

GIS, Satellite Remote Sensing, and Oceanography
Part 2
The SMILE Program
Student Sheet

The last lesson looked at some of the seasonal changes in Sea Surface Temperature (SST), and Ocean Chlorophyll (or Color). This lesson addresses more about plankton and other biology connections.

Look at the biological data:

First click on the ocean color for the early summer months, in this case June

Click on the first Birds Layer for June:

The larger and more darkly colored circles represent higher bird concentrations.

Click the select tool and highlight some of the birds.

Written Questions: In the space below write you answer

What species of birds are in this area?

Where are the birds located?

Write down three common names in the space below

Then type a name into Google and click on the Images tab at the top



Google should show you a picture of the bird sited.

Before moving on, click off the birds layer, then click on the mammal data for June.

Repeat the same process for the August images
First look at the Birds, then the Mammals

To review: look back at the SST from both periods then at the Chlorophyll for both periods

Discussion Question: Phytoplankton are very small plants, so they need light and water to grow. Why then does the phytoplankton grow best close to or just off shore? What else do they need to grow?

Discussion Question: Why are we interested in measuring chlorophyll?

Discussion Question: Why is phytoplankton important in a larger sense?

Discussion Question: What eats phytoplankton?

Discussion Question: Where are the bird and mammals most often sited?

Click the Ocean Color, the birds for June on, the Mammals on, and the phytoplankton,

Then do the same for the August data

Discussion Question:

What are some of the large assumptions we are using when we look at the data in the IMS and make connections?