

Assignment Details - Native Plant Propagation Protocols

ESRM 412 – Native Plant Production

Native plant production requires an understanding of the unique requirements of each species. This information is scattered in a variety of sources. The objective of this assignment is to develop propagation protocols that summarize and compile this information. Each student will develop protocols for four (4) species. As noted below, up to two of these may be revisions of protocols prepared in 2003 or 2004. Revisions are not required; you may choose to do all new species if you prefer.

A list of all species for which protocols have been developed is available [here](#). This list is organized alphabetically within life forms (trees, shrubs/vines, forbs, graminoids, ferns). Protocols developed in 2007-2009 can be linked to by clicking on the species name in the list. Protocols developed in 2003-2006 are available at:

<http://depts.washington.edu/propplnt/plantindex.htm>

Note that this webpage contains species organized by broad life form (tree, shrub/vine/fern, herbaceous plant) and then repeated but organized by life form within various ecosystems.

Species Selection

By **April 8**, each student must select the species they will focus on. All species must be native to the Pacific Northwest. Consult floras (in the Miller Library) and the distribution maps within the USDA Plants database (<http://plants.usda.gov/>) to determine whether a given species is native to this region.

Protocols may not be developed for the same species by more than one student. If multiple students select a species, the first one to notify me will be the one permitted to proceed with it. A species sign-up list will be posted outside Jon's office in Merrill Hall.

The extant protocols are of varying quality and, of course, do not contain newly published information. Therefore, students this year may choose to redo up to two of the species that were originally done in 2003 or 2004.

Revised protocols should be reformatted to follow the same format as new ones. In addition, students who are revising a protocol will have to:

- i) verify the existing information in the protocol
- ii) do a comprehensive search for new information
- iii) update the taxonomy as necessary

The original protocol should be submitted as an appendix to the revised protocol.

Protocol Format

A template protocol is available on the course website:

<http://courses.washington.edu/esrm412/protocols/Protocol.template.doc>

All of the fields in this template should be included in all protocols, even if there is no information available. However, the explanatory text in the captions does not need to be included.

The Native Plants Propagation Protocol Database is available, and searchable, online at:

<http://www.nativeplantnetwork.org/network/>

For example, a search for *Festuca idahoensis* (Idaho fescue) returns multiple entries. The entry produced by Glacier National Park is an example of one with a good level of detail:

http://www.nativeplantnetwork.org/network/view.asp?protocol_id=151

The *Lathyrus japonicus* entry prepared by an ESRM 412 student in 2008 is also a good example of a detailed protocol:

<http://courses.washington.edu/esrm412/protocols/LAJA.pdf>

Pictures may be included, but should be appropriately cited.

Species may have multiple taxonomic synonyms (other scientific names that have been used for the same species). It is important to note these synonyms (eg, as noted in the USDA plants database), and to search for information under those names as well. Use the USDA Plants database as the taxonomic authority.

Information Sources

The internet is powerful in many ways, including as an information depository. There are good sources of protocol information on it, such as the Native Plants Propagation Protocol Database and electronic peer-reviewed journals. However, there are also sources of questionable quality. Student research should focus on primary materials, particularly published materials such as journals and books. Interviews with personnel with first-hand experience (eg, nursery managers) would also be considered primary materials.

Each protocol should be based on at least 10 primary sources. This can be a challenge for some (many?) native species. There is also a spot in the template for you to list sources that you consulted but that did not include helpful information. However, please note that it is not enough to just check 10 sources and call it quits – I am expecting you to do a thorough search for literature associated with your species.

All information sources must be cited within the body of the text and included in the list of references cited. Website citations must include the date accessed.

Submission

Protocols must be saved as a PDF file, and should be named with the symbol for the species, as noted on the Plants Database. For example, the symbol for *Festuca idahoensis* is FEID (<http://plants.usda.gov/java/profile?symbol=FEID>), so the protocol filename would be FEID.pdf.

Protocols are due roughly biweekly, as noted on the schedule. Protocols are due before class on the day indicated. Late submissions will be docked ten percent per day.

Protocols must be submitted by uploading them to the ESRM 412 Dropbox in Catalyst:

<https://catalysttools.washington.edu/collectit/dropbox/jbakker/5422>

Grading

Grading will be based on the completeness of the protocol, evidence of digging into the (primary) literature, grammar and spelling, etc. A grading rubric is available on the course website:

<http://courses.washington.edu/esrm412/protocols/Protocol.rubric.pdf>

Particularly well done protocols, as identified by the instructor, can be submitted to the Native Plants Propagation Protocol Database (<http://www.nativeplantnetwork.org/network/>).