Track the Habitat

You can use monarchs to teach about many things! Stone Mountain Memorial Association (SMMA) uses the monarch butterfly to help students apply their knowledge in other contexts and to different disciplines. The activities relate a grade-level specific GPS to monarch life, habitat or migration. Use this lesson as a post-trip activity following your 3rd Grade Stone Mountain Geology field trip in the Piedmont region.

GPS correlation: S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat. a. Differentiate between habitats of Georgia (mountains, marsh/swamp, coast, Piedmont, Atlantic Ocean) and the organisms that live there.

Preparation:
Read the background information. Print the worksheet, or make an overhead or display on your Interactive white board. Make copies for each student or for pairs of students.

Background Information:
Monarch butterflies migrate to Mexico to spend the winter. In this lesson we examine the ability of monarchs to live in different habitats of Georgia as they migrate south.

Monarch butterflies live in many parts of the world including North America (United States, Canada and Mexico). During the late spring and summer, monarch butterflies stay close to the ground to find nectaring flowers and milkweed. Monarchs particularly like to nectar on milkweeds, thistles, goldenrod and ironweed. These wildflowers grow along roadsides and in fields of any habitat of Georgia. Female monarchs lay their eggs only on milkweed leaves because it is the only food source for their caterpillars. There are various species of milkweed, in the genus Asclepias, that grow in Georgia.

As the daylight hours shorten and temperatures get cooler, all of the monarch butterflies that are east of the Rocky Mountains begin to migrate to Mexico for the winter.

Journey North asks volunteers to post sightings of migrating monarchs in gardens or roadsides. You can see animated migration maps at www.learner.org/jnorth/monarch/

Note: Journey North is a free, Internet-based program that explores the interrelated aspects of seasonal change. Through interrelated investigations, students discover that sunlight drives all living systems and they learn about the dynamic ecosystem that surrounds and connects them.

Activity:
Read the background information to students. Read them the essential question so they understand the focus of the lesson. Have students label the habitats outside of the map. Leave the inside of the map clear. Read the dates and ask students to put the correct number in the correct habitat to track the monarchs as they move through Georgia.
**Essential Question:**
What habitats of Georgia do migrating monarch butterflies use?

1. Label the habitats of Georgia on the outside of the map.
2. Listen carefully as your teacher reads the below information on the fall monarch migration through Georgia. Place the correct number in the correct habitat.

### Reports of monarch sightings in habitats of Georgia

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>August 30</td>
<td>report of monarchs in the mountains</td>
</tr>
<tr>
<td>2</td>
<td>September 5</td>
<td>report of monarchs in the mountains and Piedmont</td>
</tr>
<tr>
<td>3</td>
<td>September 12</td>
<td>report of monarchs in the mountains</td>
</tr>
<tr>
<td>4</td>
<td>September 19</td>
<td>report of monarchs in the mountains</td>
</tr>
<tr>
<td>5</td>
<td>September 26</td>
<td>report of monarchs in the mountains and Piedmont</td>
</tr>
<tr>
<td>6</td>
<td>October 3</td>
<td>report of monarchs along the coast</td>
</tr>
<tr>
<td>7</td>
<td>October 10</td>
<td>report of monarchs along the coast</td>
</tr>
</tbody>
</table>

3. Butterfly Weed likes sandy, dry soil with full sun. In which habitat would a monarch find this plant?

4. Swamp milkweed likes swamps or wet soil with full sun. In which habitat would a monarch find this plant?
3. Coast (based on the sandy soil need), but this plant can actually grow in every habitat.

4. Mostly coast, but you can actually find marsh/swamp areas in any habitat in Georgia.