

In the world of communication, James Gorman may have come up with a winner. Gorman is the author of a column entitled "Light Elements," and in the November 1986 issue of *Discover* he tackles the problem of how to communicate ecological principles. His essay is "The Granola Factor, or the Track as a Model Ecosystem," and in it he expounds, both humorously and with scientific integrity, on the validity of ecological principles as they work in human society.

Gorman makes the obligatory bow to such timeworn analogs as "the pond" and "the tragedy of the commons," and then goes on to couch his human ecology lesson in terms of a true story at Saratoga Raceway in New York State. The column demonstrates in entertaining fashion how even the least likely pockets of human society can furnish updated ecological metaphors. Park interpreters, in concert with park scientists, could probably add enormously to the effectiveness of their park programs by borrowing a page from Gorman's saucy little "book."

In a nutshell, the Gorman tale describes how an entrepreneur in manure turned the waste products from 1,100 trotters and pacers from a \$100,000 a year loss to the track (the cost of carting the stuff away), into a \$300,000 income item. Robert W. Morris set up a system based on the U.S. Department of Agriculture's sludge composting operation in Beltsville, Md., that transforms the daily 150 cubic yards of manure, straw, and sawdust from the horses' stalls into rich, crumbly compost that a garden guru has called "brown gold."

Gorman paints the operation as "efficient, elegant, ecologically sound" and couches his message in terms that can be readily grasped and appreciated by today's audiences: namely, as an operation "developed not out of a sense of oneness with all life, but for the sake of **money**."

In replacing the pond as an ecological model, Gorman points out that "a racetrack operation is built on the \$2 bettor, whom we might compare to photosynthetic phytoplankton, or algae. In the pond, the plankton and algae capture the energy of the sun and form the base of the food chain. At the track, the \$2 bettors do something similar. They provide the money. The parimutuel betting system, through which this money flows, guarantees that all life forms at the track are interdependent, as in natural ecosystems."

Gorman goes on to describe how betting on the various horses affects the odds and demonstrates their closely tied relationships. He draws further analogies between the pond, where sunlight, vegetation, and bigger and bigger animals feed on one another, and the track, where money is transformed into fancy cars, stocks and bonds, and so forth, as a result of action at the betting windows.

Gorman's final paragraph sounds the clarion call to park interpreters. It completes the ecosystems analogy and puts the challenge directly to those of us who are trying to make national parks as meaningful as they can be only if they are interpreted at their splendid, self-maintaining best. Concludes Gorman:

"I put \$2 to win on Love Champ in the first. She surged ahead at the wire and paid 10-1. I also bought some Saratoga Organic that day, and later I worked it into my garden. The way I see it, Love Champ not only won me \$20 but next spring she's going to make my tomatoes grow. Now **that's** ecology."

One final word. In no way should this editorial be interpreted as a moral defense of gambling. The fact that many people find racetrack action one of the less glorious ways of spending time and money is part of the point I wish to make – which is simply that ALL systems, whether viewed subjectively as "good," "bad," or "indifferent," are **objectively systems**, and the general principles that drive them are identical. This is the message America's national park owners (the "visitors") deserve to hear during their sojourns in the magnificent National Park System.