**Backyard Biologist Event Resources:**

Teams will be assessed on their knowledge of living organisms that they may encounter in their own backyard. In 2019, the focus will be on trees, plants, and insects. Teams will be required to identify organisms from a provided list and know about the habitat and conditions required for growth of the organisms.

1. Identification
   1. Students will need to identify specimens, by common name, from the Official Specimen List, including which are SC state symbols.
2. Plant and Trees
   1. What is the structure and function of roots, stems, leaves, seeds and flower parts?
   2. What are the distinct stages of life cycle of seed plants?
   3. What is gravitropism, phototropism, thigmotropism, and hydrotropism?
3. Horticulture
   1. What are the basic properties and components of soil and how do they determine the ability of soil to support the growth on many plants?
   2. What is needed to grow a successful garden and harvest food to eat?
4. Insects
   1. What are basic characteristics and descriptions of insect habitats?
   2. What are habits and life cycles of insects?
   3. What is the importance to the ecosystem and impact on human or human activity?

[Backyard Biologist 2018 Coaches Clinic (2019 Rules)](https://docs.google.com/presentation/d/1TsZXWFtxS0lbBRdnMvBggK7rTGcq3ngfdsK4ca2SoPg/edit#slide=id.p)

[2018 Backyard Biologist Test](https://www.sciencenc.com/wp-content/uploads/Backyard-Bio-A.zip)

[2017 Coaches Clinic Presentation](https://docs.google.com/presentation/d/1Lj66KnhcM3G3PXYE988dfYOK-LIMY7RShwIH6NU2XhA/edit?usp=sharing)

[Backyard Biologist test from 2015](http://www.sciencenc.com/pdfs/resources/elementary/backyardbiologist/backyardbiologist2015forposting.pdf) (birds and plants)

[What Tree is That?](https://www.arborday.org/trees/whattree/)

[Trees of SC](https://www.state.sc.us/forest/reftree.htm)

[Why Do Plants Grow Flowers?](https://mysteryscience.com/flowers/mystery-1/flowering-reproduction/91?modal=activity-prep-modal#slide-id-1593)

[Flora of South Carolina](https://en.wikipedia.org/wiki/Category:Flora_of_South_Carolina)

[Wildlife of SC](http://www.dnr.sc.gov/wildlife/species.html)

[Native Trees of SC](http://www.treesforme.com/south_carolina.html)

[Clemson Cooperative Extension Home and Garden Information Center](https://hgic.clemson.edu/)

[SC State Symbols](https://statesymbolsusa.org/states/united-states/south-carolina)

[FREE, really good, printable tree guide](http://library.rawlingsforestry.com/ncdfr/common_forest_trees/common_forest_trees_of_nc.pdf)

[FREE really good ebook on species of the Southeast](http://www.uscupstate.edu/fieldguide/)

[Tree id app – scroll to the bottom of the webpage](http://dendro.cnre.vt.edu/dendrology/main.htm)

[Plants by Janice VanCleave](http://www.amazon.com/Janice-VanCleaves-Plants-Mind-Boggling-Experiments/dp/0471146870/ref=sr_1_1?s=books&ie=UTF8&qid=1284580910&sr=1-1)

[The Magic School Bus Plants Seeds](http://www.amazon.com/Magic-School-Bus-Plants-Seeds/dp/0590222961/ref=sr_1_1?ie=UTF8&s=books&qid=1284580876&sr=8-1)

[The Teachers Guide- Lesson plans on Plants](http://www.theteachersguide.com/Biologylessons.html)

[Project Learning Tree](http://www.plt.org/environmental-education-activity-guide)

[Missouri Botanical Garden](http://www.mbgnet.net/bioplants/main.html)

[Great series of YouTube videos about leaf identification](https://www.youtube.com/playlist?list=PLBE1197A3397CAE00&feature=plcpYou-Tube%20Dendrology)

[LeafSnap](http://leafsnap.com/) – an Apple app that lets you take a picture of a plant and get an identification. Sorry, no Android version yet.

[The Right Diet for your Plants](https://www.agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=346)

[Types of Soil by Texture](https://www.agclassroom.org/teacher/matrix/lessonplan.cfm?lpid=365)

[Spotify Playlist of Bird Calls](https://open.spotify.com/user/aimsterlamb/playlist/5s25lbkFcuH1OytDQSjeBb)

[All About Birds](https://www.allaboutbirds.org/)– From Cornell University, bird identification and calls.