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### ABSTRACT

Collections of 50–100 postage stamps illustrating many organisms or biomedical topics are available widely and cheaply. They are valuable stimulus material for exercises as diverse as observing and describing, studying biological classification, substituting for collecting and preserving real specimens, describing health education campaigns, and introducing ethical topics such as scientific fraud.

**Key Words:** Postage stamps; motivation; biology teaching.

Chemists have long recommended postage stamps as teaching aids (Schaeffer, 1934; Daniel & Eugenia, 1987; Pinto, 2007). By contrast, we found no publications recommending stamps for biology teaching, although stamps on biological topics are available widely and cheaply by post or via the Internet from specialist dealers. Research journals include series such as “Genetic landmarks through philately” (Chudley & Chodirker, 2003), document medical advances and public education campaigns featured on postage stamps (Pai, 2007), or publicize stamps honoring scientists (Bruce & Bruce, 2005).

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### ○ Suggestions for Classroom Use

Many stamp dealers stock economical packets of stamps on biological topics. For example, we have purchased sets of 100 different insects and 100 different butterflies for \$14.50 (Australian; including postage). Applications include, but are not limited to, the following.

*Stimulus material for observation and writing.* Students can be asked to describe organisms illustrated on stamps, perhaps with emphasis on diagnostic features of taxonomic groups. We used this approach successfully with junior students (ages 6–9) in a Western Australian primary school in 2007 and 2008. It is important, though, to check all stamps before class. We found that some stamps purportedly showing “insects” featured spiders. We were divided on whether this is best dealt with by removing these stamps or by making the distinction between insects and spiders a teaching point. There are arguments for each viewpoint, but it is better to make a decision beforehand than be caught unawares.

*Insect collecting.* Older students often compile insect collections, although this creates problems with permits, and students may object. Collecting insects on postage stamps, together with writing on classification or collecting techniques suitable for real specimens, is an alternative.

*Biological classification.* Groups in phylogenies can be illustrated with stamps. This could be a class project, with students responsible for specific taxa and the results compiled into a class phylogeny.

*Researching public health campaigns.* Stamps documenting these can be stimulus material to research the health issue or to discuss biology’s role in public health.

*Research integrity.* Rusnak and Chudley (2006) used a stamp to introduce the issue of scientific fraud. Although they did not consider educational implications, the stamp could be a stimulus for discussing research integrity with students, following the example of Pinto (2007).

### ○ Conclusion

Stamp collecting is popular. The availability of stamps on biological themes enables teachers to use students’ interest in philately to stimulate engagement with many biological topics.

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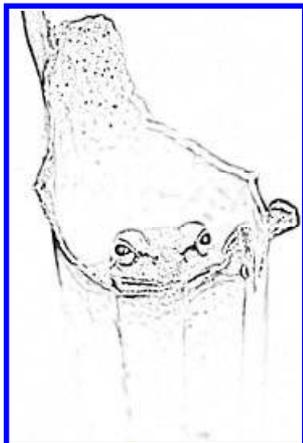
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