

Pollinators and Your Garden

DERALD A HARP

Pollinators

- Insects, birds, and other animals that move pollen from one flower to another
- Pollination results in fruit formation
 - Apples
 - Pears
 - Peaches
 - Melon
 - Almonds
 - Many others!
- One of every 3 bites of food is the result of a pollinator



Common Pollinators



- Bees
- Butterflies and moths
- Birds and bats
- Beetles
- Direct
 - Collects and carries pollen
 - Eaten directly or carried to home
- Indirect
 - Feeds on nectar
 - Collects pollen accidentally

Bees

- Over 4,000 species around the world
- Direct pollinators, feed on both nectar and pollen
- Honeybees
 - Eight different species
 - *Apis mellifera* imported from Europe
 - Most important pollinator for food crops
- Bumblebees
 - Over 250 different species, 9 common in Texas
 - *Bombus pennsylvanicus* American Bumblebee considered threatened
- Other bees
 - Carpenter bees
 - Sweat bees
 - Leaf cutter bees



Butterflies and Moths



- More than 500 different species found in Texas
- Butterflies fold wings vertically over body and wings are longer than body
- Moths fold wings horizontally and body is longer than wings
- Accidental pollinators
- Carry less pollen than bees, but cover a larger area

Bird Pollinators

- ~2,000 birds feed on nectar or insects in the flowers
- Hummingbirds
- Wrens (Cactus wren)
- Tendency toward specialization
 - Recurved petals
 - Deep nectaries
 - Little to no fragrance



Plants to Attract Pollinators



- Brightly colored flowers
 - Broad range of colors for butterflies
 - Reds, yellows, oranges for hummingbirds
 - Bees do not select flowers by color
- Fragrant flowers (though not always pleasant)
- Heavy nectar production
- Ample pollen production

Trees for Pollinators

- Fruit trees
 - Apple
 - Pear
 - Peach
 - Plum
- Red bud
- Crepe myrtle
- Southern Magnolia
- Vitex
- Almost exclusively bees



Crepe Myrtle



- Special mention
- Excellent food source for honeybees in summer
- Be careful with insecticides
- Insecticide can move into pollen
- Collected pollen returned to hive and potentially lethal to young bees

Shrubs for Pollinators

- Texas Mountain Laurel (honeybees and other bees)
- Elaeagnus (honeybees, flowers in fall)
- Rose (all seasons except winter, bees)
- Rosemary (bees)
- Abelia (Butterflies and moths)



Perennials for Pollinators



- Primary source of pollen and nectar for pollinators
- Greatest variety and specialization
- Hundreds to choose from
- Groups tend to perform similarly

Salvias

- Sages
- Wide variety of color
- Wide variety of plant sizes and bloom shapes
- Attract bumblebees and carpenter bees
- Fair for honeybees
- *Salvia guaranitica* good for hummingbirds
- Can also be used as herbs



Salvia guaranitica 'Amistad'



Salvia guaranitica 'Black and Blue'



Salvia farinacea 'Henry / Augusta Duelberg'



Hibiscus



- Tropical Hibiscus
- Rose of Sharon
- Hardy Hibiscus
- Texas Star Hibiscus
- Turk's Cap
- Hummingbirds, Butterflies, and Bumblebees

Hibiscus rosa-sinensis



Hibiscus syriacus



Hibiscus moscheutos



Hibiscus coccineus



Malvaviscus arboreus drummondii



Lantana and Verbena

- Several annual and perennial species available
- Wide range of flower colors
- Excellent heat and drought tolerance
- Very good for butterflies
- Common Lantana
- Texas Lantana
- Trailing Lantana
- Verbena



Asters and Relatives



- Purple Coneflower
- Black eyed Susan
- Blue Mist Flower
- Sunflower
- Many others!

Rudbeckia hirta



Conoclinium coelestinum



Helianthus maximiliani



Helianthus annuus



Others!

- Fennel
- Dill
- Carrot
- Phlox



Phlox paniculata 'John Fanick'



Preparing Your Garden



- Bed prep!
- 3 inches of compost, tilled in
- 3 inches of mulch
- Irrigate as needed
- Do NOT use pesticides of any type
- Do NOT add synthetic fertilizers
- Allow mulch to break down, and replace as needed
- Enjoy!

Questions?

