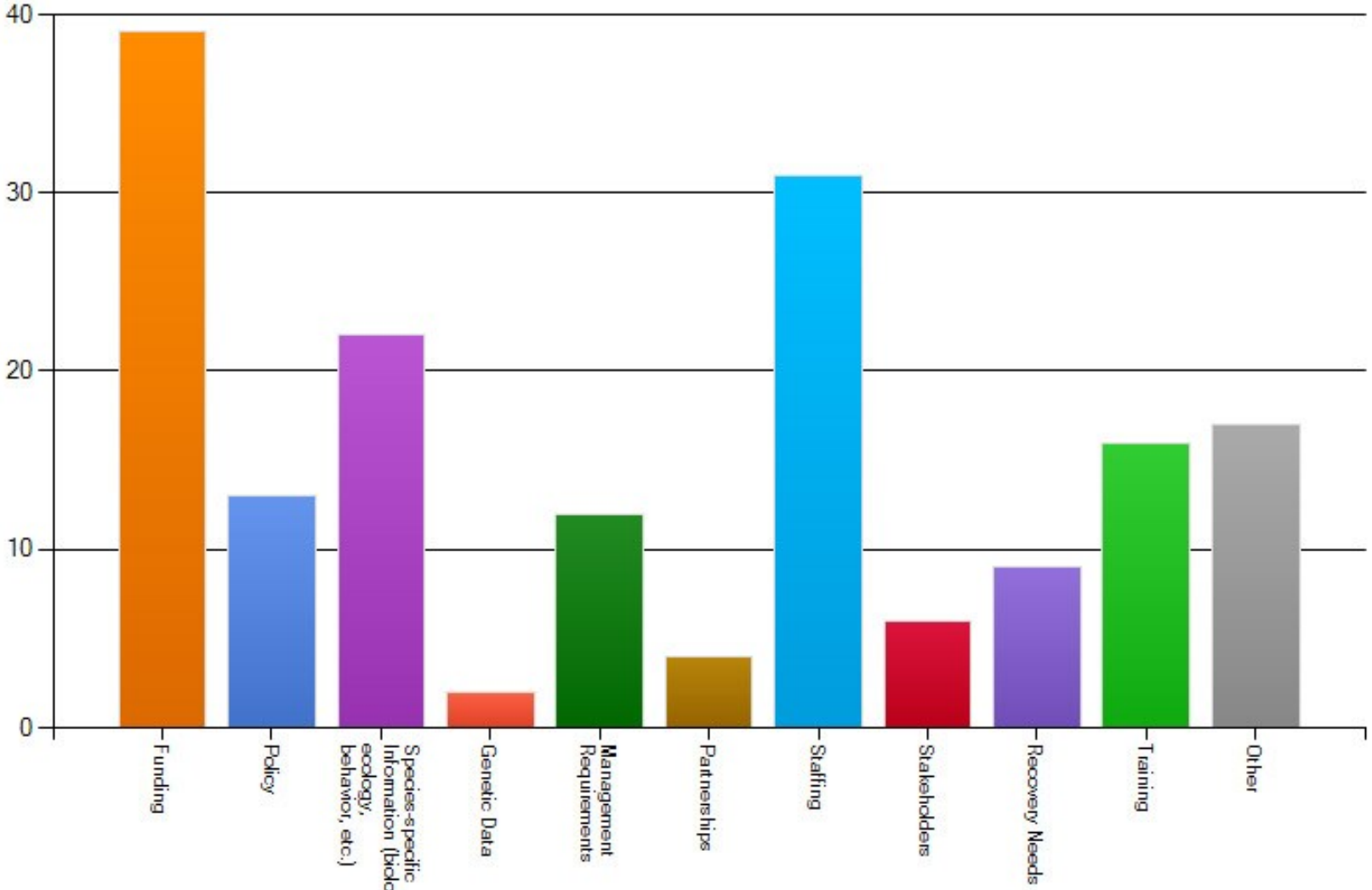
Move to expand partnerships with other stat and federal agencies

Created national survey

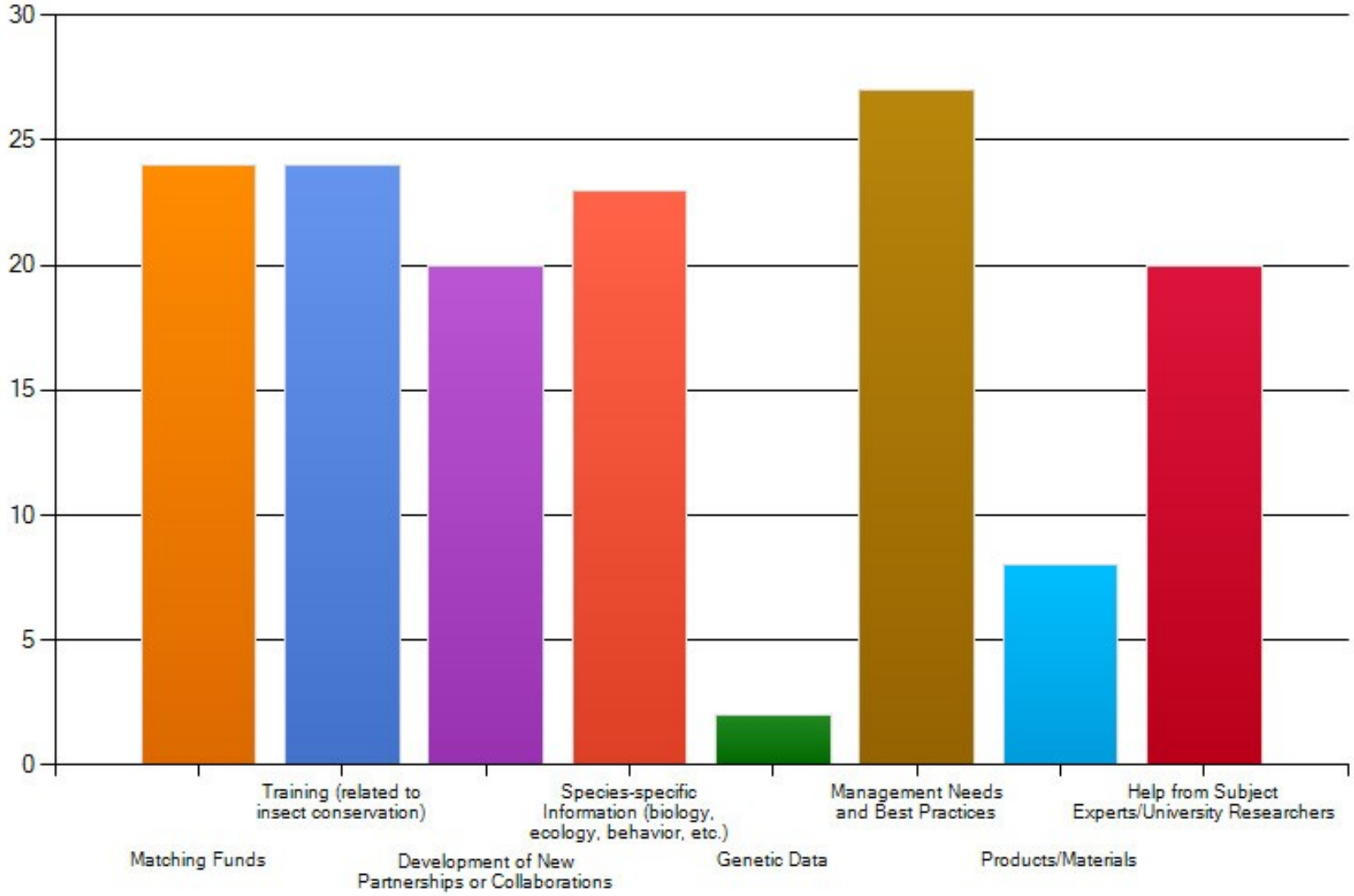
If your office is actively coordinating conservation efforts for any imperiled butterflies, what are the primary program components involved?
Please select all that are appropriate.



What are your primary limitations for advancing imperiled butterfly or native pollinator conservation efforts? Please select all that are appropriate.



What resources would be most useful to help overcome these limitations? Please select all that are appropriate.



With which partners does your agency work? Please select all that are appropriate.