

wilderness fire as a unique laboratory, a chance to study fires that, as utilization intensifies, may vanish elsewhere. Fire historians will recognize in wilderness fire a variety of national fire, an eternal flame to the settlement of the New World, a vestal fire for America's virgin lands.

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WESTERN PARKS AND THE AMERICAN CHARACTER

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Savant Joseph Campbell recently stated that “. . . mythologies differ as the horizons, landscapes, sciences, and technologies of their civilizations differ.” Though he speaks in broad anthropological terms, I apply the idea narrowly to the historical evolution of the American West. To give point to this idea of myth-making horizons and landscapes, and the effects of evolving science and technology, I turn to the Lewis and Clark Expedition, and to the commentary of one of its students, Roy Appleman, who trod the explorers' trail 170 years after them. The journals of the expedition are restrained and factual. But not and again the drama of the journey shines forth, as in this passage by Meriwether Lewis, written the night of April 7, 1805, as the two captains prepared to leave their winter camp at Fort Mandan to reach the unknown, beyond the missouri:

. . . we were now about to penetrate a country at least two thousand miles in width, on which the foot of civilized man had never trodden; the good or evil it had in store for us was for experiment yet to determine, . . . however, as the state of mind in which we are, generally gives the colouring to events, when the imagination is suffered to wander into futurity, the picture which now presented itself to me was a most pleasing. . . I could but esteem this moment of my departure as among the most happy of my life.

Implicit in these expectations is the yearning for Eden in the first days of God's creation. The captains' subsequent adventures, marked by discoveries and revelations beyond imagination, fulfilled that yearning.

But their chronicler, 170 years later, found that “. . .an industrial-technological America has wrought vast changes along the route of Lewis and Clark.” Then he tolls the changes:

That the rampaging Missouri River Lewis and Clark knew would be tamed, that many of their campsites would be submerged, that most of the native trails they traversed would disappear from the plains and mountains, that the majestic Great Falls of the Missouri would be reduced to a trickle--all would seem unbelievable to the two captains. That the vast herds of buffalo, elk, and antelope, as well as the numerous grizzly, would be all but extinct, except where sanctuary exists, would seem equally as preposterous. The disappearance of the great falls of the Columbia would be beyond comprehension.

In these words can be read the end of dreams, the domestication of mythic horizons and landscapes. The loss is twofold. Eden's people, who shared their spirit world with Lewis and Clark, are gone as well. A few place-names survive to suggest rich cultural geographics that died with the elders.

I share the belief that the Westering dreams of an earlier age--the age of our grandparents--formed a core element of our national psychology. It is the romantic, effective element that pulls us asunder as our lives become evermore controlled by numbers, diminishing space, and the inhuman scales and threats of our creations. Compared to yesterday's clear dawning and the adventuring lives that greeted it, our time is hazy and crowded and constrained. So we burst out in other ways.

We have yet to adjust to the new world of our own making. Scholars have demonstrated the pertinacity of those earlier myths, despite closing horizons and right-angled landscapes. Perhaps, as some say, our mythic needs are purely psychological and will atrophy in time. But perhaps they are biological, reflecting, as Colin Turnbull asserts, our “lost identity” as hunters and gatherers. Whichever, the tension remains. Nostalgic films and books satisfy some seekers. Intense, death-beckoning adventures, in what is left of the wild, call others. Meditation, often mixed with sorrow over what is lost, consoles a few.

Parks and other preserved lands in the West are reliquaries where the old myths find sanctuary. They are the places left to us for escape from a progressively deteriorating and almost wholly urban daily-life environment. In their back-country reaches these places, whether near-regional park or far-Alaskan wilderness, offer companionship with Lewis and Clark. They give us opportunity--sensory, effective, logical--to adventure, to trod untrodden ground, to see the creation again. They attract scientists who want to see how the real world works. They are refuge for poets and climbers, for naturalists and river-runners, for children who have no choice but to accept what is left.

The parks and preserved lands, once buffered and remote, become islands--eroded and transformed by their advancing surroundings. In the minds of some they are threatened symbols of transcendent meaning, beyond utilitarian measure. They are last links with the world before. They are spiritual havens. These parklands, in all their diversity of types and sizes, keep alive the kinds of human experience that once occupied all of human experience.

The American character (assuming some validity in that concept, and discounting its unavoidable ethnocentricity) was largely shaped by a new continent, lightly peopled and rich beyond Old World measure. This circumstance allowed a re-

play of history. Modern people, at the dawn of the industrial age, could go back in time to that first dawn. Through the publicized adventures of the pathfinders who pushed beyond the fringes of settlement and brought back stories of vast spaces peopled by neolithic civilizations, a partly active, partly vicarious national experience took place. But all too soon, George Catlin's vision of a trans-Mississippi preserve was sullied, the garden desecrated.

An enlightened few saw the tragedy abuilding and set aside parts of the land to allow that national experience to continue. Today, these places with varying success, depending on the human impacts they have suffered, perpetuate that national experience.

Is the Myth of Eden sustainable? Is the American character--still moved by the evocations of remnant horizons and landscapes--sustainable? Some would agree that it is essential to maintain these things--land, myth, character. It could as well be argued that there is no rule in the future for a character so shaped. It causes unwanted stress in a world that trends toward blotting out Eden altogether.

As for me, I confess to Romantic tendencies. I want my myths. I want horizons and landscapes that nurture them. I want to be with people who want these things.

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URBAN SOILS OF WASHINGTON, D.C.

John R. Short and James C. Patterson

Urban soils, or highly man-influenced soils, have become more commonplace with the extensive earth moving and manipulating activities of man. Highly man-influenced soils are not limited to urban areas, but may be found wherever activities of man result in disturbance of soil profiles. Disturbance may consist merely of compaction of an existing soil by foot traffic, or may result from large scale manipulation of soil materials to create an entirely new land surface. The mode of formation of these soils, and the magnitude of impact the soils receive will surely result in soils with unique properties. It is important to understand the properties of urban soils in order to effectively manage them as a resource, whether the soils are situated in an urban or a rural setting. The study of urban soils is a new branch of soil science, so that there is much work to be accomplished to characterize these impacted soil systems. The National Capital Region has been interested in expanding the level of knowledge of these soils because of the largely urban nature of its parks.

The physical characteristics of soils in most urban environments are often unfavorable for plant growth. Use of soils for paths, trails, roadways, campgrounds, picnic areas, and recreational areas create compacted soil systems. Bulk density, which is the weight of soil material in a given volume is increased by compaction. The bulk density of an "ideal" soil is approximately 1.33 grams/cubic centimeter (g/cc), while bulk densities as high as 2.22 g/cc have been found in highly man-influenced soils. Studies have shown that soils with bulk densities of 1.67 g/cc or greater are often inhospitable environments for plants. The main result of compaction is a loss of pore space. While an "ideal" soil will contain approximately 50% pore space, evenly distributed between soil air and soil water,