

Botany 401

Name: _____

Vascular Flora of Wisconsin

Exam 1 – take home portion [due in class Tue March 8]

[20 points out of 90 total; each question is 5 points]

1. Use the online key to ferns and relatives at UW-Green Bay to key this fern to species. Size of the fronds is shown with a hand reference. Sporangia are shown on bottom of one frond.

http://www.uwgb.edu/biodiversity/herbarium/pteridophytes/pteridophyte_key_start.htm

species _____



2. Using resources you have learned about in lecture and laboratory, find 2 synonyms of the following species – *Opuntia fragilis* (Nutt.) Haw. – our native and threatened prickly pear cactus. Give the complete scientific name for both in correct format.

Give one likely reason (of several) how such synonyms have arisen:

3. Using the Wisconsin State Herbarium Wisflora website, examine the distribution maps of the listed species below (for a more detailed distribution, click on the ‘View specimen location map’ link), visit other links provided at each species webpage, give a common name for each, and answer the following questions:

	common name
a. <i>Besseyia bullii</i>	_____
b. <i>Gymnocladus dioica</i>	_____
c. <i>Abies balsamea</i>	_____
d. <i>Cakile edentula</i>	_____

_____ The species that basically honors the Wisconsin Tension Zone by being confined to the Northern Hardwood Province.

_____ The species that is confined to Great Lakes’ sandy lakeshores.

_____ The species that is derived from the western “prairie element”.

_____ The species that is derived from central North America but primarily restricted to “riparian” habitats.

4. Three of the important families you learned from the Wisconsin flora include the Ranunculaceae (buttercup family), Rosaceae (rose group including raspberry, agrimony, cinquefoil), and the Fabaceae (legume family). Make a dichotomous key to these three families **using only vegetative or floral features from the following set**: stipules +/-, stamen number, hypanthium +/-, pistil number, fruit type.

A. _____

A.

B. _____

B. _____