

Southeastern Forests and Climate Change

Correlations to Next Generation Sunshine State Standards (NGSSS) for Science



Understanding and Using the Southeastern Forests and Climate Change Correlations Grid:

Focus:

The standards listed on the grid are Florida Next Generation Sunshine State Standards for Science (NGSSS for Science), and have been related to those national Next Generation Science Standards (NGSS) that teach activity concepts and ideas, as well as require demonstration of the practice. This enables depth of learning for and higher levels of cognitive demand on students, thereby resulting in higher performance expectations.

Grades:

Standards highlighted in gray target middle school grades (6, 7 and 8). Standards with no highlighting target high school grades (9,10, 11 and 12).

Applicability of Standards to Activities:

Applicability of a standard to a *Southeastern Forests and Climate Change* activity (A1, A2, A3, etc.) is noted by an “X”; standards that do not apply to a particular activity are noted by an “O” for the activity as it is written. Modification and enrichments as noted in the *Southeastern Forests and Climate Change* guide, as well as in C-Palms connections, could result in the applicability of standards not listed.

An asterisk (*) in the A14 column indicates that the standards will vary based upon the service learning project selected.

C-Palms Links:

Each standard is hot linked to C-Palms. There are substantial resources to support *Southeastern Forests and Climate Change* lessons on C-Palms. Included are items such as, but are not limited to:

- **Access Points** – Expectations written for students with significant cognitive disabilities to access the general education curriculum, which reflect the core intent of the Standards with reduced levels of complexity. Each standard is broken down into Independent, Supported, and Participatory elements.
- **Related Resources** – Numerous resources to facilitate teaching and learning are available for every Benchmark. Below are a few examples:
 - **Teaching Ideas and Lesson Plans** – Many of these facilitate extension of *Southeastern Forests and Climate Change* lessons. For example, SC.912.E.7.3 provides a lesson plan entitled “Albedo and Climate Change” that expands the concept of albedo that is introduced in Lesson 2.
 - **Professional Developments** – For those educators who want more information about incorporating specific content or skills development into their lessons, websites and other resources are offered. For example, [SC.912.L.12.11](#), offers a Professional Development entitled “Volcano Power” that is designed to help teachers integrate literacy skills within their science curriculum. This tutorial is useful not only with *Southeastern Forests and Climate Change*, but other Project Learning Tree curricula as well.
 - **Video/Audio Animations, Images/Photographs, Educational Games, Presentations/Slide Shows, Worksheets, Center Ideas**, and other teaching tools – Numerous standards provide tools to support or expand *Southeastern Forests and Climate Change* lessons. For example: SC.7.L.13.3 provides a video entitled “Fire and the Carbon Cycle” that supports Lessons 4, 5, and 6.
- **STEM Lessons** – Many Benchmarks offer STEM lessons, most of which require C-Palms membership to access. The majority of the lessons are model-eliciting activities (MEAs), which encourage students to invent and test models.
- **Student Resources** – Mini-lessons intended for student use. For example, SC.912.L.17.8 in Lesson offers a “Biodiversity and Non-native Species” audio/visual lesson that support Lessons 3, 4, 5 and 6, and is Florida specific.
- **Parent Resources** – Numerous resources for parents and homeschool educators are available. For example, SC.5.E.6.6 provides a video called “Isotopes and Paleoclimates” that extends lessons 1 and 2, and helps students understand “big picture” climate change. This video is also appropriate for classroom use.

Acknowledgements:

The *Southeastern Forests and Climate Change* Correlations to Next Generation Sunshine State Standards (NGSSS) for Science was made possible by an agreement between Florida Project Learning Tree/University of Florida and Vicki Crisp (Environmental Education Consultant), and Gugliotti Environmental and Conservation Education Services – Nature Teach.

Note:

- The correlations in this version of the guide are in an Excel spreadsheet and can be sorted according to Excel rules.
- The standards code is linked directly to C-Palms for additional information and resources.
- The description is the description of the standard, not a description of the activity.
- There are many strong STEM strategies (especially Math and Engineering) that should be considered when doing an activity.

The activities and their codes are listed below:

A1	Stepping through Climate Science
A2	Clearing the Air
A3	Atlas of Change
A4	The Changing Forests
A5	Managing Forests for Change
A6	Mapping Seed Sources
A7	Carbon on the Move
A8	Counting Carbon
A9	The Real Cost
A10	Adventures in Life Cycle Assessment
A11	The Cycle Assessment Debate
A12	The Carbon Puzzle
A13	Future of Our Forests
A14	Starting a Climate Service-Learning Project