

WHERE DOES IT LIVE?

LEARNING GOAL

1. I can use inequalities to describe where a species lives.

WHERE DOES IT LIVE?

All types, or **species**, of living things require a specific kind of environment for survival. For example, we all need to live in a place that is not too hot or too cold.



Sometimes ecologists use mathematics to study where a species can live. Let's look at an example.

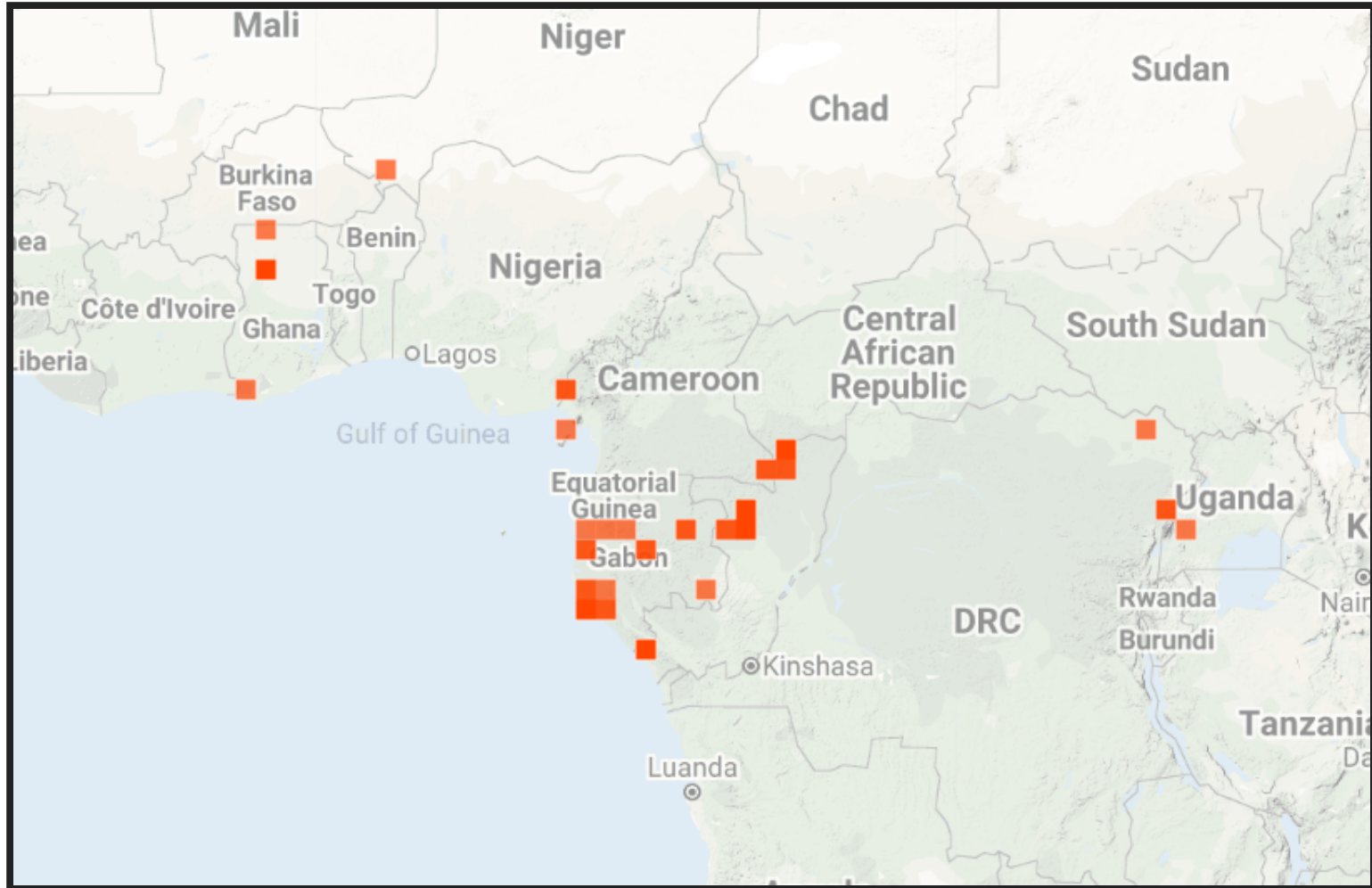
AFRICAN FOREST ELEPHANT



- Lives in humid forests in African
- **Conservation status:** Vulnerable (likely to become endangered unless conditions change)

OCCURRENCE MAP

Every red mark represents a location where the African forest elephant has been seen.



TASK 1

Choose an animal species.


HOW TO CHOOSE A SPECIES:


1. Go to the [iNaturalist](#) website.
2. Type the name of a group of animals (for example "Elephants") and select one of the choices that appears.
3. Click on "Species" and choose a species.


Observations


Elephants Location

The World 5,265 OBSERVATIONS 4 SPECIES 616 IDENTIFIERS

 4,305 observations CC
Savannah Elephant
(*Loxodonta africana*)

 624 observations CC
Asian Elephant
(*Elephas maximus*)

 98 observations CC
Forest Elephant
(*Loxodonta cyclotis*)

 2 observations CC
Savannah x Forest Ele...
(*Loxodonta africana* x *cyclotis*)

Example: If you search [iNaturalist](#) for "Elephants," it will allow you to choose from 4 observed species of elephants. Once you choose your species, click on its image to begin **task 2**.

TASK 1

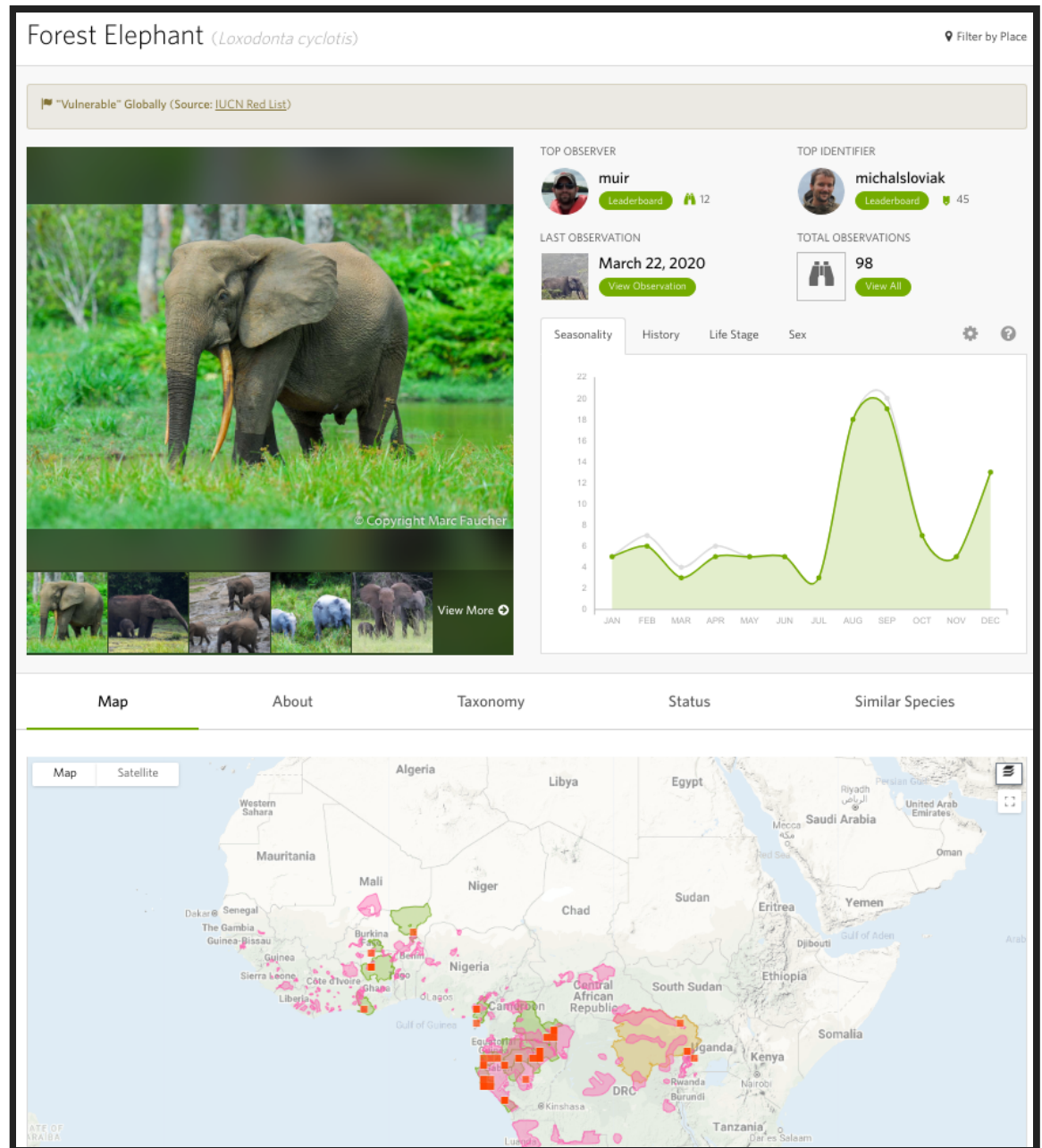
Write the name of
the species of
animal you have
chosen here.

Optional: Draw a
picture of a
member of this
species

TASK 2

Find the map for your species, and take a screenshot.

1. Go to the [iNaturalist](#) page for your species (You found this in task 1). If you need help finding the page for your species, go back to the directions for task 1, or ask Mr. Durden.
2. Find the map. Make sure you can see all of the red dots.
3. Directions for taking a screenshot are on the next slide.



TASK 2

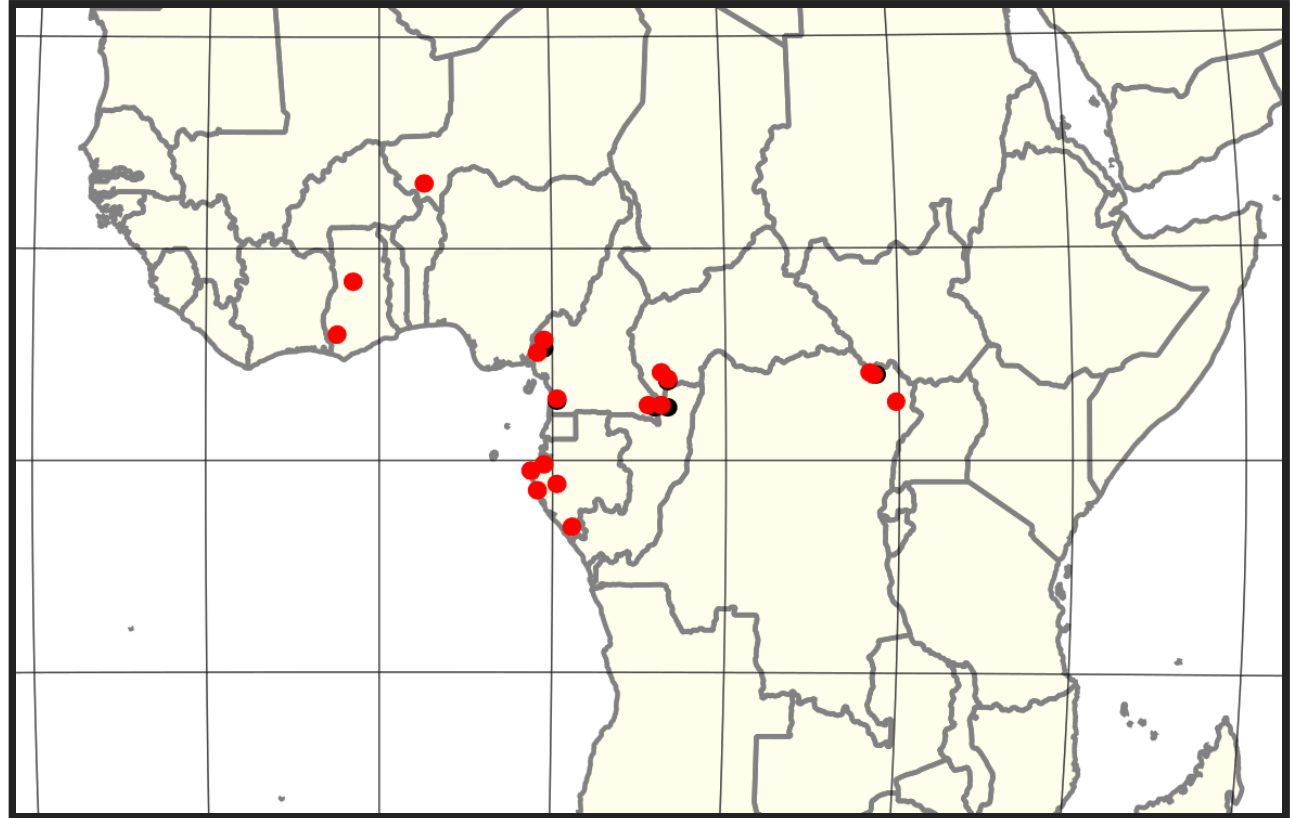
Take a screenshot of your map and insert it here. Make sure you can see all of the points!

HOW TO TAKE A SCREENSHOT

1. On your iPad, press the sleep/wake button and the home button at the same time.
2. You can save the screenshot to photos first, and then insert into Notability, or you can copy and paste.
3. Let me know if you need help.

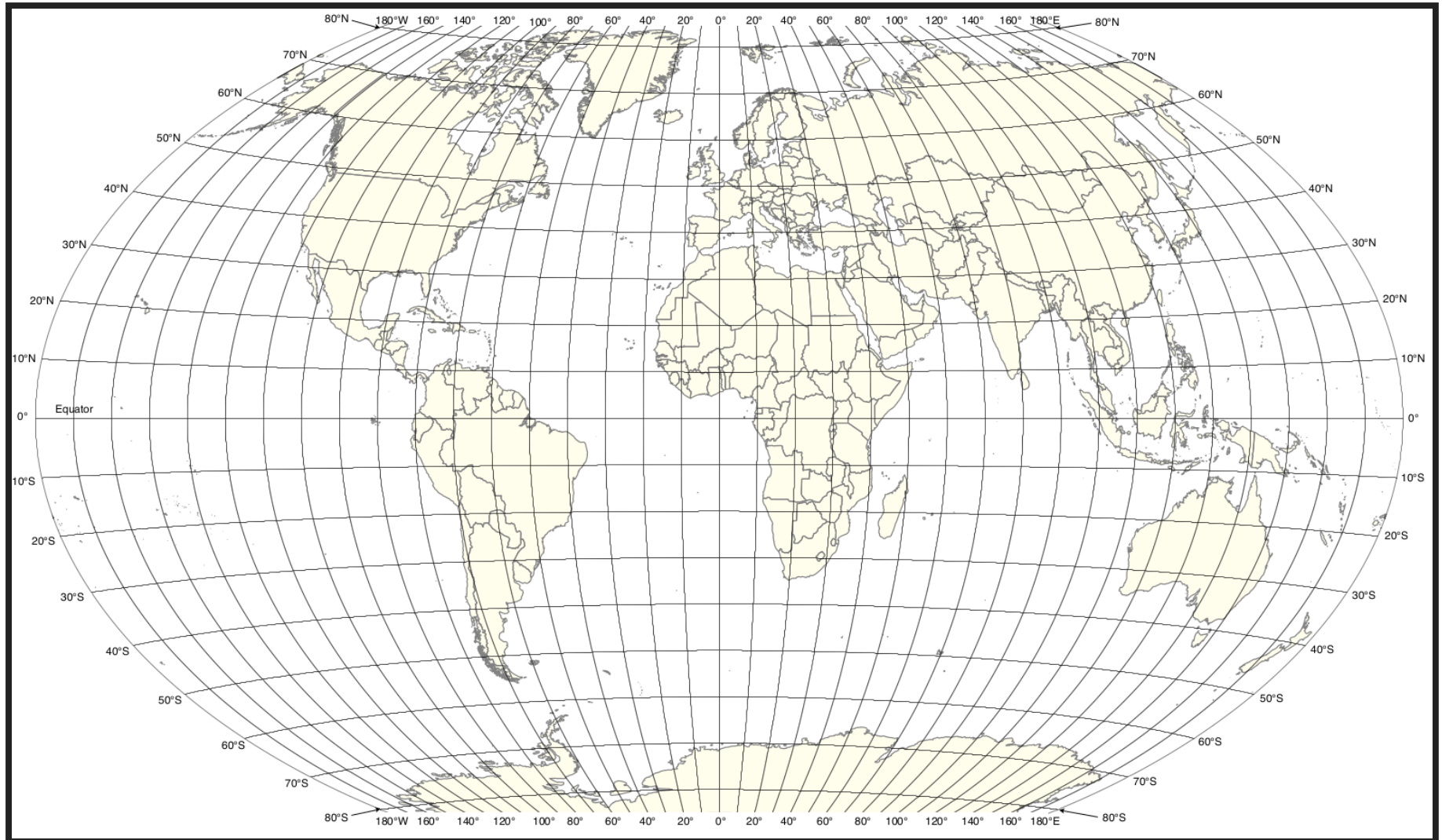
TASK 3

Draw the points from your map onto the map with the latitude and longitude grid (We will be using the grid lines to find latitudes and longitudes later).



Example: I plotted the red points where the African forest elephant was seen.

Plot the points where your species has been seen here.



TASK 4 (OPTIONAL)

Tomorrow we will write inequalities to describe the latitudes and longitudes where your species occurs. **Are you ready to do this on your own?**

Are you ready for more?

Write one or more inequalities to describe the locations that you plotted, where your species has been seen.