

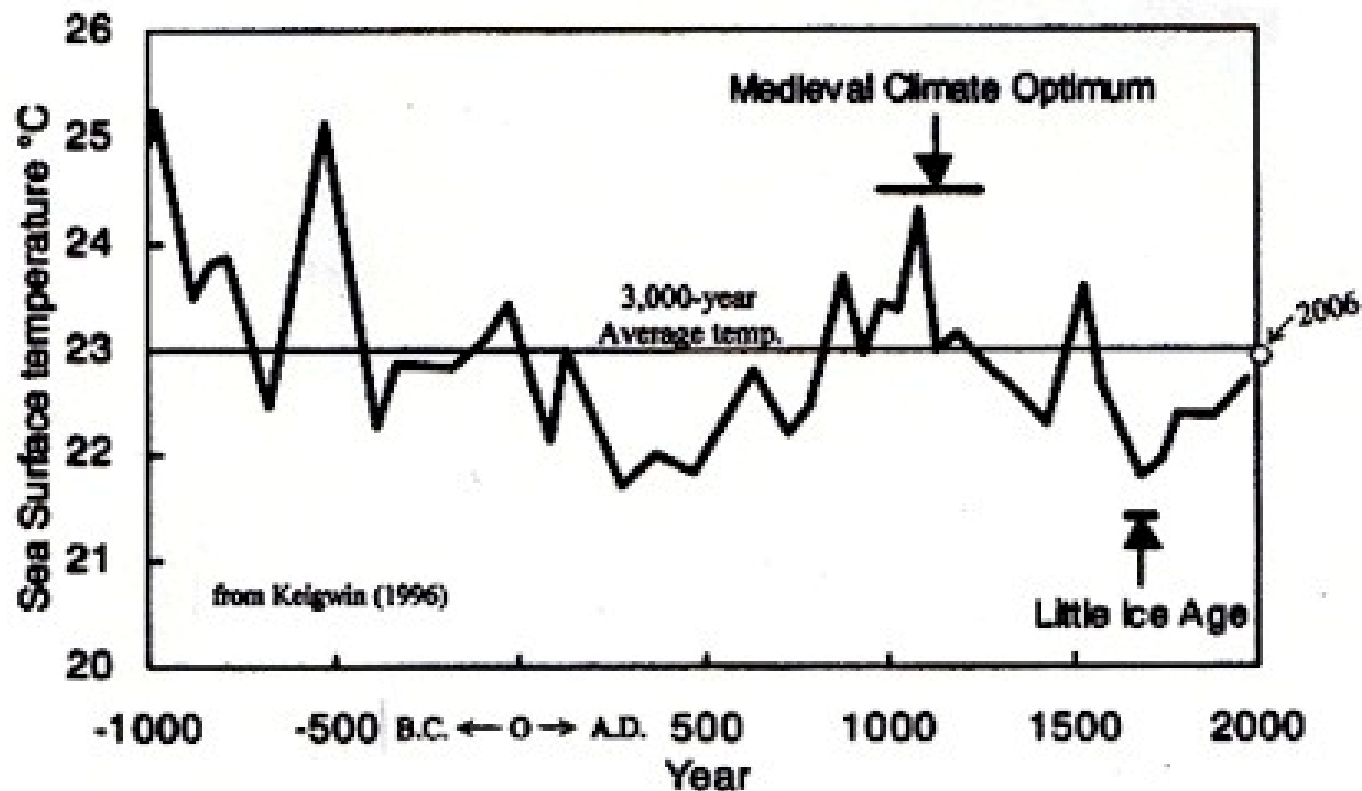


Climate Change Impacts on Tribal Cultural Resources

Peter Nelson

9/15/2016

A long history of dealing with climate change



Solutions for the CA drought...

- Traditional Ecological Knowledge
- Fire management thins forests
- Fewer trees equals more water
- More water equals productive grasslands
- UC Berkeley study estimates thinning forests could produce 16% more available water for CA

An Ancient Native American Drought Solution For A Parched California

By EZRA DAVID ROMERO / PEOPLE/EZRA-DAVID-ROMERO | JUN 2, 2015

Twitter (<http://twitter.com/intent/tweet?url=http%3A%2F%2Fwww.tinyurl.com%2Fodetm2m&text=An%20Ancient%20Native%20American%20Dr>)



(http://mediad.publicbroadcasting.net/p/kvpr/files/styles/x_large/public/201506/charley_meadow_dirk_sierra_nevada_12k.jpg)
Dirk Charley is with US Forest Service and is also Native American. He is blessing a meadow with burning sage and an abalone shell.

Implications of archaeological research on environmental policy...

Widening diet breadth, declining foraging efficiency, and prehistoric harvest pressure: ichthyofaunal evidence from the Emeryville Shellmound, California

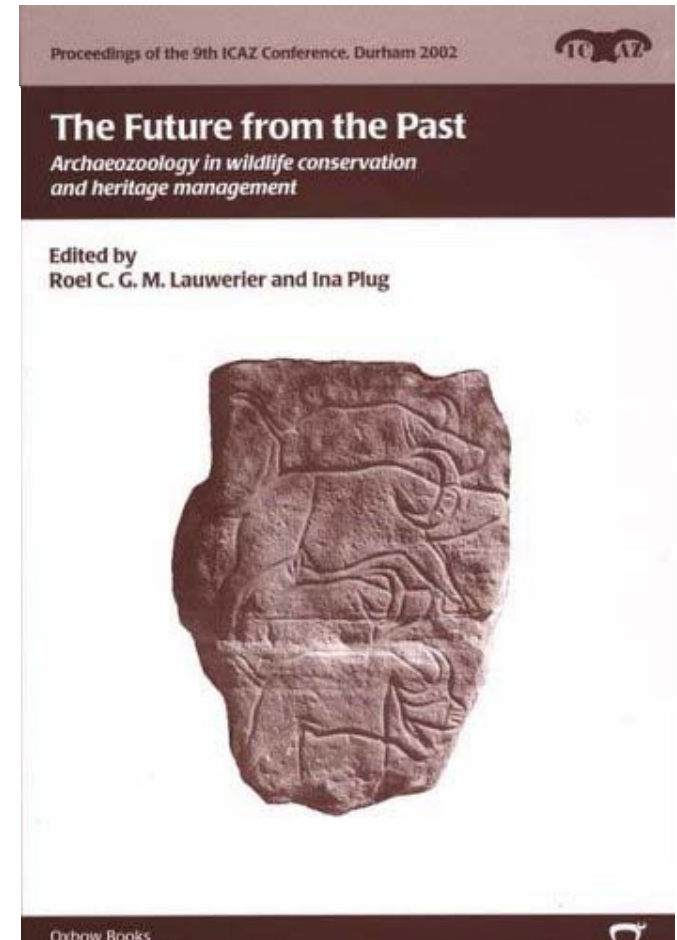
JACK M. BROUGHTON*

The Emeryville Shellmound is a famous but now destroyed midden once located on the east shore of San Francisco Bay. Analyses of the fish remains from the stratified late Holocene deposits indicate that prehistoric peoples had substantial impacts on the sturgeon populations of the Bay. This calls into question the commonly held belief that native peoples lived in harmony with nature and has important implications for the management of modern vertebrate populations.

Introduction

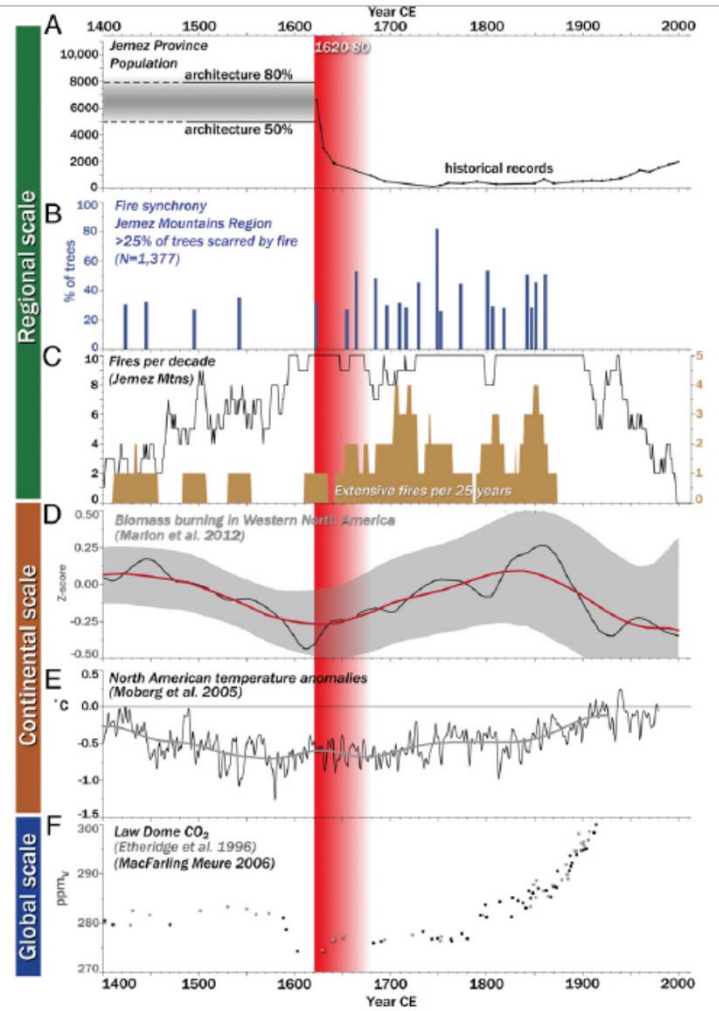
Let us begin by briefly suggesting what North America would have looked like to a late-fifteenth-century

environments are routinely viewed as 'primordial wilderness' (Hewes 1973:150; Shabecoff 1993:3-5). restoring ecosystems to their 'origi-



Native American depopulation, reforestation, and fire regimes in the Southwest United States, 1492–1900 CE

Matthew J. Liebmann^{a,1}, Joshua Farella^b, Christopher I. Roos^c, Adam Stack^a, Sarah Martini^a, and Thomas W. Swetnam^b



Mark Tansey (1986) Achilles and the Tortoise

Sea Level Rise, Coastal Erosion, and Inland Drought



Point Reyes National Seashore



Lake Oroville (photo by Ruth Fremson NY Times)

Indirect impacts of climate change: Greater exposure of sites to grazing animals and looting

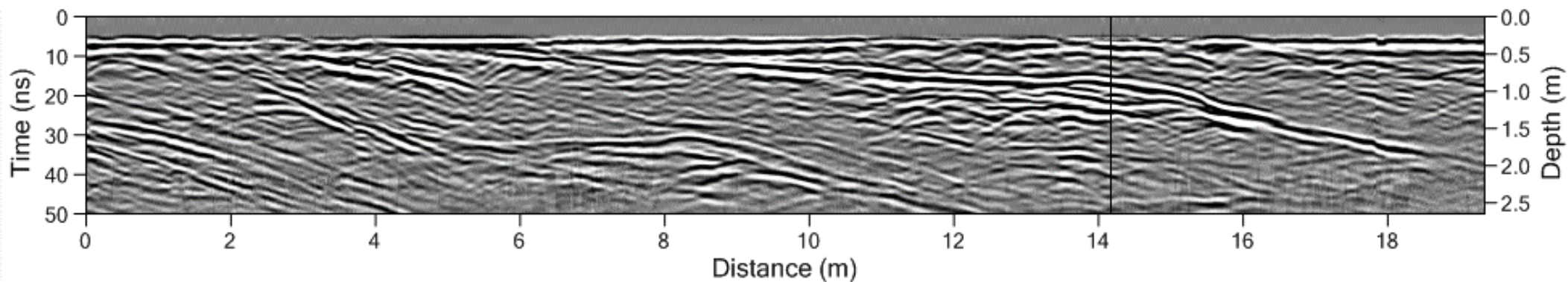
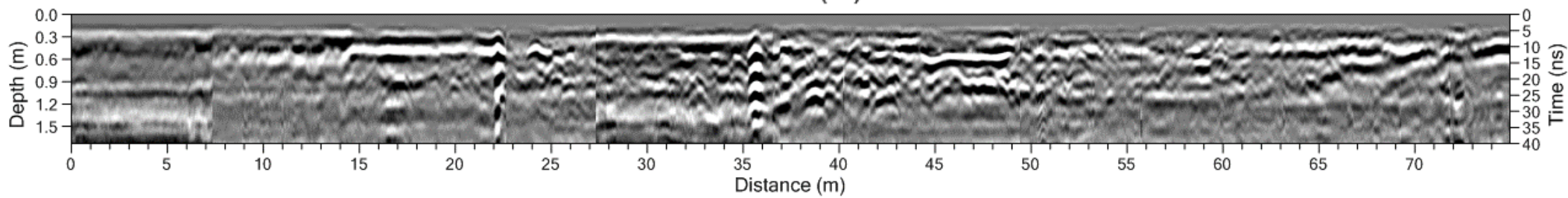
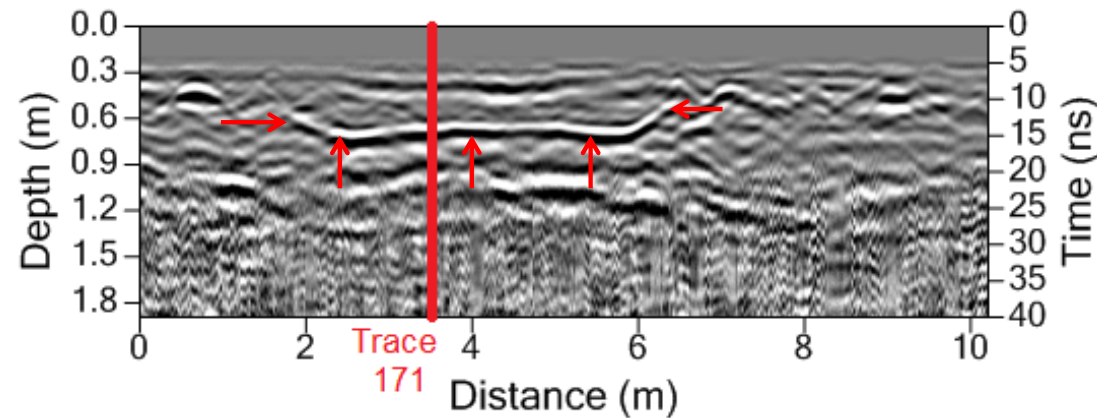


Low-Impact Information Gathering:

Ground Penetrating Radar
Magnetometry
Resistivity



Three Examples of What GPR Tells Us...



Solutions?

- What is valued will determine the type of preservation strategy
 - No action
 - Survey
 - Monitoring/rescue
 - Stabilization/restoration
 - Data recovery
- Venues for discussing management policy
 - Society for California Archaeology
 - Society for American Archaeology
 - World Archaeology Congress, Intercongress of Indigenous Peoples
 - Others
- Feedback? peteran@berkeley.edu