

## Editorial

*Redwoods, Medieval Cathedrals and a Comment from Henry Thoreau*

We are proud to present in this issue of **Restoration and Management Notes** an insider's account of what must be one of the most ambitious ecological restoration projects ever undertaken—the restoration of ecological communities—including redwood forest—on 36,000 acres of Redwood National Park that had been heavily logged before the land was acquired.

While this project can be regarded as a continuation of Park Service policy rather than a break with it (see box, page 63), it is certainly a major step in the coming of age of ecological restoration as an important form of environmental technology.

It is also a dramatic and conspicuous emblem of the restoration movement itself. There is, after all, something about what NPS staffer John Reed calls “the scale of the vegetation,” an expression that echoes in the mind because it comprehends both vast size and immense reaches of time. Anyone who undertakes a restoration project has to live in some imagined future, and in the case of the redwoods this implies a long view indeed.

The project may not be unprecedented, but it is somehow stirring, nevertheless. While perhaps no more valuable in the egalitarian accounting of the ecological conscience than draba or the snail darter, the redwoods stand in the imagination along with the grizzly bear and the blue whale as the very emblems and epitomes of nature's handiwork.

This, we say to ourselves, reflecting on the redwoods, is what nature can do. This is nature at her most prepossessing.

Now a redwood forest of the next millenium will be the work at least partly of human beings, working in concert with nature. Forests made by men and women. Oddly the thought evokes our conception of the Gothic cathedrals of the Middle Ages, and thinking about it, we realize this is no accident. British novelist John Fowles has suggested that forests may in fact have been the ultimate inspiration for these towering, columned edifices, and indeed both the cathedrals and the restoration of the forests clearly have much in common. Both may seem impractical when measured against the insane standard that accepts the short term values of the marketplace as the only values. Both imply imagination and a long view of the future. And both imply a social commitment—not just the commitment of one or a few exceptional individuals—to a task that will take generations to fulfill.

Such undertakings are not commonplace in any society. And they come as a genuine surprise in a society that institutionalized the plastic spoon and the throw-away wristwatch. But they are immensely heartening when you come across them.

Not long ago, reflecting on the challenge that ecological restoration presents our society, University of Arizona Ecologist Michael Rosenzweig compared the task explicitly to that taken on by the builders of the

Medieval cathedrals. “To my knowledge,” he wrote, “only in the late Middle Ages, when communities took centuries to build a cathedral, has human society exhibited the patience needed (for such a task). Does our society have it?”

Projects like the one at Redwood National Park suggest that perhaps it does.

As far as we know, no one has written a history of the idea of ecological restoration, but readers who are interested in the subject might want to take a look at chapter 7 of Henry David Thoreau's *Walden*, titled “The Beanfield.”

In this chapter, Thoreau presents himself as a reluctant and even skeptical farmer, as willing to look critically at agriculture as at any of society's most venerable institutions. While he does not actually refer explicitly to restoration (as he does elsewhere, in his journal and in “On the Succession of Forest Trees”), he does establish a kind of intellectual and psychological basis for the idea, and it is interesting to note that he does so in the context of a farming venture that raises in him a succession of doubts about the final value of what he is doing, and even about his right to do it.

“This was my curious labor all summer,” he writes, “. . . to make this portion of the earth's surface, which had yielded only cinquefoil, blackberries, johnswort, and the like, before, sweet wild fruits and pleasant flowers, produce instead this pulse.”

But this is only the beginning of doubt. Later, referring to the depredations of woodchucks on his young beans, he is more explicit: “But what right had I to oust johnswort and the rest, and break up their ancient herb garden?” And in a telling reflection on hoeing his beans, he refers to himself “making such invidious distinctions with the hoe, levelling whole ranks of one species, and sedulously cultivating another.”

Any manager or restorationist will recognize the state of mind. Any farmer will be a bit puzzled by it. This is agriculture turning back to the earth and becoming aware of a new kind of commitment. Indeed, in the course of this chapter Thoreau questions the whole range of traditional agricultural practices, and even the motives behind them, from seeding of monocultures to fertilizing, weeding and harvesting. In doing so, he clearly prepares the way for the idea of restoration. While he presents no program for restoration, all the psychological requisites are here: the strong sense of identity with nature; the sense of the farmer as intruder, but also the sense of the possibility of cooperation and participation; the sense of imitating nature rather than imposing on her; and finally the esthetic sense and value, and even the hint of impracticality that always underlies the commitment to restoration in an agricultural and industrial context.

If, as we have suggested, restoration is a form of agriculture transformed by a marriage with ecology, it is interesting to see the transformation taking place here, in the beanfield of a man now regarded as one of the forefathers of ecology.

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