9.17.14

Sonoran Desert video

Symbiosis – relationship between 2 organisms

3 types:

1. Mutualism – both organisms benefit
   1. Ex. Acacia ant and acacia tree
   2. Ex. Honeybees and flowers
2. Commensalism – one organism benefits while the other neither benefits nor is harmed
   1. Ex. Orchids growing in the tops of trees
   2. Ex. Barnacles on a whale
3. Parasitism – one benefits, the other is harmed
   1. Ex. Predator vs. prey
   2. Ex. Mosquito biting you

Diadasia bee and Prickly Pear cactus are mutualism

Flies and Diadasia bee have a parasitic relationship

Woodpecker and Diadasia Bee also have a parasitic relationship

There are 6 tons of water in Saguaro cactus; the largest contains almost 2,000 gallons of water

Javelini – desert pig. vulnerable to predators

coyotes can live for several weeks on javelini that have died

coyotes compete for food that will help them through the famine

fruits on Saguaro, ensure dispersal of its seeds

The plants that humans have introduced into the Sonoran Desert have caused fires.

The female diamond back rattlesnake needs several weeks of rest to develop eggs.

The blooming of the prickly pear cactus produces over 60 gallons of nectar and 6.5 pounds of pollen per acre.

There is enough water in a Saguaro cactus to sustain it for a year or two.

Plants that survive slow their metabolism almost to death.

Spines are modified leaves, with a protective wax coating and much less surface area so they don’t lose water from the leaves.

Gallons of water are found in large cacti, enough to sustain these plants for a year or two

Creosote bush tolerates droughts which kill most desert plants, can live for thousands of years

The animal strategies for survival; cling to the shade and stay as still as possible to wait out the season

Saguaro – 10 years to attain their first inch, 60 years to its first foot; fruiting is the climax of their struggle to reproduce

bats gorge themselves on the fruit they helped to create