

Vignettes

One of the most significant dilemmas for NP management revolves around the idea of parks as "vignettes of primitive America." Central to the dilemma is the fact that there is no such thing as "a fixed world." The nearest that management can come to the vignette idea is not reintroduction of conditions that may have held sway at some arbitrarily chosen time in the past, but rather the perpetuation of the processes that represent "how it would look if Europeans had not showed up."

Everyone knows that weather changes from day to day and season to season. Less well understood, even by scientists in the field, is the profound changes in climate and all attendant conditions that may stem from such phenomena as the 11-year sun spot cycle and the 22-year Hale cycle (in which the complex magnetic fields of the sun return to their starting polarity.)

A recent article by Walter Sullivan of the *New York Times* describes intensive tree ring work being led by Dr. Charles W. Stockton at the University of Arizona, seeking to define the likelihood of prolonged and extreme drought for each of nine river basins in the Western states. In assessing the impact of such a drought, researchers are looking for signs of extraordinary deviations from normal climatic behavior. They have examined the resiliency of each watershed in situations of curbed water flow and have found the Colorado River system to be "by far the most vulnerable."

Cores so far collected in the more western of the states under study reach back to 1600. The information about conditions that prevailed over the past 400 years could be useful to park management in determining how natural park areas would look today if human intervention had not occurred (Scientists and managers are working together to achieve park specific prescriptions for restoring "historic" vegetation sequences.)

Additionally, the vulnerability of the Colorado River system and its increasing overexploitation sets up warning signals for national park managers. In the words of Dr. Stockton, "There is going to be a day of reckoning." Just how interested the public may be in vignettes of primitive America when the human water supply for whole regions is affected remains to be seen. Meanwhile, the most scientific and enlightened management of natural parks can contribute to the public understanding and valuation of natural park areas in the overall ecological scheme of things.