

**Overview** - This session is designed to improve students understanding of biological classification through the use of case studies and hands-on examples. Students are introduced to why we use classification systems and the different ways in which we classify animals. Using the Linnaean Classification system, students will explore these concepts as they relate to conservation action.

**Lesson Logistics** - Students take part in a formal presentation, including live animal encounters and biological artefacts. This session takes place in one of our indoor education experience areas. Groups are encouraged to use our Student Activity Sheets before, during or after their *Highly Classified* session to investigate how classification can help in conservation.

**Duration** - 60 minutes

**Conservation Message** - Classification is an essential tool when it comes to recognising, appreciating and conserving the biodiversity on Earth.



Short-beaked Echidna  
*Tachyglossus aculeatus*

## Links to the Australian Curriculum Senior Secondary

### **Biology Unit 1: Ecosystems and Biodiversity**

#### Science Understandings

Learning Outcome: Students understand how classification helps to organise, analyse and communicate data about biodiversity.

#### Describing biodiversity

- biodiversity includes the diversity of genes, species and ecosystems; measures of biodiversity rely on classification and are used to make comparisons across spatial and temporal scales
- biological classification is hierarchical and based on molecular sequences, different levels of similarity of physical features and methods of reproduction
- biological classification systems reflect evolutionary relatedness between groups of organisms
- most common definitions of species rely on morphological or genetic similarity or the ability to interbreed to produce fertile offspring in natural conditions – but in all cases, exceptions are found

#### Science as a Human Endeavour:

Science is a global enterprise that relies on clear communication and international conventions.

