



Minding the Hill Country
Spider Friends
Survey



Field Notebook

Minding the Hill Country is about inspiring people to spend more time exploring the natural world around them. We want to encourage and support people of all ages, abilities and backgrounds to enjoy and study wildlife in their local area and to observe and record information about the local environment. Minding the Hill Country's research and education program is delivered through a network of organizations, providing resources, training and events. To find out more, you are welcome to contact the project PI: Kristy Daniel: kristydaniel@txstate.edu



You may have seen me before, but do you know much about me? There are 45,000 described species of us, but you might not even notice most. I don't mean to brag but in our world, we are excellent hunters and keep insect populations in check. Take a closer look...



A day in the life of a spider

I eat loads of insects and help prevent the spreading of diseases carried by fleas, ticks, and mosquitos. I help maintain ecological balance in the places I live. Some of us can be found all around the globe, in plain sight, treetops, underground, and even underwater! Really, you can find us just about anywhere except for polar regions, the highest mountains, and deep oceans.



Highlighting Spider Science



There are scientists like **Dr. Aimée K. Thomas**, from Loyola University New Orleans, who work with students to explore the biology, ecology, and natural history of spiders in New Orleans, Belize, Guatemala, Ecuador and the Galapagos Islands. Dr. Thomas serves on the Board of Directors for the Louisiana Master Naturalist of Greater New Orleans, an organization that encourages members of the community to be good stewards of the environment by learning the natural history of the Greater New Orleans region and volunteering time to teach others about the complexities of the natural history of the region. She has been passionate about studying spiders for more than 25 years because there is a lack of information about their niche in our environment, even though they provide important ecological services.

According to West African and Caribbean folklore:

A long time ago there were no stories in our world. Then, Anansi, a trickster that took the form of a spider, went to visit Nyan, the sky god, to buy his stories to share with the world. However the god said the stories can only had if Anansi brought back a python, leopard, fairy, hornet. Off Anansi when to find the other animals. First, he traveled to where the python lived and debated out loud if the python really longer than a palm branch. Python overheard and agreed to tied to the branch to solve the debate. When he was completely tied, Anansi took him and searched for the other animals. Anansi dug a deep hole the Leopard fell into. Anansi offered to help him out with his webs. Once the leopard was out of the hole he was bound in Anansi's webs. Next, Anansi pretended it was raining by using a gourd to pour water his head and hornet nest. He helped the hornets seek cover in the empty gourd and sealed the opening. To catch the fairy, he a doll covered with sticky gum. When the fairy touches the doll, her hands stuck. Anansi brought his captives to Nyan the sky god where he was granted the stories. Nyan "Kawku Anansi, from today and going on forever, I present my stories to you with my blessing! Form now on we shall call them spider stories!

Story adapted from:

<https://www.wilderutopia.com/traditions/myth/ashanti-of-ghana-how-spider-obtained-the-sky-gods-stories/>



The Survey



There are almost 900 species of spiders that live in Texas. Some are common and found in lots of places while others are rare. This survey aims to find out more about the distribution of where spiders live in Central Texas.

Some spiders are sensitive to many environmental factors and that may influence where they live. Scientists can use results about where spiders live as an indicator of environmental health.

This is what you get to do!

- Choose your location and record site characteristics (on page 4).
- Begin looking for spiders inside your home.
- Take pictures of spiders you see.
- Upload pictures to the project [iNaturalist](#) site.
 - Spider Friends of Central Texas
- Search for more! Look for spiders outside of your home!
- Return all your results and survey responses (See back of packet).



How to set up an iNaturalist account:

- Visit the iNaturalist website at <https://www.inaturalist.org/> or download the iNaturalist app onto your smartphone.
- Create an account using an existing email and choose any username (many TXST students use their NetID).
If you already have an account, feel free to use that one!
- We suggest you turn on Geolocation services

How to access [Spider Friends of Central Texas](#) on iNaturalist:

Website: Within the webpage, search for *Spider Friends of Central Texas* in the search bar located at the top left corner. Click ‘Join project’

App: Click the tab in the lower right corner labeled More. In the search bar, type *Spider Friends of Central Texas* and click ‘Join’

Safe fieldwork

In the event that you are bitten by a spider during your observations, you should wash the affected area with soap and water, apply an icepack or cold washcloth, elevate the site to prevent swelling, and optionally apply an antihistamine cream to the site. If you choose to go to the doctor, capture/kill the specimen and bring it with you to your appointment for species verification.



[Potentially Dangerous Spiders to Avoid](#)



Activity: Observing Spiders

Use the **Spider Identification Guide** included!

Choose your location and record site characteristics.

Observer Name: _____ Date: _____

Survey Start Time: _____ Survey End Time: _____

Current Weather Conditions (circle all that apply):



Describe the building you are observing:

Apartment, Town House, or Dormitory



Name of Dorm/Complex: _____

Modular Home or Trailer



Tent



Shed or Outbuilding



Business Building, School, or Hotel/Motel



House



Location Zip Code: _____

Number and Type of Indoor Pets:







Other _____



Activity: Observing Spiders

Use the [Spider Identification Guide](#) included!

Search around inside your living space for spiders!

Inside – Suggestions:

- Top and bottom corners of each room
- Under chairs/stools, bookshelves, and other similar objects
- Around cabinets
- Corners of windowsills, doorframes – or anywhere you find them!



Click to
← watch
video



Search around outside your living space for spiders!

Outside – Suggestions:

- Around doorframes and exterior of windows
- On the walls



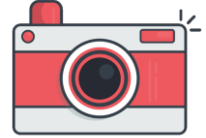
Click to
← watch
video



Activity: Observing Spiders

Use the [Spider Identification Guide](#) included!

I FOUND ONE! What do I do now?



1. Take as as many clear photos as possible!

Tip: It helps to zoom instead of bringing the camera closer to a small object – Using your regular photo app, then uploading to iNaturalist is recommended. You also can also take a video and take still images by pausing the video when the spider is in focus and taking a screenshot!

2. Upload to **iNaturalist.org**

1. Open [iNaturalist webpage](#) and click '+ Add Observations' or click the camera icon labeled 'Observe' in the smartphone app
2. Select 4 photos at a time on the app
Tip: you can add more than 4 by clicking 'Next' then clicking the square with '+' sign to the left of the photos o add more
3. Click 'Search Species bar' if using the webpage or click 'What did you see?' in the app to view identification suggestions – **Don't be intimidated! There is no pressure here! It can be as broad as necessary! Do your best!**
4. In the Notes/Description section, mention where you found the spider (for example: 'found on the windowsill inside my dorm,' or 'found on the doorframe outside of my dorm')
5. Lastly **don't forget to add your observation to the project [Spider Friends of Central Texas](#)**. This can be done by clicking Projects and selecting our project before clicking Share or Submit.



Activity: Your Thoughts About Spiders

Do you think spiders are important?

 Yes

 No

 Not Sure

Do you like outdoor activities?

 Yes

 No

 Not Sure

How did you hear about this survey?

 In-Person Activity

 Website/
E-mail

 Other: _____

What is your iNaturalist username? _____

**If you do not have an iNaturalist Account, you check out an iPad to use for free at the Meadows Center. Or you can email photos you find directly to TXSciencePEERS@gmail.com*

Read each statement and then select the response that best indicates how you feel:

Strongly agree Somewhat agree Neither agree nor disagree Somewhat disagree Strongly disagree

It is fun looking for things in nature.					
I like to learn about nature.					
I enjoy spending time outside in nature.					
I think about nature when I am outside.					
I do things without paying attention.					
I rush through activities when outside.					
Nature has value even when not used by humans.					
I understand how my actions impact nature.					
I do not think I am a part of nature.					
I pick up trash I find outside.					
I try not to disturb animals outside.					
It is not my job to take care of nature.					



Activity: Your Thoughts About Spiders

How do you think you will react next time you see a spider? _____

Pretend you are a spider and look around outside, where would you like to live? Why? _____

How do you think the world would change if there were no more spiders? _____

How do you think people should treat spiders? _____



Safe Relocation



Click to
watch
video

Moving a Spider to Safety

Caution! Do not attempt to handle a spider if it cannot be identified as harmless

1. Place a cup or glass over the spider on a flat surface to trap it (mind its legs)



2. Get a piece of paper or thin cardboard and slide it between the cup and the surface and under the spider (again, mind the legs!)



3. Keep the paper/cardboard securely against the cup with your hand and try to flip the cup right side up to trap the spider at the bottom (you can keep the paper/cardboard as a "lid" in case the spider jumps or climbs out)



4. Take your rescued spider friend outside and release it away from your home in a patch of grass or on a plant



Here are some steps you can take to help them avoid making your house, their house.

- Keep garages, attics, and basements clean and clutter-free.
- Keep clothes and shoes off the floor.
- Seal off any cracks or crevices around the home.



Activity: Your Thoughts About Spiders

Read each statement and then select the response that best indicates how you feel:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I want to know more about spiders					
I want to know how scientists study spiders					
We should learn more about spiders in school					
I want participate in activities investigating spiders					
We should protect spiders					
Spiders are interesting animals					
People should use fewer chemicals in order to allow spiders to live close to them					
I want to watch a spider construct its web					
I will run away if I find a spider in my room					
Spiders scare me more than other animals					
I get nervous if someone tells me there is a spider near me					
I do not like pictures of spiders					
Thinking about touching spiders scares me					
Catching spiders is exciting					
I am fine with spiders living in my home					
I would rather avoid places with spiders					
I would like to touch a spider					

Extra Notes & Drawings

You can use this space to take notes or draw pictures of what you found!



Fun Extra Resources...

Find more Information about Spiders!

Meet Lucas the Spider:

<https://www.youtube.com/watch?v=ZoYVZmKSYFg>

Watch the Sicariid Spider that couldn't hide:

<https://www.youtube.com/watch?v=rLw-9dpHtcU>

General Spider Information: <https://www.spidersworlds.com/spider-information/> or <https://www.spidersworlds.com/es/informacion-sobre-aranas/>

Texas AgriLife Extension-Spiders:

https://lubbock.tamu.edu/files/2015/04/Spiders_E408.pdf

The Great Spider Debate:

<https://www.uky.edu/Ag/Entomology/ythfacts/resourc/tcherpln/spiderdebate.pdf>



Community Organizations and Programs Available:

Centro Cultural Hispano de San Marcos: <http://www.sanmarcoscentro.org/programs.html>

EARDC Aquatic Science Adventure Camp: <https://www.eardc.txstate.edu/camp.html>

Indigenous Cultures Institute: <https://www.indigenouscultures.org/>

San Marcos Youth Services Bureau: <http://ysb.org/ysb/>

Spider Joe: <http://spiderjoe.com/>



Send in your responses!

Now that you have gathered your results it is important that you return them to us so that they can be shared with the scientific community.

Return your results through the project Qualtrics site (<https://tinyurl.com/SpiderFriendsSurvey>)

OR

Return this activity packet through Mail to:

Kristy Daniel
Texas State University
254 Supple Science Building
San Marcos, TX 78666

Thank you for taking part in the Spider Friends of Central Texas survey!

