The Insect Zoo at Michigan State University's Bug House

Bernice Bacon DeMarco
Gary Parsons
• Introduction to the Bug House
• Displays
• Live arthropods
• Care and feeding of arthropods
• Permit issues
• Value to educators and students
What is the Bug House?

• Opened 1998 as an Outreach Facility
• Bernice DeMarco, Gary Parsons
  – Co-coordinators
• Student workers and volunteers
• Office Staff
Bug House Facility
Bug House Outreach

- Tour guides (students and staff)
- 130 Tours per year
  ~ 4500 school children
- 40 Open Houses and other events
  ~ 5000 visitors from the general public
Preschool Tour

• They just want to have fun!
• Talk about colors, numbers.
• Let them hold the bugs!
Grade School Tours

• Introduction to Arthropods & Insects
• Characteristics of Insects
• Different Types of Insects
• Metamorphosis
Middle & High School

- Biology Classes
- Writing Classes
- Scavenger Hunt

College Students

- Introductory biology courses
  ~ 1000 students per year
- Art Classes and writing classes
Open Houses

- Open Houses
  - School year: One Monday night / month
  - Summer: One Saturday / month
  - Holiday Open Houses
    - Halloween
    - Christmas
Special Events

- Be a Tourist in Your Own Town
- MSU Science Festival
- Darwin Discovery Days
- Grandparents University
- 4-H Children’s Garden Bug Day
- Tollgate Fair
- Local School Science Fairs
Bug House on the Road!
3 main body parts: thorax, abdomen, head

- 2 antennae
- 2 compound eyes
- mouthparts
- 6 legs
- 4 wings
- 3 spiracles
- 4 parts of the head
- 3 parts of the thorax
- 1 part of the abdomen
Displays

• Arthropod Diversity
Displays

- Insect Orders
Displays

• Michigan Insects
Displays

- Camouflage
- Mimicry
- Defense
Displays

- Metamorphosis
- Immatures
Displays

- Insects in the News
  - Student project for credit
Live Arthropods

- Cockroaches
- Beetles
- Walking Sticks
- Assassin Bugs
- Crickets (feeders)
- Butterflies
- Honey Bees
- Tarantulas
- Scorpions
- Vinegaroon
- Millipedes
- Centipede
Housing and Feeding

- Glass Aquariums
- Labels and “Names”
- Coconut Fiber Bedding
- Decorations
- Water and Food Dishes

- Food
- Routine Cleaning of Cages
- Thinning and Disposal
Cockroaches & Beetles
Assassin Bugs & Walking Sticks
Butterflies & Honey Bees
Tarantulas
Vinegaroon and Scorpions
Centipede and Millipedes
Permit Issues

• USDA – APHIS requires permits for certain insects and arthropods
  – Plant feeders
  – Foreign species

• Local and State agencies may also have permit requirements

• Quarantine Facilities
Value to Educators and Students

• STEM requirements
• Teachers can include insects in curriculum
• General public education
• Overcoming fear and loathing of insects and other arthropods
• Students workers and volunteers
  – Experience in outreach
Detroit Achievement Academy
How we survive!

• Current funding
  – Tours and events: $50/hour
  – Endowment
  – Donations

• Volunteers
The End