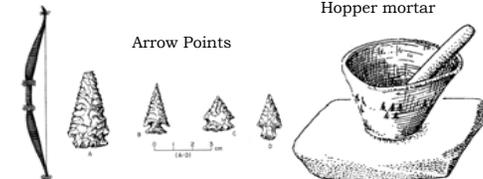
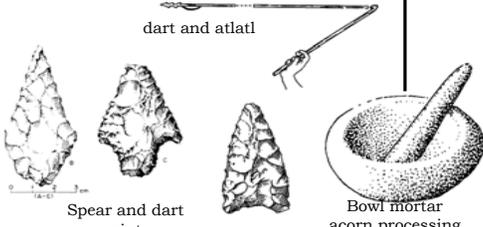
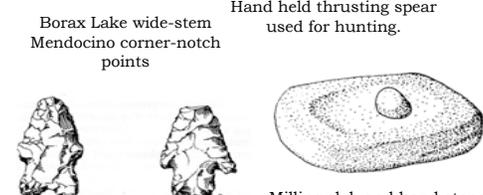
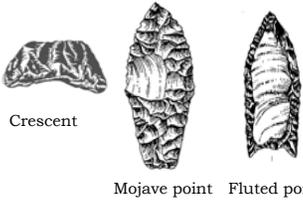
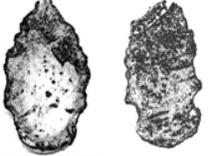


20,000 YEARS OF CULTURAL CHANGE IN THE CLEAR LAKE BASIN

YEARS B.P. (before present)	TECHNOLOGICAL CHANGE	ENVIRONMENTAL CHANGE	CULTURAL CHANGE
Historic Period 500 B.P.		Today's climate	1850 California becomes state 1830's-40's Hudson Bay Trappers/Vallejo visit Clear Lake 1772 Spanish Missions built 1500 European diseases wipe out 50% of population
Emergent Period 1,000 B.P.	 <p>Arrow Points</p> <p>Hopper mortar</p>	Climate and weather patterns are much like today's.	Growing population requires additional food, accomplished by adding bow and arrow and hopper mortar to the tool kit. Shell bead money economy well developed. Village based political system with "captains" representing each village. Craft specialization and class structure exist. People no longer have equal access to wealth. Southeastern Pomo practice private land ownership with families owning one or more tracts of land.
Upper Archaic 3,500 B.P.	 <p>Serrated spear and dart points</p> <p>Bowl mortar acorn processing</p>	Climate becomes similar to what we experience today with cold-wet winters, long springs, and hot-dry summers. Most recent Clear Lake volcanic eruption ~3,500 B.P.	Over-population and volcanic eruption prompt many Pomo people to migrate out of the Lake Basin west to Sonoma and Mendocino County. Lakeshore village territories permanently established and remain unchanged till the historic period. Shell bead money economy expands with the Lake Pomo the primary manufacturers of shell beads in Northern California.
Middle Archaic 6,000 B.P.	 <p>dart and atlatl</p> <p>Spear and dart points</p> <p>Bowl mortar acorn processing</p>	The hot-dry weather patterns continue and oak woodland and grasslands dominate the Clear Lake landscape. Toward the end of this period, climate cools a little, becoming more like today's weather pattern.	Growing population expands, requiring new technologies to produce new food resources. The mortar and pestle (acorn processing) and dart and atlatl enable the capture of more food. Large settlements established around the lakeshore at 7-mile intervals. Upland sites appear by 5,000 B.P. Shell beads and trade items indicate well established community territories and the need to trade for resources outside one's territory.
Lower Archaic 8,000 B.P.	 <p>Borax Lake wide-stem Mendocino corner-notch points</p> <p>Hand held thrusting spear used for hunting.</p> <p>Milling slab and hand stone for milling hard seeds</p>	Global warming (Altithermal) began 8,000 B.P. and lasted 4,000 years. Wetlands dry up and pine forests are replaced by grassland and chaparral. Sites in the Clear Lake Basin are confined to the southern and eastern arms of the lake.	As wetlands dry up, small groups forced to live in large communities near reliable water resources. The need for rules for behavior leads to development of political/religious systems. Loss of existing foods require new resource (grains) and the grinding tools needed to process them. A wandering settlement pattern changes to one of a residential base camp. Everyone had equal status. No evidence of trade or craft specialization.

<p>Paleo Indian Period 12,000 B.P.</p>	 <p>Crescent</p> <p>Mojave point Fluted point</p> <p>Fishing and gathering of freshwater mussels by hand in the shallows.</p>	<p>The end of the last Ice Age. Continued year-round rains mean the Lake Basin is covered in pine forests. Marshy, lake and river areas dominate the landscape. Some snow in winter but warm Pacific current kept temperatures mild.</p>	<p>The first people to permanently inhabit the Lake Basin came up the Cache Creek drainage from the Central Valley. Their small groups settled along the productive wetlands at the eastern and southern arms of Clear Lake. These people foraged for easily gathered and prepared resources. Everyone would have had equal status in the community and there is no evidence of trade or exchange. These were likely the ancestors of the Southeastern Pomo (Elem and Anderson Marsh).</p>
<p>Early Projectile Point Period 14,000 B.P.</p>	 <p>Flatbase widestem Mendocino sidenotch</p> <p>First stone-tipped spears show up. It is assumed that hunting becomes more important in the resource gathering economy.</p>	<p>During the height of the last Ice Age, year-round rains mean the Lake Basin is covered in pine and cypress forests. Marshy, lake and river areas dominate the landscape. Some snow in winter but warm Pacific current kept temperatures mild.</p>	<p>Little is known about these people and they may be the same as those represented by the "pre-projectile point period". It is assumed that they foraged for easily gathered and prepared resources. It is likely that the groups were small, mobile, and that everyone had equal status and equal access to resources.</p>
<p>Pre-Projectile Point Period 20,000 B.P.</p>	 <p>Napa obsidian scraper</p> <p>No stone-tipped spears. It is assumed that vegetable resource gathering and the trapping of small game and fish dominate the economy.</p>	<p>During the last Ice Age, year-round rains mean the Clear Lake Basin is covered in pine and cypress forests. No oaks or chaparral as these species need dry soils. Many more marshy, lake and river areas than today. Some snow in winter but warm Pacific current kept temperatures mild.</p>	<p>The first people to use the Lake Basin. Little is known about these people, where they came from, or what their culture was like. It is assumed that they foraged for easily gathered and prepared resources. It is likely that the groups were small, mobile, and that everyone had equal status and equal access to resources.</p>

