On-Line Resources for Curriculum

Center for Ecoliteracy: <https://www.ecoliteracy.org/>

1. Understanding Food and Climate Change: An Interactive Guide
   1. Grades 6-12
   2. 16 topics
   3. Free iBook for Mac and iPad users
2. Starting with Soil
   1. Grades 3-5
   2. Companion to soil science/gardening/ecosystems
   3. iPad app and Google Play

KidsGardening.org: <https://kidsgardening.org/>

1. Digging Into Soil A Garden Practicum
   1. Grades 9-12
   2. 10 lessons
   3. Free download

Understanding Soil Health and Watershed Function – a teacher’s manual by Didi Pershouse

Pdf available for download <https://soilcarboncoalition.org/learning/Soil_Health_and_Watershed_Function.pdf>

Project Learning Tree: <https://www.plt.org/curriculum-offerings/>

1. Carbon and Climate e-unit
   1. Grades 6-8
   2. Inexpensive; on-line training and access to e-unit $40.00
2. Teaching with i-Tree
   1. Middle and High school
   2. Learn to use i-Tree Design software from US Forest Service to calculate value of trees
3. Other offerings available with training

Earth Labs: for educators: <https://serc.carleton.edu/earthlabs/index.html>

For students: <https://serc.carleton.edu/eslabs/index.html>

1. Climate and the Carbon Cycle: <https://serc.carleton.edu/eslabs/carbon/index.html>
   1. Specific lab that supports climate and carbon cycling concepts
   2. Grades 9-12, earth and environmental science classes;
   3. Complete on-line units with movies, discussion questions, labs, etc.
2. Other topics include: Climate and the Biosphere, Climate Detectives, and Corals
3. Carbon Storage in Local Trees (use DBH measure to find out stored carbon): <https://serc.carleton.edu/eslabs/carbon/1b.html>

Biodiversity Counts: <https://www.amnh.org/explore/curriculum-collections/biodiversity-counts>

1. Loose collection of activities that take place in the field
2. Can be adapted for many ages

Beetles Project: <http://beetlesproject.org/>

1. Mostly a resource for educators and for field instructors
2. Training videos and specific outdoor teaching techniques to use with all ages

On-Line Resources for Teachers

Video: **Adaptation Bangladesh: Sea Level Rise:** <https://filmfreeway.com/adaptationbangladesh>

Video: **A Boat Made from Plastic**: <https://www.nationalgeographic.com/environment/2019/04/boat-made-from-plastic-waste-one-kenya-solution/>

**Degrees of Change:** <https://www.sciencefriday.com/spotlights/degrees-of-change/>

<https://us6.campaign-archive.com/home/?u=3155bde08d00356469b4662f5&id=cc1b4ac787>

**What’s Going On In This Graph?:** <https://www.nytimes.com/2019/02/28/learning/teach-about-climate-change-with-these-24-new-york-times-graphs.html>

**Next Generation Science Storylines:** <http://www.nextgenstorylines.org/what-are-storylines>

**Climate Change, Lines of Evidence** – you tube video series: <https://www.youtube.com/watch?v=qEPVyrSWfQE&list=PL38EB9C0BC54A9EE2&index=1>

**BPS Climate Curriculum:** <https://www.climatecurriculum.com/>

**Interactive Simulations:** <https://phet.colorado.edu/en/simulation/legacy/greenhouse>

**Global Footprint Network**: <https://www.footprintnetwork.org/>

**Carbon TIME** – teaching units for Middle and High School: <http://carbontime.bscs.org/about>

**Outrage and Optimism** podcasts: <http://outrageandoptimism.libsyn.com/>

**Street Art** source: <https://www.boredpanda.com/environmental-street-art-graffiti-climate-change/?utm_source=google&utm_medium=organic&utm_campaign=organic>

**Ant Picnic** citizen science: <http://studentsdiscover.org/lesson/ant-picnic/>