

INSECTS etc. / BUGS

Background information for Jr Ranger program on BUGS-insects, spiders etc.

The insects to be discussed: Butterfly, House Fly, Grasshopper, Bee, Ant, Beetle, Dragonfly, Praying Mantis, Ladybug.

Also Spider (an arachnid) and Caterpillar (a larva).

Insects have 3 body parts - HEAD, THORAX and ABDOMEN.

Insects have an EXOSKELETON. (They have no interior skeleton like we do.)

HEAD - Compound eyes,

Special mouthparts for chewing or sucking.

Antennae (Feelers) which are jointed for touch or smell.

THORAX - 6 legs; legs are jointed

2 pairs of wings (beetles have 1 hard pair of wings which protect the underlying 'flying wings'.)

ABDOMEN - Most abdomens are segmented.

The abdomen contains the heart and digestive organs.

Insects breathe through tiny holes, spiracles, which are connected to breathing tubes. The spiracles are aligned on each side of the abdomen.

Insects have an EXOSKELETON. They have no interior skeleton like we do.

Most insect lays eggs and mature through a process called METAMORPHOSIS.\

METAMORPHOSIS - Egg to Larva (grub/worm) to Pupa (cocoon) to Adult.

HERBIVORES - Grasshopper, Butterfly, Bee, Ant, Beetle, Caterpillar

CARNIVORES - Dragonfly, Ladybug, Praying Mantis, Ant, Beetle, Spider

SCAVENGER - House Fly.

(OMNIVORES - Some species of crickets and some species of earwigs.)

NOTE - ANTS: Some species are herbivores and some are carnivores.

BEETLES: Some species are herbivores and some are carnivores.

BENEFICIAL INSECTS (Helpful bugs)

HARMFUL INSECTS

INSECTS etc. / BUGS

BUTTERFLY - pollinator
BEE - pollinator
DRAGONFLY - eats bugs
LADYBUG - eats aphids
SPIDER - eats bugs

GRASSHOPPER - eats plants
HOUSE FLY - carries diseases
CATERPILLAR - eats plants

Social insects like ants, bees and wasps live in groups and share the work required to survive.

As insects grow, they shed their outer covering and grow a new one. They molt!

SPIDERS - have 2 body parts

CEPHALOTHORAX - 8 jointed legs attached
2 simple eyes (no antennae or wings)
Mouth looks like a straw, designed for sucking.
(Spiders can't chew but can eat their own silk.)

ABDOMEN - Heart
Intestine
Spinneret (lower rear of abdomen)
Silk Gland
Breathing system

FUN FACTS

Honeybees have hair on their eyes.
Most houseflies live less than 1 month
Praying mantis is only insect that can turn its head.
A mosquito flaps its wings 500 times a second.
Dragonflies can fly up to 50 miles per hour.
A butterfly can taste with its feet.
A slug has 4 noses.
When a spider walks it always has 4 feet on the ground and 4 feet off the ground!

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(FREE NATURE PROGRAMS)

Weekends from June 17th to Labor Day Weekend 2017

SATURDAY MORNING PROGRAMS:

DATES: JUNE 17th, 24th, JULY 1st & 8th (Saturdays)
TIME: 9am to 10:30am
AGES: Junior Rangers (7-12yrs)
Junior Ranger Cubs (4-6yrs)
LOCATION: Auburn State Recreation Area Headquarters (ASRA-HQ)
(501 El Dorado St., Auburn, CA 95603)
NOTE: Please pre-register participants by June 13th. Space is limited.
REGISTER — by phone, 9am-4:30, at 530-823-4141 or in person at ASRA-HQ
501 El Dorado St., Auburn, CA 95603 (9am-4:30pm)

SATURDAY & SUNDAY PROGRAMS at UPPER LAKE CLEMENTINE:

DATES: JULY 15th to Labor Day Weekend (Saturdays & Sundays)
TIME: 3pm
AGES: Children of all ages are welcome at this program
LOCATION: Upper Lake Clementine
(adjacent to parking lot, near life-vest board)
NOTE: A **Day Use Fee of \$10** is required to access Upper Lake
Clementine. Program is free.

Each program has a main topic. Topics may include Bugs, Animals, Water Creatures, Plants, Bats or other topics related to nature in the American River Canyons. It is a fun time and each session includes nature games and activities. All programs are free and are led by State Park staff and volunteers (Canyon Keepers).