

A deeply probing analysis of NPS policy for managing vegetation in National Parks is carried in *Environmental Management*, Vol. 6, No. 2, pp. 109-122. In this article, Thomas M. Bonnicksen and Edward Stone argue that the Park Service has failed to recognize the significance of changes in the vegetation that occurred after fire was excluded and of the "unnatural vegetation" that now exists and that will be perpetuated if the fire process is simply renewed.

Bonnicksen is assistant professor of forestry at the University of Wisconsin, Madison, and Stone is professor of forestry at UCal, Berkeley.

The article raises a plethora of pertinent questions, among them: "Is reducing fuels acceptable as the only or principal objective? Are fire-induced changes acceptable so long as fuels are reduced? What standards should be used to judge if these other changes are desirable or not? If reintroduced fires are used and natural

fires are allowed to operate freely, at what future time, and upon what criteria will the Park Service declare an ecosystem as now "natural?"

The article presents two philosophies: one, to reintroduce prescribed and natural burns and then simply declare whatever results as a natural ecosystem, and the other, leave the ecosystems alone and allow them to change in whatever way nature dictates — "beginning today."

The authors plead for consideration of unanswered questions and for achievement of widespread agreement based on unambiguous, quantifiable criteria, rather than on "fuzzy undefined concepts like dynamic equilibrium."

The paper presents five alternatives that reflect both philosophies, and then adds a sixth that the authors think spans the two points of view . . . "providing a middle ground that can serve as the beginning of a compromise."