

The Southern Cascades and Modoc Plateau

Purpose: To acquaint the student with the physiographic region known as the Southern Cascade Mountains and the Modoc Plateau.

I. Location and Physical Geography

SOUTHERN CASCADES

- A. Northern boundary = Oregon Border
Southern boundary = Sacramento Valley
Western boundary = Klamath Mtns.
Eastern boundary = Modoc Plateau (volcanic) indistinct, but Modoc Plateau has smaller and less impressive volcanic landforms.
- B. Physical Geography
 1. The southern extension of the Cascade Mtns. = recent volcanics. Some still active.
 2. Mt. Shasta = 2nd highest volcano in the Cascades 14,162' (Mt. Rainier highest 14,406') Shasta has adventive cone Shastina 12,336'.
 - a. Has not erupted in over 200 years.
 - b. Has active gas vents near the summit.
 - c. Has five small glaciers on its flanks.
 3. Lassen most recent eruption in Cal. (1914 to 17). Mt. St. Helens most recent in Cascades (1982 to date)
 4. Divided into north/south sectors by the Pit River.
 - a. Shasta dominates the north
 - b. Lassen (10,457'), Butt Mtn. (7866'), Crater Pk. (8677') dominates the south.
 - c. Lassen Nat. Park established 1916. Gas vents (fumaroles), hot springs, boiling mud pots, etc.. Evidence of glaciation (pleistocene) over 1000' thick in some places.
 5. Not much rainfall. No notable natural lakes, rivers nor forests. Little fluvial erosion.
 6. Most water flows below the ground and re-emerges in springs. Most notable is Burney Falls in McArthur-Burney Falls Memorial State Park on the Pit River at Hwy. 89.

II. Cultural Geography of Southern Cascade

- A. Very few people - no large urban areas
- B. Use is mainly recreational
- C. Yreka = largest town = less than 6000 people.
- D. Local ranching and lumbering, also people passing through.
- E. Native Americans = Shastans of Hokan family; Modoc in Northeast.
- F. Outside Spanish California
- G. 1827-45 American & British fur trappers- opened trails for the pioneers who followed them. Ca.-Oregon Trail = Hwy. 5
- H. 1887 R.R. Completed Portland to Sacramento.
- I. No mining in recent volcanics. Some in sedimentary - metamorphic underflow of S.E. Klamath Mtns.
- J. Economy - Lumbering, commerce, use of water, recreation.
 1. Commerce - The Shasta Corridor = through commerce.
 - a) Hwy. 5 = bottleneck - Sacramento Gorge near Dunsmuir.
 - b) East-west routes more accessible than through Sierras
Hwys. 97,299,44, and 36.
 2. Ranching - mainstay since 1850's.
 3. Farming limited due to rugged terrain, thin rocky soils
 - a) Shasta Valley - 500 sq.mi. some wheat, barley (dry farming) in irrigated land = 3 cuttings of alfalfa.
 4. Dairying- since 1920's - milk to local markets.
 5. Lumbering
 - a) Pine- important to local economy. See Lantis p. 375.
 6. Hydroelectric Power - Shasta and Keswick Dam. Refer to previous lecture on Cal. Water.
 7. Recreation = little frequented but much to do. Distance.
 - a) Lassen Volcanic Pk.
 - b) Mt. Shasta Rec. Area
 - c) Shasta Lake, & Caverns

- d) Castle Crags
- e) Lake Amador
- K. Land of Villages - many are languishing. See Lantis p. 380

III. Location and Physical Geography 13,000 sq. miles of Magnificently scenic sculsion

MODOC PLATEAU

A. Northern Border Oregon

- Southern border Sierra Nevadas
- Eastern border Basin and Range province
- Western border Southern Cascades

B. Physical Geography

1. Volcanic landscape
2. Little surface water. Eagle Lake = exception
3. Lava Beds National Monument = lava tubes, cinder cones etc.
4. Southern tip of the vast Columbia Plateau.
5. Hard to separate from Southern Cascades.
6. These are the only two lava covered regions in Cal. (lava plateaus)
7. Extrusive igneous (explain) only a few million yrs. old.
8. Relatively flat land "on a clear day you can see almost forever".

IV. Cultural Geography Modoc Plateau

- A. Pop. - over 1/2 live in 2 places. Honey Lake Plain (13,000), and Upper Pit Basin (4,000).
- B. Ranching = dominant source of livelihood.
 1. Taylor Grazing Districts- B.L.M. controls grazing.
- C. Forestry - also important - also much government control.
 1. about 5% of Cal. log output (Ponderosa and Jeffrey)
 2. Susanville = center of processing.
- D. Much open space- but harsh climate; semi-arid like Nevada.
- E. Poor soils; about 1/10 of land suitable for cultivation.
- F. Native Americans - 4 groups
 1. Honey Lake Plain = Paiutes
 2. Maidu = Penutian - west of Honey Lk. Plain
 3. Achomawi - Hokan family in Pit River Basin
 4. Modoc - northern basins
Modoc War of 1872-73
- G. Contemporary Use
 1. Cattle ranching, farming, lumbering, tourism.
 2. Retirement Acreage - near Alturas = California Pines 33,000 acres sold as retirement subdivision. Most of the owners camp on their land.
 3. Tule Lake Basin
WW II Japanese resettlement = reclamation of swamp to good farm land. After the war homestead act allowed 80 acre tracts. Homestead so popular they had a lottery for land.
 - a) grains, hay, alfalfa, potatoes, onions, durum wheat
 - b) Tule Lk. Wildlife Refuge = largest seasonal concentration of water fowl in N. America. About 6 million geese & ducks. Hunting good.
 4. Alturas (3000) = 1/2 way between L.A. and Seattle.
 5. Susanville (7000) = seat of Lassen Co., biggest town in region.
 6. The "Sagebrush Aristocracy" - large landowners = "prince" = respected voices. Some social stratification.
 7. Northeasterners hunt and fish.

END