



# Backyard Biologist

## Description:

Teams will be assessed on their knowledge of living organisms that they may encounter in their own backyard. In 2018, the focus will be on trees, plants, and birds. Teams will be required to identify organisms from a provided list and know about the habitat and conditions required for growth of the organisms.

## Number of Participants: 2

## Approximate Time: 45 minutes

## Materials:

1. Each team may bring up to 2 commercially produced field guides and/or 2 – 3-ring binders with pages in any form from any source. (This means 2 guides, or 2 binders or a guide and a binder.) No Actual specimens –plant or animal - are allowed in the binders.
2. Teams may also bring up to two hand lenses.

## The Competition:

1. This event will be run as stations that the students rotate through. Stations may include but are not limited to drawings, scenarios, leaves, photographs, specimens and songs.
2. Plants and trees
  - a. Structure and function of roots, stems, leaves and flower parts
  - b. Stages of the life cycle of seed plants.
  - c. Concepts of gravitropism, phototropism, thigmotropism and hydrotropism.
3. Horticulture
  - a. Basic properties (texture and capacity to hold water) and components (sand, clay and humus) of soils and how these determine the ability of soils to support the growth and survival of many plants.
  - b. Identify what is needed to grow a successful garden and harvest food to eat.
4. Birds
  - a. Basic characteristics and description of habitat
  - b. Eating habits and life cycles.
  - c. Importance to the ecosystem and impact on humans or human activities

## Scoring:

The score will be based on the following:

- Points awarded for the accuracy of responses. Students are not required to provide scientific names of specimens. Common names are appropriate. Ties will be broken by responses to pre-selected questions chosen by the event leader.

**Common Birds**

Identify Songs, Calls &amp; Coloring

- American Crow
- American Goldfinch
- American Robin
- Barn Swallow
- Blue Jay
- Brown Thrasher
- Carolina Chickadee
- Carolina Wren
- Chipping Sparrow
- Common Grackle
- Downy Woodpecker
- Eastern Bluebird
- Eastern Phoebe
- Eastern Towhee
- European Starling
- House Finch
- House Sparrow
- House Wren
- Mourning Dove
- Northern Cardinal
- Northern Flicker
- Northern Mockingbird
- Red-bellied Woodpecker
- Ruby-throated Hummingbird
- Song Sparrow
- Tufted Titmouse
- White-breasted Nuthatch
- White-throated Sparrow

**Common Trees**

Identify leaves, bark and seeds

- American Elder
- American Elm
- American Sycamore
- Black Cherry
- Black Willow
- Blackgum
- Eastern Red Cedar
- Flowering Dogwood
- Green Ash
- Loblolly Pine
- Post Oak
- Red Hickory
- Red Maple
- Red Mulberry
- River Birch
- Sweetgum
- Water Oak
- White Basswood
- White Oak
- Yellow-Poplar

**Bushes, Vines & Flowers**

Identify leaves, bark and seeds

- Azalea
- Butterfly Weed Trumpet Creeper
- Carolina Lily
- Carolina Rose
- Catawba Rhododendron
- Daisy Fleabane
- Eastern Poison Ivy
- English Ivy
- Kudzu
- Pink Lady's Slipper
- Scuppernong Grape
- Strawberry
- Sunflower
- Venus Fly Trap