

#### **Benefits of Butterflies & Butterfly Gardening**

Butterflies are beneficial insects that serve as pollinators

- Beautiful
- Charismatic
- Inspiring
- Culturally important
- Butterfly gardening is a way to attract & help these insects and many others

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2



4





3



5

wisconsinbutterflies.org







# **Resource: Caterpillars of Eastern N. America**

- David Wagner
- Information on hundreds of caterpillar species in eastern North America
- Info on appearance, biology, phenology, host plants
- Has a host plant index











8

# The Monarch (Danaus plexippus)

- Nymphalid butterfly
- Associated with milkweed
- Migratory species
- Multiple generations / year





9





10

# Milkweed: Essential for Monarchs

- Female monarchs only lay eggs on milkweed (Asclepias spp.)
  Adults will take nectar from a wide variety of plants
- Serves as food source for caterpillars
   Provide chemical defenses





### What do Adult Monarchs Need?

- Fuel!
- Will go to milkweed flowers, but also a wide range of other plants to get nectar











- 2. Monarchs go extinct; listing no longer needed
- 3. Monarchs "hang on" & "wait in line"; are listed as endangered

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15





14

# Key Tips for Butterfly Gardening: <u>Have goals</u>—be aware of what you're trying to achieve 1. Create habitat for the species you're hoping to attract A. Larval host plants B. Nectar plants Other resources 2. Reduce/eliminate pesticide use In your yard, garden, and beyond •

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#### 16





19



21



20

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# What Plants Should You Use?

- No single "best" answer—think about your unique situation
- 1. Want caterpillars? Need correct host plant
  - <u>Host-plant lists</u> can be especially helpful in this regard
- 2. Diversity is key!
  - Adult butterflies often visit a range of flowers
  - Can also be attracted by other resources

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## What Plants Should You Use?

- 3. Chose plants appropriate for your unique situation
  - Right plant right spot!
- 4. Think about blooming times
  - Diversity of blooming times helps butterflies throughout season
  - For migrating monarchs, nectar in late summer & fall is especially important
- 5. Go native!
  - Native insects are adapted for native flowers
  - Avoid "double flowers"; these often have limited floral resources

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25



27



# So Many Milkweeds!

• Over 100 species native to North America; 12 in Wisconsin



26



28

# **Constructing Your Butterfly Garden:**

- Choose a sunny, protected spot
- Prepare site (remove turf, weeds, groundcover, etc.)
- Choose appropriate plants for your site
- Grow from seed or plugs—make sure they haven't been treated
- Follow good growing practices:
  - H<sub>2</sub>O, spacing, mulching, weed control, etc.

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31

# Rearing

- Natural mortality can be high for caterpillars
- Rearing can may a consideration for those hoping to maximize the chances of getting an adult butterfly
- Be realistic though! Rearing can take a lot of effort.
- Consider <u>who</u> benefits from rearing



32



# **Reducing/Eliminating Pesticides**

- 1. Avoid pesticides if possible
  - Insecticides, herbicides, etc.
- 2. Consider non-chemical management approaches for pests Physical barriers, hand-picking, mulching, etc.
- 3. Use pesticides only when absolutely needed
  - Choose products with reduced toxicity & short persistence
  - · Read the pesticide label; follow all directions
  - Minimize drift & be aware of nearby plants
  - Avoid applying pesticides to flowering plants

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Use extreme caution with any systemic product

To consider: your own yard/garden, neighborhood, parks, etc.

34







37

# Avoid Mosquito Treatments:

- Mosquito yard treatments typically use <u>synthetic pyrethroids</u>
   Broad-spectrum insecticides that can last for several weeks
  - "Greenwashing"
- Oberhauser (2006) study found harm to monarch caterpillars, even several weeks after treatments



38



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40

39