

UBC, Geography 419: Research in Environmental Geography.

David Brownstein. February 21, 2011.

Biodiversity Research Project.

Due in class on **March 2, 2011**. This research assignment is worth 5% of your final grade. *Do not spend more than three hours performing your research.*

By the end of this course your training will have prepared you to undertake rapid response research missions! In the future you may be asked to prepare a policy brief under heavy time constraints. Consider this a trial run to sharpen your skills and thus avoid future stress.

At the UBC Botanical Garden, we will receive a list of 15 threatened plants, one plant for each student in the class. Andy Hill, Curator-Horticulturalist of the Asian Garden, will present a brief introduction on the role of botanical gardens in global biodiversity issues. He will then take us on a tour so that we can see all of the species on our list.

Your task is to launch yourself at the UBC libraries, and to find out as much information as possible about your assigned species. Imagine that a Cabinet Minister is about to make a crucial decision, or that an important court case hinges on the information that you can gather in just **three** hours!

What is the scientific name of the species, does it have a common name? What is known about this plant, and what is not known? This is to say: what are its biophysical characteristics? What is its distribution? Describe the relationship, as you understand it, between this species and human beings. To what degree is it threatened, and by what? Are there any particular social/political/economic/management issues that impinge on this plant's future existence? What options are available, if any, to mitigate these problems? We will give you some suggestions for useful places to start your research. Your first stop should be the book *The Jade Garden — New and Notable Plants from Asia*, held on reserve in the Woodward Library.

The **first component** of this assignment is to keep a running diary of your research attempts. How did you spend your three hours? What tools did you use to gather your information, and how helpful were they? Please mark the number of minutes you spent with each search term or research tool in a column on the left, with detailed information about what you find in that time on the right. It could be that even after you exhaust your three hours, you have come up with absolutely nothing. This is unlikely but it could be that nothing has been written about your plant and its home region—provide what information you can.

A hint on how to do well: do not limit your searches to the species name for your tree or plant. Instead, perform as many lateral searches as you can to uncover relevant information not linked to the plant name.

The **second component** of the assignment is to transform the results of your research into a policy brief (max three pages, double-spaced). Your briefing note should answer the questions outlined above. Please communicate your findings as efficiently as possible.

Your final product should consist of **both** your research diary and a policy brief. The policy brief should be handed in, in two formats: hard copy for marking, electronic copy for the botanical garden.

BIODIVERSITY RESEARCH PROJECT

Study Area: 'Botanically threatened Asian woody plants'

1. *Acer pentaphyllum* - Larissa.
2. *Acer pictum* subsp. *Okamotoatum* - Thomas.
3. *Aesculus wangii* - Olga.
4. *Bretschneidera sinensis* - Eric.
5. *Cinnamomum japonicum* - Dylan.
6. *Corylus chinensis* - Chris.
7. *Epimedium truncatum* - Knut.
8. *Fagus longipetiolata* - Javier.
9. *Glyptostrobus pensilis* - Janine.
10. *Halesia macgregorii* - Samantha.
11. *Magnolia wilsonii* - Amy.
12. *Rhododendron rex* - Owni.
13. *Sciadopitys verticillata* - Ryan.
14. *Tapiscia sinensis* - Olivier.
15. *Torreya nucifera* - Jason.