



# Giraffe Tracker

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Giraffes are beautiful and unusual animals! They are also endangered! In this activity, you will use a “big data” tool to find out where the Tallest animals on the planet are found. You can even ask your own questions about the movement of the animals to understand more about their range and habitats.

**Grade Level** – 2-8

**Driving Question:** Where do the different giraffe species live?

**Timeline** – 45 min – 1 hr

**Objectives:**

- I can ask questions that can be answered with data.
- I can access a database of observations and data.
- I can notice patterns in data.
- I can create a map comparing habitats of different kinds of giraffes.

## NGSS Alignment

### DCIs:

LS2A: Interdependent Relationships in Ecosystems

LS4D: Biodiversity & Humans

### SEPs:

Developing & using models.

Analyzing & interpreting data

Engaging in argument from evidence

Obtaining, evaluating & communicating information

### CCs:

Patterns

Systems & System Models

Giraffes are not all one species! Scientists have a couple of different ideas about how species exist, and how many are “subspecies” of the same species. In one model, there are four species, with about 9 subspecies. In another model, all 9 subspecies are considered separate.

But an observation that all giraffe scientists agree on is that each type of giraffe can be found in different locations. They all also recognize that giraffe populations are shrinking, and that we need to understand their range and habitat to better protect them.

In this activity, you can be the scientist by seeing the real observations that other people are recording in a database called “iNaturalist.” This tool will let you see lots of information reported by people who see giraffes in the wild, including the species, the habitat, the location on a map, and more!

### **Download iNaturalist**

The first step is to download iNaturalist. This app is FREE, and they will not send you information you do not ask for. Have an adult help to access the site and set up your account. They can check for security concerns.

iNaturalist is available from your app store for both Mac and Android smartphones and tablets. You can also use a computer to view the site at <https://inaturalist.org>.

When you have downloaded the site or reach the web page, create your own account. Follow the steps on the website or app. Then on the next page, follow the instructions to find data to help answer your own questions.

### **Finding Giraffe Data in iNaturalist**

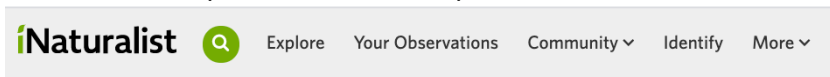
iNaturalist is a “citizen science” site that lets you post photos of living things, identify them, and share with other people. When you post an observation, other viewers may either confirm or correct your identification. The data in the site is used by professional scientists to get large amounts of data about animal habitats, location, population numbers, and other information.

For this activity, you will “Explore” the data others have posted.

#### **Procedure:**

1. Log onto iNaturalist on your smartphone, tablet or computer. See page 1 for instructions for installing or accessing on the computer. Use your account login and password.

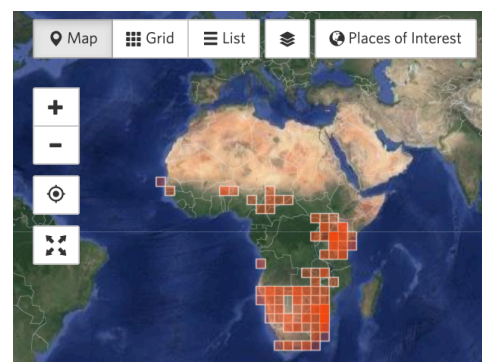
2. Click on the “Explore” tab in the top row menu.



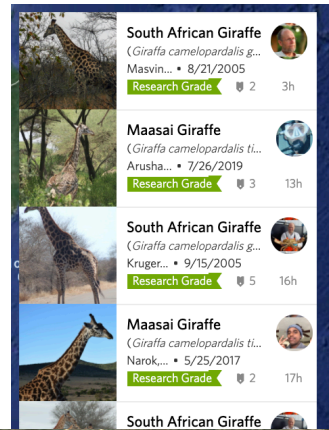
3. When the world map loads, type “Giraffe” into the “species” box in the search bar.



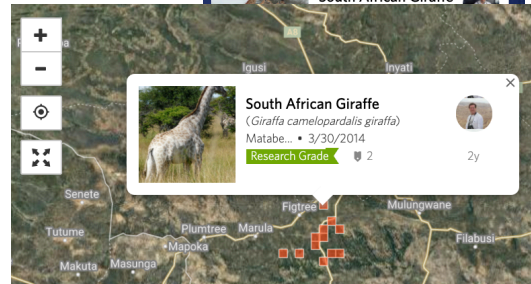
4. The map will show colored pixels where giraffes have been observed. Use the + and – buttons to the left to zoom in or zoom out, and look more closely at the area where giraffes live.



- You will also see a list of giraffe observations that tell you what species or subspecies of giraffe the observer found. This can give you more information about each kind of giraffe.



- When you zoom in far enough, you can click an individual orange pixel to see more information about that observation.



If you double click on the observation on this image, you can get more details (see image below.) This information includes the photograph of that animal, a map of the location, and any confirmation from others that this is the correct species.



## **Mapping Giraffes and Asking Your Own Questions!**

Now you know how to FIND information. It's time to BE the scientist!! Start on the Page 4 by mapping out where you find different species of giraffes. You may eventually notice a pattern on the map that tells you more about giraffes!

Then you can ask your own questions using the template on Page 5. Then use the information in iNaturalist to get the data you need to help answer your questions!

You can also learn more about giraffes by reading [Conservation Tales: Giraffes!](#)

## Mapping Giraffe Observations

**Driving Question:** Where do the different giraffe species live?

On the African map below, put colored dots on the areas where you find each species or subspecies of giraffe! You get to pick what colors to use! Make sure you color in the “key” that tells what color represents each kind of giraffe!



**Giraffe Species or Subspecies**

- Kordofan Giraffe
- Masai Giraffe
- Namibian Giraffe
- Nubian Giraffe
- Reticulated Giraffe
- Rothschild's Giraffe
- South African Giraffe
- Thornicroft's Giraffe
- Uncertain species

## Asking Your Own Questions

Now it's time to ask your own questions that you can answer using iNaturalist data.

In the table below, write some questions about giraffes that you wonder about. You will see a sample question to get you started! Then write your ideas about what you THINK will be the answer. Then use the iNaturalist app to find out more about giraffes. When you find answers, you can write your conclusions in the space provided!

Question	What data do I need to find?	Conclusions
<i>Do any giraffe species share the same habitat and location?</i>	<i>Look for color dots on the map that are in the same area.</i>	

Share your questions and conclusions with a teacher or parent. They can help suggest other ways to use the data, or they might help ask other new questions!