GETTING LOST WITHOUT A MAP – CREATING A ZOOLOGY ATLAS FOR UNDERGRADUATE STUDENTS TO NAVIGATE THE ANIMAL KINGDOM

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PROBLEM

Understanding animal morphology and its relation to evolutionary relationships within the animal kingdom is a fundamental concept for any undergraduate Zoology major. In addition to lectures, students typically build upon this knowledge through hands on laboratory activities where they analyse, observe and draw a range of zoological specimens. Each specimen drawn usually comes with a list of morphological features that need to be identified and labelled.

To enable accurate labelling of these features, students often rely on costly textbooks with stylised illustrations or a collection of ad hoc resources that have been collated over the years. Online resources are varied. Some websites may contain labelled illustrations or photographs of key morphological features, however, to find them, students need to sift through multiple sites to find the necessary details. There is currently no freely available, comprehensive resource which covers the diverse anatomical structures found in the animal kingdom.

PLAN

The plan is to create an Open Educational Resource (OER) textbook to address this gap by creating and publishing an openly licensed textbook that focuses on animal morphology. This 'Zoology Atlas' will serve as a visual aid to undergraduate students studying animal anatomy and organisms in zoology related subjects and have a uniquely Australian approach focusing on Australian animal examples.

ACTION – CAN YOU HELP?

The first phase of this project will develop a resource of the top 15-20 most commonly used animals in zoology classes with plans to build upon this in future iterations. The list of included species illustrations will be curated in consultation and collaboration with coordinators of zoology units from around Australia to ensure broad relevance and appeal to a wider audience. Scientists from the university and government sectors will be invited to contribute existing resources, including unpublished line drawings or photographs. Historical resources, such as public domain scientific reports, will also serve as a basis for high quality taxonomic illustrations. Museum collections of specimens and online databases hosting photos under creative commons licenses will be also consulted.

If an open-source zoology atlas would be a useful addition to your unit, please let me know.

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