

From Grizzlies to Geysers: Science Challenges Tradition

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Editor's Note: *As promised in the Summer issue of Park Science, here is an abstract of Yellowstone Superintendent Barbee's contribution to the AAAS panel on "How Can Science Be Used More Effectively To Manage National Park Resources?" – held in Los Angeles in May 1985. Co-author John D. Varley is Research Administrator at Yellowstone NP. Contributions of the other three panelists, John Dennis, David Graber, and Cliff Martinka, were carried in the Spring and Summer issues. The full text of the Barbee/Varley paper will be carried in the next issue of FORUM, the George Wright Society Journal.*

This paper acknowledges the first major impetus toward ecological park management, under Interior Secretary Stewart L. Udall, and the attendant roll call of environmental compliance legislation and Executive Orders that guided and supported this effort. It also considers the costs – financial and otherwise – of the renaissance of science that is now well underway.

Grizzly bears, for example, are today managed by a bewildering consortium of government executives, managers, and scientists. The manager, waiting for

inspired direction, spends a great deal of time in a state of acute anxiety, attempting a balancing act between bear politics, bear management, and bear research.

Science also helps exacerbate the differences between what must be done to protect resources and what the public expects in the way of traditional use patterns. Seasonal closures of prime bear habitat to reduce the opportunity for bear-caused human injuries seems defensible, yet public reaction and political outcry is intense and hostile. The desire to implement science-based recommendations cannot keep pace with the manager's ability to convince supporters of the parks that it is a good idea.

The complexities of ecological science have reached a level of sophistication that often makes it difficult for the scientist to communicate his reasons and his recommendations to the manager and to the public.

Science has never fit well into the Federal budget process – especially funding for long-term monitoring and research. The cutthroat trout studies in Yel-

lowstone Lake (now 35 years old and ongonig) and the Yellowstone elk are cases in point.

Crises often occur and give rise to dollars; everyone wants the answer tomorrow; then the controversy dies and the dollars dry up.

The proprietary interests of some scientists are another stumbling block for management. Egos and reputations are seen as "at stake." The scientist may take his ball and go home. Or he may elect to "go public." In any event, the park may have a lifelong enemy as a result.

Despite these hazards, all significant advances in NP resource management have come about through the efforts of science. The problem comes where scientific findings, no matter how well-founded, come head to head with tradition.

Sir Napier Shaw wrote, in 1926: "Every theory of the course of events in nature is necessarily based on some process of simplification of the phenomenon and is to some extent therefore a fairy tale."

Vigor and strength in organizational life are maintained through a continuing process of adjustment and renewal. Today the NPS needs the energizing revalidation of principles. Just as such former giants as Lane (1918), Wright et al (1933), Robbins et al (1963), and Leopold et al (1963) each brought park science and resource management into synchronization with contemporary ecological thought in the past, we again need a reaffirmation of that distinctive blend of tradition and the avant garde.