

# GREENIE'S CONSERVATION CORNER

**INTERPRETIVE SIGNS:** The signs themselves are made out of old Zoo animal identification signs. With some imagination, you, too, can repurpose discarded objects into many new and exciting things!



**SOLAR PANELS:** These provide clean, renewable energy for our garden and power our water fountain, irrigation drip timers, and the lights in the Earthquake Shack.



**BAT HOUSES:** Bats can thrive in man-made structures. Each night they eat hundreds of insects per hour (including mosquitoes).



**RAIN BARRELS:** Rain collected from the roof of the Earthquake Shack is stored in repurposed food bins and used to water the garden.



**TURBINE:** By harnessing the wind both day and night, this bird- and bat-friendly turbine helps power the Earthquake Shack.

**COMPOSTING BINS:** Built by Eagle Scouts as a project for their troop, our composting bins turn garden and kitchen waste into nutrients that can be put back into the soil.



**BEE HIVE:** These Americanized honey bees help pollinate the Zoo's flowering plants.



**EARTHQUAKE SHACK:** Former housing for refugees from the 1906 earthquake, this historic building is now an interpretive center powered by the sun and wind where you can learn about the past and how you can impact the future.

**FOUNTAIN:** Constructed of an old water trough and animal drinkers, the solar powered fountain is used by birds for bathing and drinking.



**WATER-WISE GARDEN:** To use less water, look for plants that are drought tolerant or California natives.



**FEEDERS FOR WILD BIRDS**



A nice place to sit and enjoy the garden



**RAISED-BED GARDEN:** Built out of reused wood from animal exhibits, the raised-beds are planted with crops for the Zoo's animals.

**CEMENT PLANTERS:** Repurposed garbage cans now grow herbs and flowers, which support plant pollinators and provide food for our animal collection.



**DRIP IRRIGATION:** Powered by the sun, this drip system saves water by delivering water directly to the plants' roots, limiting evaporation.



## Greenie's Harvest - May, 2010

The garden produced 22 pounds of lettuce, 2.82 pounds of kale, and one pound of carrots in its first harvest. Many volunteers helped with the picking and weighing.



Look for these symbols around the garden.

- FOOD
- WATER
- SHELTER
- ENERGY

**RECYCLING CENTER:** These bins, made out of recycled plastic, help the Zoo direct waste materials into reusable products. Please use them!



## DON'T JUST VISIT THE ZOO – EXPLORE IT!

### Greenie's Conservation Corner Naturalist Guide

The Zoo sees many seasonal changes to its plants, wild birds, mammals and insects, making each visit different if you know what to look for. Especially in Greenie's Conservation Corner, you can spend a lot of time on a seasonal scavenger hunt! See if you can find all of these this summer.

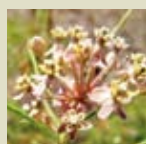
#### PLANTS OF CONSERVATION CORNER

##### SUNFLOWER (*Helianthus annuus*)



These tall plants with their bright yellow pollen-laden centers attract many bees and other beneficial insects and birds.

##### CALIFORNIA MILKWEED (*Asclepias fascicularis*)



This water-wise native plant has very narrow leaves. It is a host plant for the monarch butterfly and the only plant that monarch larvae eat.

##### HUMMINGBIRD SAGE (*Salvia spathacea*)



This plant has flowering spikes with magenta flowers, which are worked heavily by hummingbirds for nectar.

##### CALIFORNIA LILAC (*Ceanothus 'Concha'*)



This California native plant with its brilliant blue/purple spring flowers provides good cover and nesting sites for many California birds and is also a water-wise choice for a garden.

##### LAVENDER (*Lavendula sp.*)



With its small, purple flowering spikes, this aromatic member of the mint family attracts many types of bees for its sweet nectar.

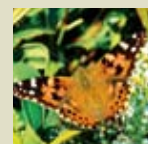
#### BUTTERFLIES AND BUGS OF CONSERVATION CORNER

##### THE SWALLOWTAILS, "ANISE AND WESTERN TIGER" (*Papilio zelicaon* & *Papilio rutulus*)



These large, yellowish butterflies have "tails" that help distinguish them from others. Look for them over the flowers and lawn.

##### PAINTED LADY (*Vanessa cardui*)



Look for the identifying row of eye spots on the underside of the wing of this large butterfly. Like the swallowtails, they are attracted to the nectar in the summer flowers.

##### LADYBIRD BEETLE (*Coccinellidae* family)



More affectionately called the "ladybug," these small, shiny insects are usually red with black spots and are the gardener's friend as they eat plant-destroying insects like aphids.

##### HONEY BEE (*Apis mellifera*)



The European (now known as the western) honey bee was introduced by the early European settlers to America. They are famous for their honey and importance to the food you eat. They can live in man-

made structures as well as trees. There are wild colonies all around the Zoo.

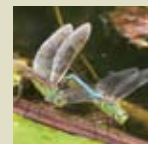
##### SWEAT AND BUMBLE BEE (*Halictidae* & *Bombus* families)



Of the 4,000 species of bee native to the United States, about 1,600 are found in California. Sweat (small and sometimes metallic-looking) and bumble (fuzzy, black and yellow) bees are two good examples of

our local natives. Look for them near the Native Bee House or on the flowers.

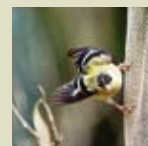
##### DARNER DRAGONFLY (*Aeshnidae* family)



You can tell dragonflies apart from damselflies in the resting phase – dragonflies don't fold their wings. Darners eat other insects and can be seen darting over the grass and resting on the lip of the water fountain.

#### BIRDS OF CONSERVATION CORNER

##### AMERICAN GOLDFINCH (*Spinus tristis*)



This vivid yellow migratory bird is adapted for the consumption of seed heads; its agile feet grip the stems while its conical beak removes the seeds. Look for them hanging on the seed socks.

##### PURPLE AND HOUSE FINCH (*Carpodacus purpureus* & *Carpodacus mexicanus*)



The males of these summer birds have bright red purplish heads but the house finch has brown streaks on the breast. Both love seeds and eat some insects.

##### ANNA'S HUMMINGBIRD (*Calypte anna*)



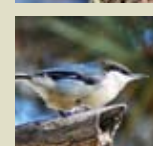
The adult male has an iridescent crimson red crown and throat; and a dark, slightly forked tail. Anna's is the only North American hummingbird species with a red crown. Females and juveniles have a green crown.

Find them perching on the lip of the fountain or zipping about the garden.

##### BROWN CREEPER AND PYGMY NUTHATCH (*Certhia americana* & *Sitta pygmaea*)



Look for these two small brown birds in the tree near the bat houses. Brown creepers have a hooked bill and tend to hop up the trunks looking for insects. The pygmy nuthatch tends to start at the top and hops down the tree looking for insects.



#### Five Things Kids Can Do to Help Pollinators

1. **Be kind to your pollinator friends.** Bugs and birds are small and fragile. Be gentle and quiet when they are near!
2. **Look, but don't touch!** Pollinators won't hurt you if you leave them alone.
3. **Don't use poison sprays.** Poison sprays might kill "bad" bugs in your garden, but they hurt pollinators, too, and non-ORGANIC fruits and vegetables can hurt you, too.
4. **Keep pollinators' homes safe.** Plant a garden for them. And when you find a bug in your house, gently take it outside rather than squishing it.
5. **Bug someone!** Teach your family and friends about these important and fun animals.

#### Greenie's Conservation Corner Opening Day

For the grand opening of Greenie's Conservation Corner, 42 first grade elementary school students from Harvey Milk Civil Rights Academy and 60 third grade students from Fairmount Elementary School helped kick off the celebratory event, along with a beautiful Harris hawk from the Zoo's Animal Resource Center. More than 20 Salesforce.com volunteers helped commemorate the occasion by assisting students with a take-home seed and potting project. The materials and supplies for the project, as well as much of Greenie's Conservation Corner, were made possible by the Salesforce.com Foundation. Students also enjoyed hands-on projects from Scroungers Center for Resuable Art Parts and the Ecology Center of San Francisco



Pull out guide for your next Zoo visit!