

Historical Ecology Warm-up - 11/2/09

Answer the following question on one HALF-SHEET of paper: (5 points)

Describe 3 reasons why Native Americans burned the Willamette Valley prairies annually.

- increases soil nutrients
- increases hunting opportunities
- increases growth of useful plants

- Test over Willamette Valley Historical Ecology: MON. 11/9/09 (open note)

- Wed 11/4 → NOYES PROPERTY

- Dress appropriately
- Permission slips!

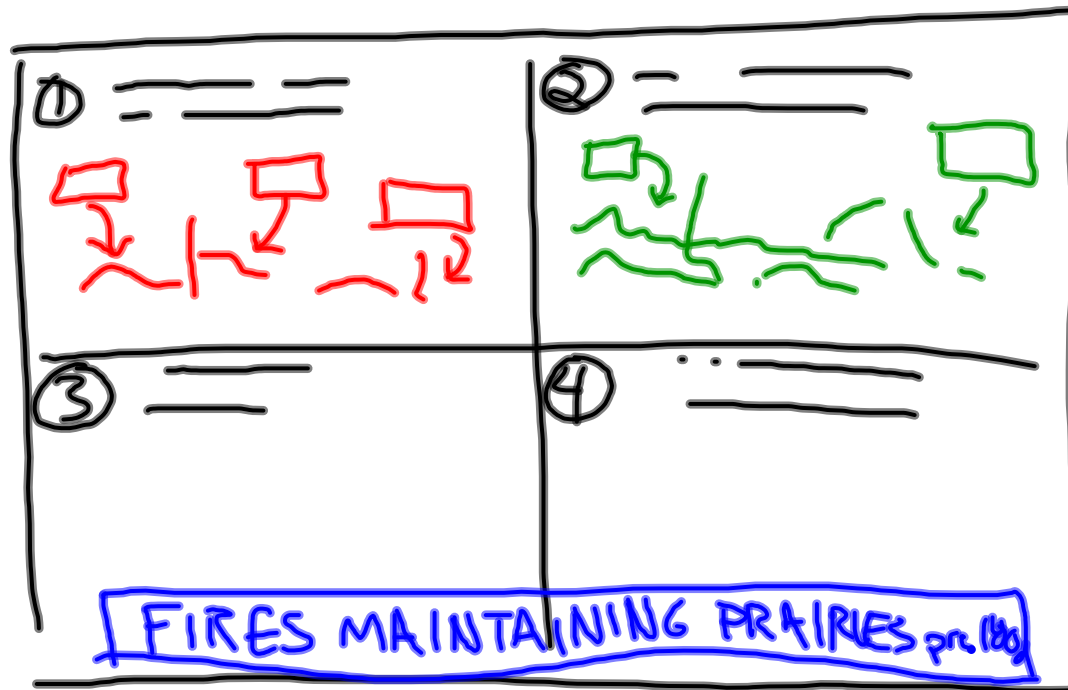
How fire maintained oak savannah/prairie landscapes prior to 1800:

1. Grasses & flowers die back @ end of summer/start of fall
2. Native Americans lit fires which burned the dead plant material
3. Fires were hot enough to burn dead plant material, newly sprouted trees & shrubs BUT not old, established trees or plant seeds
4. In spring, new plants would sprout and the process would repeat

How Douglas Fir forests took over the Willamette Valley after fires were stopped (1850)

1. For a few years, the oak savannah and prairies stayed mostly the same
2. Tree & shrub seedlings were no longer burned away - so they became established
3. Douglas Fir trees grow taller more quickly than other trees (20-50 years)
4. Deprived of sunlight, the oak trees died back (50+ years)

Create a series of illustrations for each stage of each process:



5 min/
illustration
(stage)