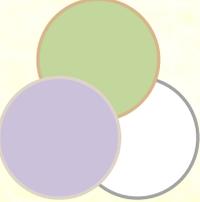
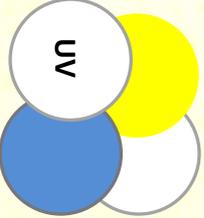
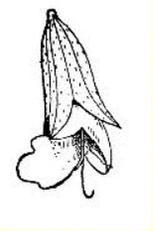
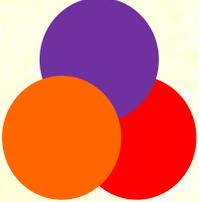
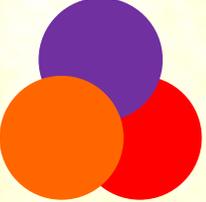


## POLLINATION SYNDROME TABLE

POLLINATOR	FLOWER CHARACTERISTICS						
	COLOR	SHAPE	ODOR	BLOOM TIME	NECTAR GUIDES	POLLEN	
<p><b>BAT</b></p> 		 <p>Funnel or bowl shaped</p>	<p>Strong, musty, fruity</p>		<p>None</p>	<p>Ample</p>	
<p><b>BEE</b></p> 		 <p>Closed lip with horizontal landing platform</p>	<p>Fresh, mild, pleasant</p>			<p>Limited; often sticky, scented</p>	
<p><b>BUTTERFLY</b></p> 		 <p>Composite with long, narrow tubes and landing platform</p>	<p>Faint but fresh</p>			<p>Limited</p>	
<p><b>HUMMINGBIRD</b></p> 		 <p>Tubular, hangs downward or sideways</p>	<p>None</p>		<p>None</p>	<p>Limited</p>	

## BATS



Saguaro



Agave

### Pollinator Characteristics:

- Color vision in white, green, purple range
- Good sense of smell, especially strong fragrances
- Large tongue to suck up hidden nectar
- Hairy head and body
- Good flyer
- Active during the night

### Flower Characteristics:

COLOR	SHAPE	ODOR	BLOOM TIME	NECTAR GUIDES	POLLEN
White or pale green	Funnel or bowl shaped, high above ground	Strong, musty, fruity	Nighttime	None	Ample

**Pollinated plants in Tohono Chul:** Saguaro, Organ Pipe, Agave

## BEES



Desert Willow



Prickly Pear



Mexican Sunflower



Salvia

### Pollinator Characteristics:

- Large, compound eyes
- Good color vision in ultra-violet (UV), yellow, blue and green range
- Good sense of smell
- “Pack” pollen on hairy underside and between hairy legs to carry it back to nests to feed larvae
- Active during the day

### Flower Characteristics:

COLOR	SHAPE	ODOR	BLOOM TIME	NECTAR GUIDES	POLLEN
Bright white, yellow, blue or UV	Closed lip with horizontal landing platform	Fresh, mild, pleasant	Daytime	Present	Limited; often sticky, scented

### Pollinated plants in Tohono Chul:

- Carpenter bees: Desert Senna, Ocotillo (cheating), Squash, Tomatoes
- Bumblebees: Desert Senna, Squash, Sunflowers, Tomatoes
- Cactus bees: Prickly Pear and Cholla cacti, Globe Mallow, and Sunflowers
- Digger bees: Palo Verde and Ironwood trees

## BUTTERFLIES



Mexican Sunflower



Lantana



Milkweed



Butterfly Mist  
Argeratum

### Pollinator Characteristics:

- Large, compound eyes
- Good color vision in red, green, yellow range
- Weak sense of smell
- Long, slender tube-like mouth
- Hairy mouth, leg, and body
- Active during the day

### Flower Characteristics:

COLOR	SHAPE	ODOR	BLOOM TIME	NECTAR GUIDES	POLLEN
Bright orange, red and yellow	Composite with long, narrow tubes and landing platform	Faint but fresh	Daytime	Present	Limited

### Pollinated plants in Tohono Chul:

- Queens, Monarchs and Painted Ladies: Mexican Sunflower, Lantana, Pineleaf Milkweed, Desert Milkweed, Butterfly Mist, Blue Mist
- Fritillaries: Pineleaf Milkweed, Lantana, Fleabane
- Various Butterflies: Mexican Sunflower, Dogweed, Blackfoot Daisy, Fleabane, Bee Bush, Pineleaf Milkweed, Desert Milkweed, Indigo Bush, Baja Fairyduster, Autumn Sage, Good-ing's Verbena, Butterfly Mist, Blue Mist, Desert Senna

## HUMMINGBIRDS



Penstemon



Honeysuckle



Salvia



Ocotillo

### Pollinator Characteristics:

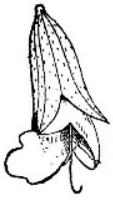
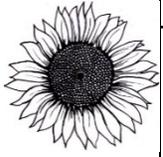
- Good color vision in red and orange range
- Poor sense of smell
- Long, narrow beaks and bristled tongues efficiently remove deeply hidden nectar
- Feathers on head and body
- Ability to hover
- Active during the day

### Flower Characteristics:

COLOR	SHAPE	ODOR	BLOOM TIME	NECTAR GUIDES	POLLEN
Scarlet, orange, red, or white	Tubular that hang downward or sideways	None	Daytime	None	Limited

**Pollinated plants in Tohono Chul:** Ocotillo, Chuparosa, Autumn Sage, Mexican Honeysuckle, Penstemon, Bird of Paradise, Baja Fairyduster, Hesperaloe, Red Justicia, Coral Bean, Columbine, Monkey Flower, Hummingbird Trumpet

# POLLINATION DATA COLLECTION WORKSHEET

		Pollinator			
					
<p><b>1. Visit a flower and try to guess its pollinator.</b></p>					
<p><b>2. Observe a flower and try to guess if the animal is a "Possible Pollinator" or "Visitor".</b></p>					
<p><b>Flower Shape</b></p>  <p>Funnel or bowl shaped</p>	 <p>Bat</p>	 <p>Bee</p>	 <p>Butterfly</p>	 <p>Hummingbird</p>	
 <p>Closed lip with horizontal landing platform</p>					
 <p>Composite with long, narrow tubes and landing platform</p>					
 <p>Tubular that hang downward or sideways</p>					

Place a "P" for Possible Pollinator

Place a "V" for Visitor