

## 17. RIPARIAN LIFE ZONES

**Overview:** This activity will help students understand and identify different plants, animals, and life zones of a desert riparian habitat.

**Objective:** Students will locate plants and animals in the riparian area of the Garden and identify which live in the different life zones.

**Time needed:** 1/2 day

**Group Size:** 2-4

**Age appropriateness:** 5th grade and up

**Site:** The waterfall, through the intermittent stream and down to the pond. Also include the mesquite bosque.

**Background:** Riparian systems have a large variety of living organisms with complex relationships. Riparian areas are important and valuable in many ways, including as ecologies for whole communities of life. Riparian areas are the green ribbons of life found on the edges of water courses. Riparian areas provide space, shelter, and food for the plant and animal communities with which they are associated. Vegetation provides shade from the sun for aquatic plants and animals and land-dwelling creatures at the water's edge. Riparian areas are also transportation corridors or highways for animals that depend on water bodies for food and shelter. The riparian plant community, especially shrubs and trees, provides shelter and food for animals as large as deer. Trees and marshy areas provide shelter for nesting birds and the banks provide homes for burrowing animals.

### Materials:

Provided at the Garden

Desert Rat Pack

Dip nets

Magnifying lenses

Tweezers

Eye droppers

Depression slides

Brock microscopes

Animal and plant identification guides

Clipboards

Pond area maps

Provided by the classroom teacher

Clear plastic cups

Additional identification guides

Paper and pencil

**Preparation:** Make copies of Garden or pond maps

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**Pre Activity:** Acquaint students with the variety of life in any ecosystem and that different organisms survive best in specific areas of that ecosystem.

**Procedure:**

1. Assign each group a specific area in the Garden to collect plant and animal observations by drawing and writing descriptions.
2. After an appropriate amount of time, rotate the groups to another region and have them again make observations in that new area.
3. Using identification guides, have groups find names for as many organisms as possible.
4. When all areas have been explored, gather students into a large group and discuss the diversity of life and the different life zones where they were found.

**Modifications:** For younger students, these differences could be observed with a guide and then made into a mural.

**Extensions:** Riparian life zones could be compared with other areas and their life zones.

**Reference List:**

**Time of Year:** any

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