

SUMMER ADVENTURES
ON THE ROAD

Get Outdoors





DID YOU KNOW?

Use these activities to learn about the natural world and connect with nature wherever you are—whether you're in a national park or your own neighborhood. You can do these activities in wild areas or in places where there are lots of streets and sidewalks. There's nature everywhere if you look closely enough.

Some of these activities help you to get to know a specific place using all your senses. Others involve exploration, playing games, and even earning digital badges. Several involve **citizen science**, which means contributing to real scientific projects. They're all designed to help you learn more about the world around you and the importance of protecting it—and have fun at the same time!

READY TO EXPLORE? 

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Plastic Pollution Journal

Ages 4-8

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Listen Like an Animal

Ages 4-8

PG 7

A-B-See Hike

Ages 4-8

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Debris Tracker

Ages 9+

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Investigate Insects

Ages 9+

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Mindfulness in Nature

Ages 9+

Book List

PLASTIC POLLUTION JOURNAL

ACTIVITY | Ages 4-8



Litter that ends up in the environment can harm or kill wildlife while also damaging and degrading habitats. Marine debris—any human-made item that makes its way to the ocean—is one of the most pervasive global threats to the health of the ocean. And scientists estimate that 80 percent of marine debris comes from land-based sources. You can learn about marine debris in Everglades National Park or anywhere else in the world, even if you’re far from the ocean.

- 1 Print out the [Plastic Pollution Action Journal](#) on the following two pages and fold it into a booklet. Ideally, everyone will have their own copy. Younger children may need help from an adult or older child.
- 2 Work through the first two steps in the journal. In Step 1, reflect on how you use plastic in your own life. In Step 2, learn about the problems that plastic creates and take a true-or-false quiz.
- 3 Turn to Step 3 in the journal and ask your own questions about plastic.
- 4 Pick a place to track litter and decide how much time you have. Then move to Step 4 in the journal and work in small groups to mark down all the litter you find using the data sheet provided.
- 5 Turn to Step 5 in the journal to analyze what you found. What’s the most collected kind of litter? Where did you find the most litter? Why do you think that was? Then start to think about solutions to the plastic pollution problem.
- 6 For the final step in the journal, make a pledge describing how you’ll combat plastic pollution. We can all be part of the solution!

WHEN IS PLASTIC A PROBLEM?

Plastics have become a huge pollution problem that won't go away easily in our country or in many other parts of the world. Use this true or false quiz to assess your plastic pollution understanding:

T or F Plastic discarded on land can get washed into rivers and end up in the ocean.

T or F Plastic can harm animals in the environment through ingestion or entanglement.

T or F Scientists estimate that 8 million metric tons of plastic enter our oceans every year.

T or F Scientists have found plastics in the depths of the world's oceans and at the summits of some of the world's highest mountains.

T or F 50 percent of plastic used globally is used only once, and then is discarded.

How did you do? The answers to all of the questions above are true!

ACTION STEPS

Of what you learned today, what is most important to you?

2

MAKE A PLEDGE!

Write one or two pledges for combating plastic pollution.

How will you use this learning in real-life scenarios?

6

PLASTIC POLLUTION ACTION JOURNAL

NAME:

1

HOW IS PLASTIC PART OF MY LIFE?

Plastics are lightweight, durable, and long lasting. No wonder they are used for so many purposes in our daily lives. Think about how you use plastics:

I use these items...

...to do these things:



Plastic bag
Plastic bottle

Have you ever found plastic items to be a problem?
Explain...

Thank you for helping to fight plastic pollution.
Share your stories on social media: #EXPEDITIONPLASTIC

Powered by:

NATIONAL
GEOGRAPHIC

Morgan Stanley

Why do you think action is needed around plastic pollution
globally?

USING SCIENCE TO UNDERSTAND

We know plastic pollution is a problem, but there's a lot we don't understand. Researchers from Bangladesh, India, U.S.A., and U.K. are working together as part of National Geographic's Sea to Source Expedition to try to answer these questions.

- How does plastic move from land to rivers and ultimately into the ocean?
 - What are the most commonly littered plastics? Where do we find plastic littered on land?
 - Are there microplastics in the air, water, and sediment near rivers?
 - Why do people use plastic? What are the barriers to change?



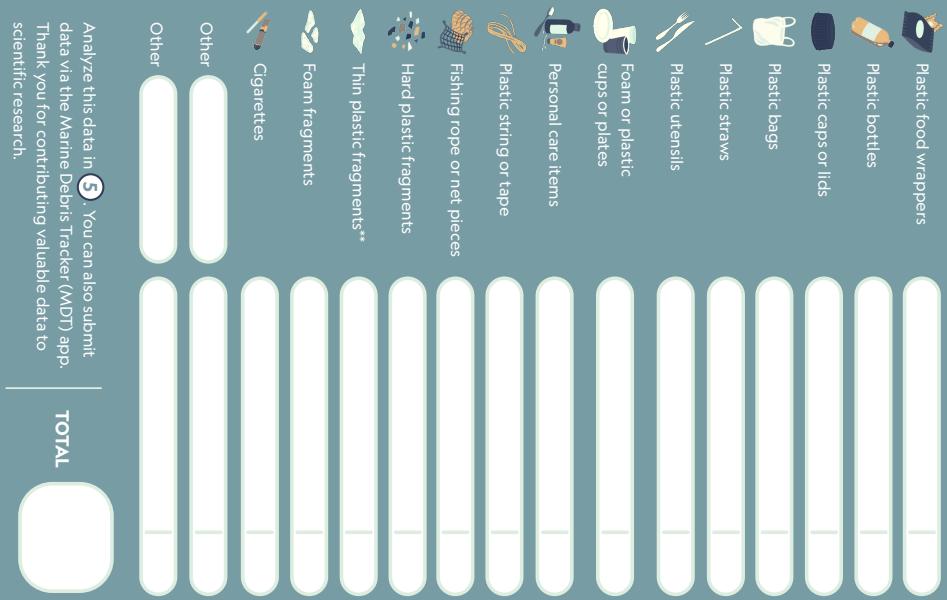
DATA FOR RESEARCH

To help answer questions about common types of plastic, we are using an app called **Marine Debris Tracker (MDT)** to record the plastic we find in the environment.

Observe litter on land or in water with your school or community; use the Litter Tracking Sheet  to share your findings.

LITTER TRACKING SHEET

Working with a partner or group, keep track of plastic litter found on land or in water by writing a tally mark for each item found in each category below.



	TOTAL
Analyze this data in 5 . You can also submit data via the Marine Debris Tracker (MDT) app. Thank you for contributing valuable data to scientific research.	

ANALYZE & FIND SOLUTIONS

Look at your data. What is the most collected plastic waste?

Where did you see the most litter? Why do you think it was there?

4 Rs

WHAT YOU CAN DO

WHAT YOU CAN DO

REDUCE
To decline in size,
amount, numbers
or intensity

REUSE
To use something
more than once

REUSE

To use something
more than once

REFUSE

accept

1

LISTEN LIKE AN ANIMAL

ACTIVITY | Ages 4-8

Animals like foxes and rabbits have to be alert listeners. They have to know the sound of possible threats such as predators. And they have to know the sound of possible food, like when a fox listens for mice tunneling through snow. Can YOU hear different sounds and tell them apart? You can listen for wood storks and Florida panthers in the Everglades or you can listen for creatures that live near you.

TO DO

Go outside with your notebook and find a nice place to sit. Make sure you have something to write with.

Listen carefully. Can you hear at least five different things? List them here:

1

2

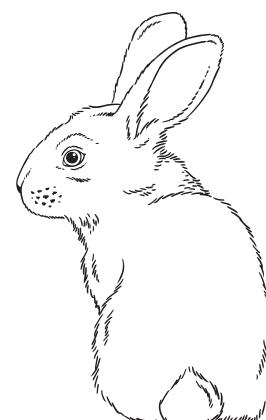
3

4

5

Try to determine which sounds were created by people, which were created by other living things, and which were created by **abiotic factors** like water or wind.

Relax and enjoy the soundscape of your spot!



A-B-See Hike

ACTIVITY | Ages 4-8

Practice the alphabet and notice nature at the same time! If you're doing this hike in Everglades National Park, you might see:

american alligators

bald eagles

clouds

dirt

eggs

forests

grass

humans

and more!

And if you're not in the park, you can find alphabetical nature wherever you are.

TO DO

- 1 Pick a place to hike and start your journey.
- 2 Have everyone point out things they see that start with each letter of the alphabet.
- 3 Once an “**A**” item is found, move on to “**B**,” and continue in alphabetical order.
- 4 If you have a large group, divide into teams and have each team play the game.
- 5 If you make it to “**Z**,” start again!
- 6 For more activities that can be enjoyed anywhere, visit the [Play in a National Park](#) collection.



DEBRIS TRACKER

ACTIVITY I Ages 9+

By collecting data about litter wherever you see it, from the ocean to your backyard, you can contribute to critical scientific research. Help scientists and researchers better understand the bigger picture of the plastic pollution crisis, from global trends to impacts on local communities, by using the free [Debris Tracker](#) mobile application on your smart device. You can collect data while visiting the Everglades or wherever you go!



TO DO

- 1 Open the Debris Tracker app and create an account. Once you are logged in, select **Quick Track**.
- 2 The next screen shows sections indicating litter categories. Scroll through the list to see many different items, or use the search bar to find a specific item.
- 3 Record the number of items you find of each litter type by tapping the **Add** button as many times as you need. You can also change the number before tapping **Add**.
- 4 When done collecting, select **Continue**.
- 5 Review the items you have tracked and the map of your sightings. You can always go back to add or remove items. When you're ready, click **Upload Session**. You've collected and shared important data!
- 6 You can learn more about Debris Tracker and find additional activities at [National Geographic Debris Tracker](#).

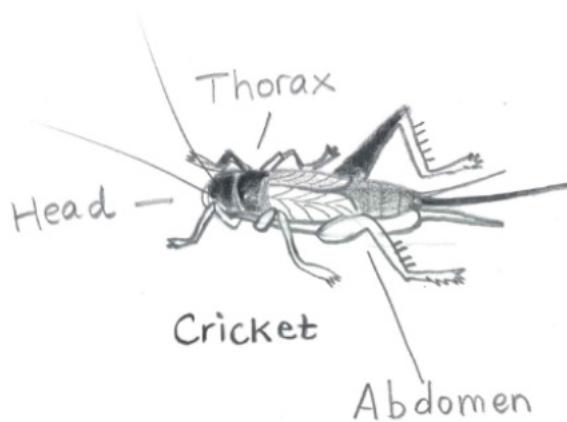
INVESTIGATE INSECTS

ACTIVITY | Ages 9+

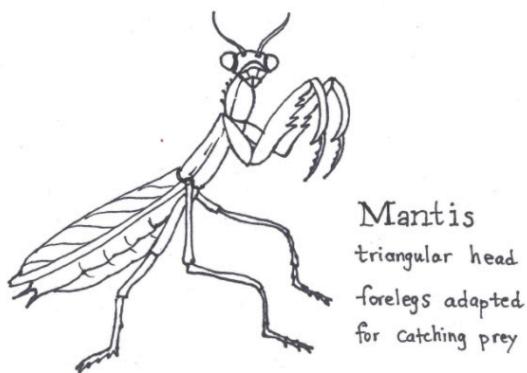
There are about one million described species of insects, and scientists estimate the actual number of living insect species may be many times higher. Insects have segmented bodies, which are divided into three major regions: (1) the head, (2) the three-segmented thorax, which usually has three pairs of legs in adults and one or two pairs of wings, and (3) the many-segmented abdomen. You can find insects like whirligig beetles and zebra longwing butterflies in the Everglades, but you can also find insects almost anywhere else.

TO DO

- Observe this drawing of a cricket, showing the three body parts:

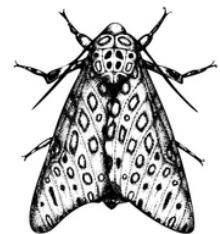


- Label the head, thorax and abdomen on this drawing of a mantis:



- Find as many insects as you can in 20 minutes. Draw them on the following page, and label the head, thorax, and abdomen.

INVESTIGATE INSECTS



MINDFULNESS IN NATURE

ACTIVITY I Ages 9+

You can build an Explorer Mindset while developing and applying the mindfulness practices of noticing, observing, and questioning. In this activity, work with a group of friends or family members to discover nature while practicing mindfulness—bringing focus to yourself and your surroundings. This activity will help you notice nature everywhere, whether you are in the Everglades or anywhere else on the planet.

TO DO

- 1 Ask everyone in your group: What senses help you experience nature around you? Next, set everyone up for a few minutes of stillness. If possible, have everyone find a space to sit, facing in different directions.
- 2 Say aloud the following prompt to help everyone use their senses to experience the surroundings:

Our minds are often racing with thoughts. Take three deep breaths and try to let those thoughts drift away from your mind.

Breathe in deeply through your nose. Breathe out slowly through your mouth. Let's take five more deep breaths together. Now let's bring our attention to our senses.

What are four things you hear?

What are three things you see?

What are two things you feel?

What is one thing you smell?

- 3 Have everyone share their sensory observations. Ask: Did we all notice the same things?
- 4 Now start asking questions about the natural world. Have everyone ask 10 questions about the world from the perspective of an animal, plant, or fungus.
- 5 Wrap up by asking: What did you notice today about your surroundings that you haven't noticed before? What would you like to learn more about?
- 6 Find more activities like this at [National Geographic BioBlitz](#).



FULL LINKS

PG 3

Plastic Pollution Action Journal

<https://www.nationalgeographic.org/media/plastic-pollution-action-journal/>

PG 6

Abiotic factors

<https://www.nationalgeographic.org/encyclopedia/abiotic-factors/>

PG 7

Play in a National Park

<https://www.nationalgeographic.org/idea/play-national-park/?page=1>

PG 8

Debris Tracker

<https://debristracker.org/>

National Geographic Debris Tracker

<https://www.nationalgeographic.org/education/programs/debris-tracker/>

PG 11

National Geographic BioBlitz

<https://www.nationalgeographic.org/projects/bioblitz/>