

Activity 3: Atlas of Change

Atlas Guide Presentation: Teacher Notes

Note: The U.S. Forest Service may change this website over time, which will change the website navigation instructions described below. These notes are not meant to be a script, but to provide information for educators that may be helpful as you use this activity.

Slide	Notes
1	This presentation is a guide to using the USDA Forest Service’s Tree Atlas. The slides follow the Atlas Guide student page in Activity 3 of the module, so you can help students use the website to answer the questions.
2	<p>If you have not already done so, watch the video, “An Introduction to the Climate Change Atlas: How Does It Work?” The video link is located in the right side menu on the home page for the project, under Atlas Videos.</p> <p>After watching the video, students can access the link for the Climate Change Tree Atlas from the Atlas homepage (or go directly to http://www.nrs.fs.fed.us/atlas/tree/tree_atlas.html).</p>
3	This is a screen shot from the Climate Change Tree Atlas. From here, click on the “Summary of Predictors” button on the right side of the screen.
4	Then click on the “Maps of actual predictors used in the model” link.
5	<p>This brings up two maps. The left side shows current mean annual temperatures, and the right side shows projections from a climate model.</p> <p>Notice the tabs just above the maps that allow you to choose different variables to be shown on the maps (e.g., Avg. Tempr, Jan. Tempr).</p> <p>You can also use the “Climate Scenario Menu” buttons to access dropdown menus that allow you to change the model used to produce the projections and to look at high and low ranges of projections from each model.</p>
6	If you want to go back to the Tree Atlas home page, you can do that by clicking on the “Tree Atlas” button at the top of the page. Do this now so that we can explore another part of the atlas.
7	This time, click on the “Combined Species Outputs” on the right side of the page.
8	<p>On this page the two tabs allow you to explore the current distribution of species as well as the model projections for future habitats.</p> <p>Click on “Modelled Future Habitats” and then on “Potential Changes by Forest Types.”</p>
9	Here you can see two maps again, similar to what you saw earlier. This time, the maps show the types of habitat in each area as measured by actual data (left side) and projected by a

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	<p>model (right side).</p> <p>The legend at the bottom lists the types of habitats included. Click on the question mark for a description of the items in the legend.</p>
10	<p>As before, you can use the dropdown menus to choose the model and range you want to focus on. You can also click the “View Summary of Changes” to look at the projections from several models at the same time.</p>
11	<p>The “Combined Species Outputs” button will take you back to the earlier page. Click on that now.</p>
12	<p>As before, click on the “Modelled Future Habitats” button. This time click on the link to “Potential Species Winners and Losers by State.”</p>
13	<p>This brings you to a map, where you can select the state you want to focus on. For the sake of this tutorial, click on Florida. You can go back and look at the projections for your own state later.</p>
14	<p>This brings up a table of data. It looks confusing at first, but it’s really not so bad. You can hover over the column headings to see their full labels. You can also click on those labels to sort the data by whichever column you choose. (Initially, they are sorted by Species Number in the left column.)</p> <p>Columns 6 through 10 show the changes projected by different models for each species. The numbers show the changes in “Importance value/abundance” or “IV.” The higher positive numbers are the biggest winners. You can click on the question mark link for more details about reading this table.</p>
15	<p>Click the “Back” button on your web browser to get back to the map page. Then, click the “Climate Change Atlas” link at the top of the page.</p>
16	<p>Click the changing image in the middle of the page when the “Bird Atlas” option is showing. (You can also get to the Bird Atlas with this web address: http://www.fs.fed.us/nrs/atlas/bird/index.html)</p>
17	<p>Once in the Bird Atlas, click on the “Combined Species Outputs” button on the right side of the page.</p>
18	<p>Click on the “Modelled Future Habitats” tab and then on the “Potential Changes by State” link. This brings up another map. Click on Florida.</p>
19	<p>This brings you to a table showing projected impacts of climate changes on bird species. Click on the “Winners/Losers at a Glance” link.</p>
20	<p>Here you can see a color-coded summary of projections for which species stand to gain or lose as a result of climate changes. Once you have become familiar with this table, go back to the</p>

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	previous page.
21	You can click the “Bird Atlas” link to go back to the main Bird Atlas page.
22	From here, you can also look for impacts on specific species. Use the “Common Name” column heading to sort the species by their common name. The top species should then be the “Acadian Flycatcher.” Click on the “Acadian Flycatcher” link to see the information on that species.
23	Here you can see an abundance of data on the species as well as external links to find more information on that species.
24	This concludes this overview of the atlases and WebQuest. Feel free to explore both atlases in more detail to see what else you might discover.