

Biodiversity Superhero

What is biodiversity?

Biodiversity is short for “biological diversity,” used to describe the variety of life forms within an ecosystem. The more biodiverse an ecosystem is, the more species work together to keep the system healthy and balanced. This helps the system recover quickly in the face of change, such as a forest fire or a shift in weather patterns.



Why is biodiversity so important?

Without a variety of species each doing their part, ecosystems can become threatened or even collapse. The endangerment of one species can quickly lead to the endangerment of another, which is why it's important that we fight to preserve as much diversity as possible.

Why do we need biodiversity superheroes?

Biodiversity around the world is being impacted by deforestation, climate change, and pollution, which is why we need heroes like you to help defend the world's ecosystems. You can even be a hero from the comfort of your own home, just by taking small steps every day!

Biodiversity Superhero

In this activity, all you'll need is a pencil and your imagination to design your very own biodiversity superhero. This could be an original character or an alter ego that takes action to protect biodiversity, or it could be an animal (real or imagined) that is a hero by playing a crucial role in its ecosystem.

Step 1: What is your superhero's mission?

Does your hero protect a specific ecosystem, or fight against a specific problem, such as pollution? Or maybe your superhero's mission is to stick up for a certain endangered species?



My mission is to put an end to deforestation by replanting trees wherever I go!

Step 2: What abilities does your superhero have?

What kinds of special abilities does your superhero need to accomplish their mission(s)? Can they fly, reverse time, or change forms? Or maybe they use special inventions - for example, a defender against pollution who uses a giant vacuum to suck up litter.

Step 3: Who helps your superhero?

Even superheroes need help sometimes. Who does your superhero call when they need help? Do they have a best friend, sidekick, or pet? How do they work together to protect biodiversity?



Take action like a

Biodiversity Superhero

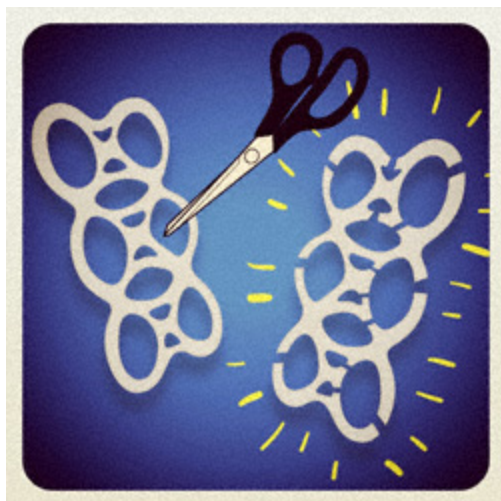
In this scavenger hunt, you'll get a chance to explore your own home and take note of the items that impact biodiversity, whether in your local community or across the world. It's likely that we all have some products that aren't great for the environment—that's why the first step to being a biodiversity superhero is understanding what the impacts are, and what you can do to help.

Plastic bags

Why it matters: Many of the plastic bags we throw away end up in the ocean, where they are swallowed by marine life. Sea turtles have become particularly endangered because floating bags look very similar to the jellyfish they naturally eat. This has a drastic impact on marine ecosystems that rely on sea turtles to maintain the seagrass beds and coral reefs.

What you can do:

- Find out if your family already has a stash of plastic bags. If so, reuse them!
- Search your home for reusable bags, boxes, or totes that can be kept in the car for the next grocery trip.



Six-pack rings

Why it matters: Six-packs of juice, pop, or alcoholic beverages are often packaged with plastic rings that can wrap around the necks, muzzles, or beaks of animals, restricting their ability to eat or breathe.

What you can do:

- Keep scissors near the garbage can to cut the loops of six-pack rings before you throw them away. This prevents animals from getting trapped.

Take action like a

Biodiversity Superhero

Straws

Why it matters: Like other plastic products, plastic straws do not decompose naturally, which means one straw can pose a risk to animals for as long as a thousand years. When birds like geese and seagulls eat them, straws can take up room in their stomachs and eventually lead to starvation.

What you can do:

- See if your family owns any paper straws, which decompose much more easily, or reusable straws that never need to be thrown away.
- If your household does use plastic straws, make sure to recycle them instead of throwing them in the garbage.



Palm oil products

Why it matters: The production of palm oil is a major cause of deforestation of tropical rainforests, which is endangering orangutans, pygmy elephants, rhinoceroses, and sun bears, among many other species. Without these species, the loss of biodiversity will continue like one domino toppling another. For example, without the orangutan, many tree species will also be threatened, because they rely on orangutans to disperse their seeds.

What you can do: Check for palm oil in the ingredients list of the following items:

- Pizza (dough)
- Chips
- Instant noodles
- Shampoo
- Laundry detergent

Do a Google search for palm-oil-free alternatives for the items you find.

Take action like a

Biodiversity Superhero

Phosphate products

Why it matters: Phosphates are a kind of chemical compound sometimes used in dish soaps and detergents. When washed away into lakes and streams, this provides an overabundance of phosphorus, which causes algae to grow and spread more rapidly than usual. This imbalance, called an “algal bloom,” creates major disturbances in aquatic ecosystems.



What you can do:

- Inspect the ingredients of your household’s dish soaps and detergents, keeping an eye out for any chemical name that includes “phosphate” (for example, “sodium tripolyphosphate”). Luckily, fewer dish soaps and detergents contain these compounds today, so it is easy to find eco-friendly alternatives.



Microbeads in soaps

Why it matters: Microbeads are the tiny plastic beads that you sometimes see in hand soaps, body wash, and other cleansing products. When flushed down your sink or bath, they end up in the waterways, where their tiny size makes them easily swallowed by animals. Worse, the toxins in the plastic are often carried up the food chain: for example, if a fish swallows microbeads, it can also have an impact on a bird that eats the fish, and so on.

What you can do:

- Keep an eye out for microbeads in your home and at the store when your family is shopping. Avoid these products when possible - there are many alternatives that are perfectly good cleansers without containing plastic.

My biodiversity superhero is named _____

Their mission is:



Their abilities are:



They are helped by:

