# Exploring Palmer LTER

<https://pallter.marine.rutgers.edu>

I. Antarctica is a Continent:Look on a globe or at the map below. Name three things you notice and two things you wonder about it.

# Notice:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Wonder:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



What do you know about the physical characteristics (weather, climate) of the Antarctic ecosystem? Write some of your ideas below:

What organisms live in Antarctica?

Write the name of the organism and one interesting fact about them on this diagram below:

A picture containing text, book

Description automatically generated

II. LTER Research: Scientists visit Antartica year-round to better understand this important ecosystem.

LTER is an Acronym. Write what each letter stands for below.

L:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

T:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

R:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What do you think the value is of collecting scientific data over a long period of time in Antarctica?

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Middle and high school students can read about each of the laboratories that work together to understand the Antarctic food web. See <https://pallter.marine.rutgers.edu/research-components-labs/>

What is most interesting to you? Why? Write some notes below:

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**III. Research Methods:** Antartica is a cold and harsh environment. How do you think scientists study this important ecosystem? What equipment do they use?

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Take a look at Palmer Station on the webcam:

Station - <https://www.usap.gov/videoclipsandmaps/palwebcam.cfm>

Torgeson Island (penguins) <https://www.usap.gov/videoclipsandmaps/palwebcam.cfm?t=1>

What do you notice about Palmer Station?

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What questions do you have about Palmer Station?

## IV. Organisms that Live on the Western Antartic Penisula

Penguins on the Western Antarctic Penisula

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| --- | --- | --- |
|  |  |  |
| Adelie  http://eol.org/pages/1049602/overview | Chinstrap  http://eol.org/data\_objects/31959318 | Gentoo  http://eol.org/pages/1049603/overview |

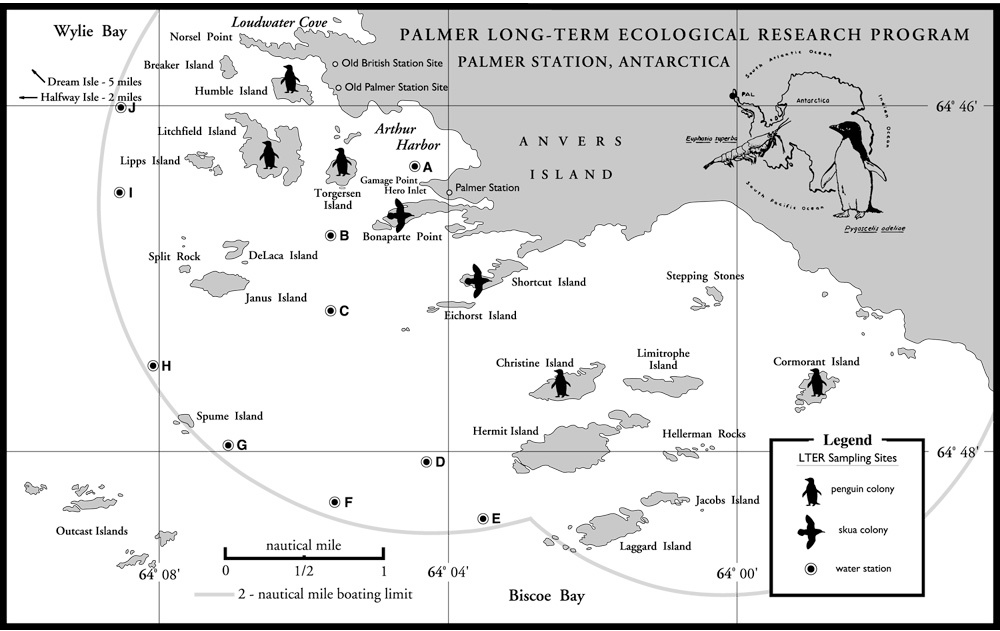
Explore the Encyclopedia of Life (eol.org). What can you find out about the penguin species that live on the Western Antartic Penisula? Write some notes below:

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Humpback Whale  http://eol.org/pages/328575/overview | Krill  http://eol.org/pages/509426/overview | Salp  http://www.divediscover.whoi.edu/expedition10/hottopics/salps.html |

Explore the Encyclopedia of Life (eol.org) website. What can you find out about the whale species that live on the Western Antartic Penisula?

## V. Prepare for your Video Teleconference with Palmer Scientists.

Below is a map of the islands around the Penisula where LTER scientists conduct their research:



Brainstorm your questions for the scientists here: