



# **Community Science for Biodiversity Monitoring**

The Electronic Field Guide (EFG) Project

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# Goals of the EFG Project

- Allow a wide range of people to easily identify species
- Provide facility to share information in public databases



# EFG Focus on Software

- Build tools for biologists to make their own guides
- Taxon independent
- XML, Java middleware, ObjectStore database



# Develop Capacity to Work With Communities

- Develop relationships – Gain experience
- Use current digital technologies
  - Digital cameras
  - Color Inkjet Printers
  - GPS units
  - Simple web-enabled databases



# Project Focus

- Phenology Monitoring of Dandelions – Global Climate Change
- Mapping of Invasive Plant Species
- Biodiversity Monitoring



# Community Partners



- Elementary Schools
- Massachusetts Audubon Society
- Field Naturalists
- UMass Boston - Biology Department
- Harvard - Museum of Comparative Zoology
- State of Massachusetts - Executive Office of Environmental Affairs



# Lessons Learned



- Technology is up to the task
- People are enthusiastic
- Community building takes more effort and time that originally envisioned- Need partners
- Community can get data unattainable by scientists; K-12 classes can do real Science
- Scientists are skeptical of Community Science –  
Need Metadata