

SMALL ECHIDNA, BIG ENVIRONMENTAL IMPACT!



BIOTURBATION

Bioturbation is the movement of soil by a plant or animal.

One major helper in moving around soil in Australia is the Short-beaked Echidna, also known by it's scientific name *Tachyglossus aculeatus*. This species of echidna is one of the only active digging mammals with a large steady population within Australia. Bioturbation by echidnas helps spread seeds and spores and also filters water.

As the echidna digs through the soil looking for food like ants and other resources it kicks up mushroom spores which helps mushrooms grow into other areas. They also help to bury seeds from trees and plants that land on the surface of the ground. The seeds and spores that meet an echidna have a higher chance of multiplying and that helps environment maintain and develop.

SEEDS / SPORES



CLEAN WATER

Another way that bioturbation done by echidna's helps the ecosystem is by loosening up soil to allow for water to absorb better. The more water in the soil the easier it is for things to grow and allows the soil to act as a natural filter for the water as it passes through into deeper earth. This natural filtration brings more nutrients to the soil as well.



IMPORTANCE

Why should you care??? A happy Ecosystem! That's why!

The three topics above show how important the Short-beaked Echidna is to the environment and how this little mammal is helping bring balance to the Australian ecosystem one clump of dirt at a time.

WHAT IS AN ECHIDNA ANYWAY?

The short-beaked echidna is a mammal with a special nose and tongue that catches insects for food as they dig.

These small animals are great swimmers because of their strength. They can move objects double their weight.

Echidnas love to sleep all day and hunt for food at night.

They also are one of the few mammals that lay eggs!



Audience

The audience that I am trying to present this informational artifact to are visitors to a wildlife rehabilitation center in Australia. This artifact is specifically a label display intended to be added next to the Short-beaked Echidna rehabilitation enclosure. This artifact will be used to deliver information to a lay audience. As described in the lecture, an average of an 8th-grade reading level is equivalent to this directed audience. Therefore, I have used specific non-jargon vocabulary to inform the public entering the wildlife rehabilitation center. I assume this audience will be comprised mainly of families with smaller children and preschool to high school-aged students, so the information provided is compelling enough to be useful to all age groups.

Purpose

The purpose of this informational artifact is to inform the audience of the topic of bioturbation and the positive impact the Short-beaked Echidna has on the Australian ecosystem. It will also provide evidence that shows the reader the outcomes of the bioturbation echidnas perform. This is described in the four main topics of the artifact along with relaxed vocabulary to keep the reader's attention. This artifact also visually demonstrates the purpose by showing icons related to the outcomes described.

Bibliography

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