

### Lab 13 - Gymnosperms, part 2

#### **I. Families to Know on Sight (no keying allowed for lab quizzes or final)**

1. Cupressaceae

Minimum Diagnostics: Resinous, monoecious or dioecious trees or shrubs with needle-like or scale-like leaves (scale-like leaves opposite or whorled); bark often peely-fibrous; cones often round with peltate seed-scales with fused subtending bract, and >2 small, isolaterally winged, wind-dispersed seeds. *Juniperus* represents a particularly stark exception to cone morphology for this family.

#### **II. Genera to Know (you can write your own key to genera and use on lab final)**

A. Cycadaceae

1. *Cycas*

B. Zamiaceae

2. *Zamia*

C. Taxaceae

3. *Taxus*

D. Cupressaceae

4. *Chamaecyparis* (included by some in *Cupressus* sensu lato)

5. *Cryptomeria*

6. *Juniperus*

7. *Metasequoia*

8. *Taxodium*

9. *Thuja*

#### **III. Economic Notes**

Cycads are important ornamentals and in the international trade in endangered species. *Taxus* (yews) is important as ornamentals and as a source of Taxol. The cypress family, Cupressaceae, includes many ornamental trees and shrubs, ranging from junipers and red-cedars (*Juniperus* spp.) to many others. The fleshy cones of *Juniperus communis* is used to flavor gin. *Sequoia* (coastal redwood) and *Sequoiadendron* (giant redwood), both of the Cupressaceae, draw big money in California for tourism.