Editorial

Preservation, Restoration and a Trip to Mars

Which should we do first: travel to Mars and, using the techniques of genetic engineering and ecological restoration, create a biosphere there capable of supporting human colonies; or stay at home and tend to the business of taking care of the ecosystems we already have, starting, perhaps, with a proper inventory of biological resources, including those of the oceans and the tropical forests?

Most environmental conservationists, I suppose, would opt for staying at home and getting our house in order before starting on the whole solar system. But following a brief discussion with Fred Turner last summer, I came away with a rather different point of view.

Turner is the poet, philosopher and Shakespeare scholar at the University of Texas at Dallas whose article "Restoration as Natural Reproduction" appeared in last summer's issue of *R&MN*. Among other things, Turner writes epic poems, and his most recent epic, titled "Genesis," deals with the colonization of Mars and the creation of a habitable biosphere there—in a sense a kind of grandiose restoration project.

Turner himself is concerned about earthly environmental problems such as the continuing destruction of the tropical forests, but when someone commented that it might be well for us to look after these matters before striking out into space, Turner suggested that it may be that the two ventures may not be mutually exclusive at all, but in fact might best be seen as part of the same challenge and undertaken *simultaneously*.

After all, he pointed out, the whole scheme for the colonization of Mars, described in richly imaginative scientific detail in his poem, depends on intimate knowledge of the ecosystems here on Earth, since, as in restoration projects generally, these must necessarily serve as models and seed sources. This being the case, and human nature being what it is, perhaps it is just something like the colonization of the planets that will provide the incentive we need to—finally—get on with the job of inventorying and good housekeeping right here on earth.

In the context of a discussion of the colonization of Mars, this may seem a little far fetched. But is it? Isn't it true that something like this often happens in connection with restoration projects right here on Earth? Restoration and preservation are not two different, competing strategies so much as different phases of the same strategy—preservation, conservation, call it what you will—and they talk to each other and interact all the time.

Right here in Wisconsin, for example. Botanists have been collecting and describing plants in Wisconsin at least since the beginning of the 19th century. But it wasn't until the restoration work began here at the Arboretum that someone set out to make a complete inventory of the historic vegetation of the state.

The result was John Curtis's classic book, *The Vegetation of Wisconsin*. A detailed record of the presettlement vegetation of the state, this book is essential to any plan to preserve and manage, as well as to restore the historic Wisconsin landscape. In a sense one might even say the book *is*, or at least will define, the "natural" landscapes of the future.

The point here, though, is that it was the restoration work at the Arboretum that was the unseen presence behind the book. According to UW-Madison Ecologist Grant Cottam, who worked closely with Curtis during those early years, the restoration effort provided at least part of the motive for Curtis's work. It must also have provided an organizing principle for carrying it out. And—just as important, I suspect—it served as a way of engaging public interest and support for work that otherwise might have seemed a mere academic exercise.

Obviously, all these things are going to prove absolutely necessary to the conservation of ecosystems right here on this planet.

The question is, do experiences such as ours here at Wisconsin really suggest something about the way people get things done? If they do, perhaps the best way to get the tropical forests inventoried is to start planning a colony on Mars.

Three experiences during the past six months have left me with a renewed sense of the vigor of the national restoration and management effort and the progress it is making toward becoming a coherent discipline.

The first of these was a trip to San Diego in April, where I attended the Native Plant Revegetation Symposium, organized by representatives of three environmental organizations. This was impressive for the level and intensity of interest. It was, I realized afterward, the first meeting I had ever attended that was devoted exclusively to restoration, and it was an exhilarating experience. One very practical—and I think exciting—outcome of this meeting was a decision to begin laying plans for a national association of environmental restorationists. This initiative is described in some detail in the accompanying guest editorial by John Rieger.

A month later I drove down to Joliet, Illinois, to attend the Eighth Northern Illinois Prairie Workshop. And six weeks after that my son and I were in Dayton for a meeting of grassland managers.

Again, lasting impressions abound: Ron Panzer at Joliet, keeping a roomful of people spellbound for an hour and forty minutes with news from his prairie, which he manages with as much concern for insects as most people have for their big bluestem and blazing star; the amiable intensity of Steve Packard reporting on his work with savannas; and the delight of Dane Mutter and Dave Nolin of the Dayton-Montgomery County Park District at having discovered that Huffman Prairie in Dayton, famed as the site of some of the Wright Brothers' earliest test flights, really is a prairie. This is a rare find in grassland-starved post-settlement Ohio, and Mutter and Nolin and their colleagues have already begun restoration work on the site.

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