

Satellite Transmitters Worksheet

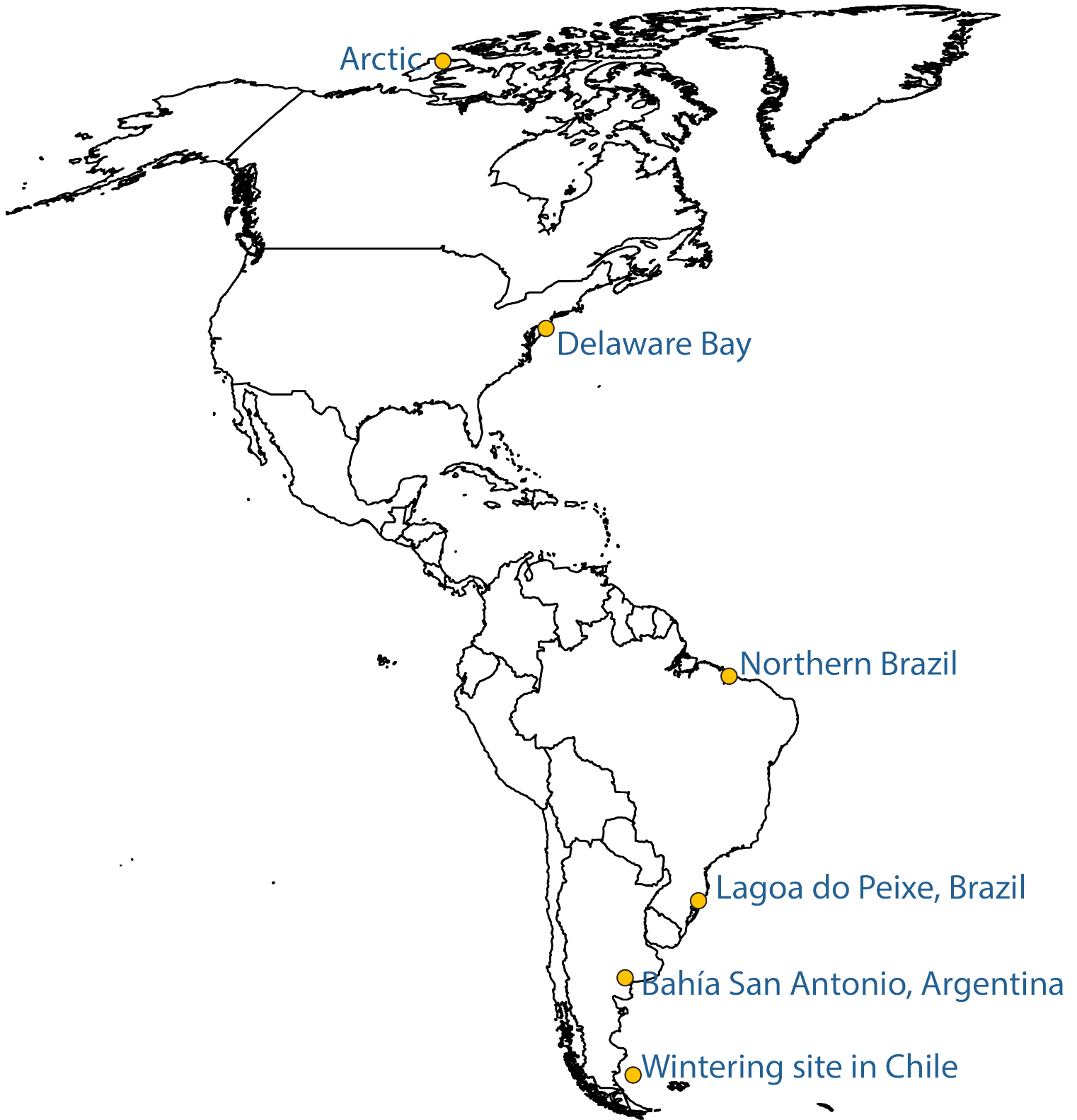
1. What did you learn in this story?

2. What challenges do the Whimbrels face on this migration?

3. What did scientists learn with the results of this tracking study?

4. What is the advantage of this type of tracking?

5. What are the disadvantages of this type of tracking?



Data Collection Sheet

First Flag ID:

Additional flag IDs:

| Modifications | | | | | | |
|-------------------|------------|-------------|------------|--|--|--|
| Chile | | | | | | |
| Bahia San Antonio | | | | | | |
| Lagoa do Peixe | | | | | | |
| Northern Brazil | | | | | | |
| Delaware Bay | | | | | | |
| Arctic | | | | | | |
| | First year | Second year | Third year | | | |

Banded Birds Worksheet

1. Which modifications helped you see more flags? Why?

2. How will scientists use that information?

3. What is the advantage of this type of tracking?

4. What are the disadvantages of this type of tracking?

5. Is there anything else you would like to learn about using leg flags to track bird migration?

Motus Worksheet

Tips to Exploring the Motus website

1. Read about Motus on the About menu. Review other pages under this Menu to understand Motus and the network of partners.
2. On the map on the home page, zoom in and out to see where the Motus stations are located. Find the area where your school is located on the map and look for Motus stations nearby.
3. Go to the Explore Data menu to understand more about the projects, stations, and species monitored. Under Explore Data > View Tracks, search for different projects or species to see different migrations tracks.

1. Why are these stations located where they are?

2. What do you think impacts the decisions on where a station should go?

3. Why do some of the tracks stop in North America even though we know these birds fly to South America?

4. What is the advantage of this type of tracking?

5. What are the disadvantages of this type of tracking?

Tracking Program

\$15,000 for a two year study. Costs of each technique:

| | Flags and bands* | Motus tracking* | Satellite tracking* |
|--------------------------------|----------------------|---|----------------------------|
| Flag or tag - Placed on bird | Flags: \$2/flag | Radio Tags: \$225/tag | Satellite tags: \$1950/tag |
| Registration of tag in network | | \$1500 for 20 tags (access to all tower data) | \$80/tag |
| Equipment | | \$3400 for a new tower | |
| Staff for resighting flags | \$1500/per site/year | | |

**All three technologies require the scientists to trap birds to put tags on them and to analyze data. For the purpose of this activity the cost is assumed to be the same for all three techniques and does not need to be included in the budget.*

State your research question.

What data do you need to collect to answer this question? *Include information about where the birds will need to be captured and tagged, where they need to be monitored, and where towers need to be installed if they don't already exist.*

How will the data you are collecting help to answer your question?

Tracking technology: _____

Create a budget to include how the funds will be spent between the two years.
