SeeSouthernForests.org Orientation Activity: Teacher Guide

Overview: The following activity will prepare students to use all of the features on the SeeSouthernForests.org interactive mapping tool. This activity can be completed if only the teacher has a computer or in a computer lab, where all students have a computer.

Time Requirement: Allow one full class period (45-50 minutes) to complete this activity. If students finish early, have them explore more of the site and read some of the case studies.

Preparation: Schedule a session in the computer lab if available. Print the accompanying 'Student Handout' and make copies for each student in the class.

Map Basics	Gives an overview of the main map and the geography that accompanies it. (5-10 minutes)
Drawing Tools	Allows students to familiarize themselves with how to use
	the different drawing tools available. (5-10 minutes)
Land Cover Feature	Orients students to the Legend and the Land Cover map.
	(5-10 minutes)
Find a Place	Exhibits how to use the 'Find a Place' text box.
	(10-15 minutes)
Measuring Distances and	Assess students on using multiple map tools.
Calculating Area	(10-15 minutes)

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Accessing the main map:

- Go to the main site: <u>http://www.SeeSouthernForests.org</u>
- Click on "Explore Maps" from the green tool bar. Use the main map that shows up (adapted satellite image of the southern United States and parts of Mexico) as the basis for the following activities.

The following activities use features from the grey map bar at the top of the screen.

Map basics:

With this map showing, ask students the following questions as they record responses on their answer sheets. [Sample responses in brackets.] Suggestion: Have students work in pairs for 3 minutes and then report back. Students may use additional resources if necessary. (These questions are on the student handout):

- 1. What do you see? Describe what you are looking at? [Answers will vary. Aim for general answers that identify a map, southern portion of the United States with parts of Mexico, etc.]
- 2. What countries are represented? [United States, Mexico, Cuba, Bahamas]

- 3. What ocean(s) or other bodies of water are on the map? [Atlantic Ocean, Gulf of Mexico]
- 4. What peninsula(s) can you identify? [Florida, Yucatan, Baja]
- 5. What natural boundaries are represented? [Eastern U.S. Seaboard, Mississippi River, Rio Grande]
- 6. What political (human-created) boundaries are represented? [State borders, U.S.-Mexico border]
- 7. Where is your home state? City? County? [Answers will vary.]
- Have students report out their responses, noting that students may not know every answer. Ask students which features were easiest to identify, and which were more difficult.
- To show the responses, click on 'Hybrid.' This will bring up a map with state names, countries, etc. Review key features. Ask students to describe how this map is different from the other one.
- Now click on "Road". This will change the map to show major interstates. Ask students to identify roads they have been on or live near.
- To move the map around, click and hold the cursor until it turns into a gloved hand. This allows you to drag the image and see further north, south, east, or west.

Drawing Tools:

- Staying in the Hybrid view, select "Draw" from the map tools function on the left. This will bring up a menu of drawing tools. There are no corresponding questions on the student handout. Sample activities:
 - a. Use the "free line" tool to trace the border of the state you are in.
 - b. Have a student come up and use another tool to identify, for example, your state's capital city, the state to the north or south, a state the student has lived in or traveled to, etc.

"Land Cover" feature:

- Click on "Land Cover." This shows different categories of land cover, as defined in the legend on the bottom right.
- Use the "meter" in the upper left to zoom in. (Drag the arrow closer to the plus sign, or just click the map.)
- Have students use the legend and map to respond to these questions, provided on their handout. You can also have students come up and identify these areas using the drawing tools as described below.
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- 1. What does the blue on the map represent? [Open Water]
- 2. Find an inland lake in your state or one you have been to. [Answers will vary.]

- 3. What color are the urban areas? [Grey] Identify three urban areas you are familiar with that are shown on the map. [Answers will vary.]
- 4. What color is used to represent forests? [Green] Find a forested area near your home. (Use the zoom meter as described above.)

Find a Place:

- Switch to the 'hybrid' map
- Type in a major city name and state abbreviation in the 'Find a Place' text box. This will bring up a detailed map of the chosen city.
- Zoom in to the maximum setting. Have students answer the following questions on their handout. (Note: The map may need to be moved as explained above, to find all of the appropriate answers. Answers will vary depending on which city is selected.)
 - 1. Identify three major highways in or near the city.
 - 2. Find two major buildings that are represented on the map.
 - 3. Find one park that is represented on the map.
 - 4. Find the closest body of water near the flag icon.
 - 5. Identify one major university represented on the map.

Measuring Distances and Calculating Area:

- Staying in the Hybrid view, zoom out to the maximum setting. Find the distance legend in the bottom left-hand corner.
- Using the line tool, draw lines between key borders and use the distance scale in the bottom left to identify the following:
 - 1. The distance from the Western most part of the highlighted area (hint: Texas) to the eastern shoreline of the U.S. (near Savannah, GA). [About 1750 miles]
 - 2. The width of the Gulf of Mexico, from the southern most point of Texas' east coast to the parallel point on the west coast of Florida. [About 1000 miles]
 - 3. Calculate the approximate total area of the highlighted section of the map (Southern U.S.). Measure from the western most border of Texas to Norfolk, VA, and from Cincinnati, OH to the southern most point of Florida, be sure to include the unit of measure you are using. (Hint: Area = height x width.) [About 2,310,00 miles]