Recent Books on John Wesley Powell

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BOOK REVIEWS

THE STATE OF THE NATURAL RESOURCES LITERATURE

Denise D. Fort* on Recent Books on John Wesley Powell


Edward Dolnick, Down the Great Unknown: John Wesley Powell's 1869 Journey of Discovery and Tragedy through the Grand Canyon (Harper Collins 2001)

Joseph Holmes (photographs and essays), Canyons of the Colorado, Foreword by David R. Brower; Text excerpted from The Exploration of the Colorado River and Its Canyons, by John Wesley Powell (Chronicle Books 1996)

Elliot Porter (photographs and epilogue), John Wesley Powell, Down the Colorado, Diary of the First Trip through the Grand Canyon (1969 E.P. Dutton)

Donald Worster, A River Running West: The Life of John Wesley Powell (Oxford University Press 2001)

New books about John Wesley Powell are once again appearing, stirring fresh interest in this unique observer and shaper of the West. Powell continues to matter because he tried to take it all in—the physical differences between the East and the West, the indigenous people, the implications of aridity, the opportunity for a good life in relationship to nature. That his vision was not realized seems more a failing of his contemporaries than of the vision itself. His courage in traveling the uncharted Colorado has not been diminished by subsequent explorations.

Wallace Stegner was the foremost interpreter of Powell in the immediately preceding generation. His book, Beyond the 100th Meridian, contained an affectionate and admiring portrait of Powell, placed within an unsentimental look at western history. This book would be on any must read list of western history books. The next generation, including William deBuys, Edward Dolnick, and Donald Worster, has taken up Powell in a spate of recent books.

William deBuys gives us Powell's own words, carefully chosen and edited from a lifetime of writing, and invites us to have a direct encounter with the ideas of a man who lived over a century ago. The text is interposed with incisive essays by deBuys and a wealth of informative

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footnotes and reproductions of illustrations from Powell's books. William deBuys holds a Ph.D. in American civilization and is the author of imaginative and eloquently written explorations of New Mexico history (Enchantment and Exploitation: The Life and Hard Times of a New Mexico Mountain Range; River of Traps) and the lower Colorado (Salt Dreams: Land and Water in Lower California). His writing is precisely crafted and free of academic jargon. In Seeing Things Whole, deBuys assumes the stance of a soft spoken and measured guide, trusting the reader to understand Powell's life through his works and deBuys' succinct commentary.

Edward Dolnick chose one chapter of Powell's life, the first voyage through the Grand Canyon. His is a lively book that interposes informative chapters about other aspects of Powell's life with the trip. The journey is the focus; accounts by other crewmembers and related historical sources are used to supplement Powell's recollections.

Donald Worster crafts a narrative that places Powell in American history, providing unforgettable authenticity through the amassing of detail. Worster is one of the most significant contemporary historians of the American West; his works include Rivers of Empire: Water, Aridity, and the Growth of the American West. The richness of his approach cannot be overstated; the book is a compelling argument for an historical approach to Powell and implicitly chides those who might be tempted to rely on a quotation or two from his life's writings to bolster a point.

The Great Voyage

We read Powell initially because he was a brave explorer. Even those who have suited up in super buoyant personal flotation devices for trips down a placid western river, with gourmet meals supplied for every dinner and experienced guides steering the rafts, have enough experience of danger to admire the great adventure that Powell and his crew took. We know just enough of the rugged territory, the terrifying standing waves, and the lack of shelter, to try to imagine what it was like when the entire experience was new, food was short, and the leader had but one arm to cling to the wooden boat.

Dolnick chastises writers who give what he considers too little attention to the dangers of the expedition. Of course, had Powell not survived, he would not have gone on to his other work: the political, intellectual, and policy work that his later years produced. How about the converse: would his work have aroused equal interest and had equal longevity had he not engaged in this heroic adventure? It seems highly unlikely. The credibility that he gained from this expedition went far beyond the scientific information he gained; he was an heroic explorer in
an era when the mystique of the West was at its peak. This reputation grew over time and was of immense benefit when Congress was debating his proposed initiatives many decades later.

Each of these books (deBuys, Dolnick, Worster) notes the rich coincidence that the Powell expedition launched from the banks of the Green River just two weeks after the nation was united by the completed construction of the transcontinental railroad. Further, the railroad line crossed the river within site of the Powell expedition. As a journalist, Dolnick seizes this opportunity to make a colorful contrast between the new life available to travelers and the rough life embraced by the crew:

Inside the palatial railroad car, the mirrors were French and the carpets Belgian, and the menu included such indulgences as raw oysters and lobster salad and omelets made with a splash of rum. A passenger crossing the Green River by train might have been forgiven for neglecting to glance out the window. And, in truth, even if a curious sightseer had turned his eyes from the sparkling chandeliers and the black-walnut woodwork, he might not have deemed the scene below him worthy of a second glance.

He would have seen, in the middle weeks of May 1869, an empty desert and a broad river and Powell's crew of novices struggling to learn how to handle their boats. Powell and his brother Walter, and the expedition's four boats, had arrived in town on May 11, by train from Chicago. By then the rest of the men had been impatiently hanging around Green River Station for three weeks. The town was shabby and tiny—it had only a hundred residents and had not existed a year before—and three weeks was a lengthy sentence.

With the completion of the railroad transcontinental travelers were freed from many of the experiences—bad weather, rough trails, robbers, and other threats—that the journey held. What did they make of those who chose to expose themselves to one of the most dangerous trips in the West? True, for Powell the trip was not primarily about adventure, but it was for some of his crew. Now adventure was an option, and seeking after it would grant fame to many in the next decades.

The expedition itself is a gripping story in Dolnick's hands. The writing borders on the melodramatic as the book invokes the thundering waves downstream, the steep canyon walls, the clumsy and ill suited boats. A book written in the modern era also ensures that we will know far more about the relations among the men than they may have themselves brought to mind, and Dolnick engages in a bit of psycho-
logical speculation. Anyone who has gone on a backpacking or river trip with a group of friends knows that these experiences can refine and cement friendships or cause ruptures that never heal. Even a temporary shortage of food and water can reveal the worst in someone. This expedition went forward with rancid bacon and flour as its only reliable food. Early on, five hundred pounds of bacon were jettisoned to lighten the load of the boats, which had to be portaged and lined throughout the canyon (pg. 30). One can only imagine the later recriminations against the men who decided to throw away food!

Tension was a companion throughout the expedition’s 99 days. Part of it, of course, was not knowing what the next bend would bring. Powell attempted to “scout” rapids, so that the party could portage or line the boats through the worst of them. But, as anyone who has floated a river knows, it is not always possible to get out of the river in time and boats would be swept downriver despite the efforts to move cautiously. The greatest threat was that rapids would occur where boats could not be lined and the canyon would offer no escape. This happened, and the survival of the members was in no way assured through these long, roaring rapids.

Four boats and ten men left Wyoming. Six were with the expedition at its conclusion. Was the first man to change his mind a deserter or prudent? Three more were to leave after a brutal number of days on the river, deciding that the sides of the Canyon and the long walk to habitation were safer than remaining in the Canyon. Each group felt that the other was in greater danger. Powell describes the scene:

All night long I pace up and down a little path, on a few yards of sand beach, along by the river. Is it wise to go on? I go to the boats again to look at our rations. I feel satisfied that we can get over the danger immediately before us; what there may be below I know not...

August 28. At last daylight comes and we have breakfast without a word being said about the future. The meal is as solemn as a funeral....

For the last time they [the three who left the party] entreat us not to go on, and tell us that it is madness to set out in this place; that we can never get safely through it; and, further, that the river turns again to the south into the granite, and a few miles of such rapids and falls will exhaust our entire stock of rations, and then it will be too late to climb out. Some tears are shed; it is rather a solemn parting; each party thinks the other is taking the dangerous course. (Powell, The Exploration of the Colorado River and Its
As it happened, staying with the expedition in fragile wooden boats was safer than leaving. The men who left were said to have been killed by Shivwit Indians, perhaps over an assault on a Native woman. In a satisfying narrative, Powell is shown as a humanist who understands the reason, or at least the mistake, that led to his men's death and even engages in subsequent friendly relations with the killers. Dolnick questions the commonplace explanation of their deaths, laying out other possibilities that may be more likely. Worster also examines the mystery but declines to revise the accepted history to such an extent.

Finally, 1100 miles after the voyage commenced, six exhausted and very hungry men were met at a small Mormon outpost, where they ate like “hogs.” Although some of the men continued downstream to the delta, that section of the river had already been explored and Powell saw no reason to continue.

Powell was to return to the river with another crew, but the second voyage does not appear in his writing and left less of a mark on the popular imagination. Stegner seemed especially upset with Powell’s introduction of elements from his second trip into the first without acknowledgement that the narrative was actually based on two journeys. The second voyage was just as dangerous as the first. Certainly the omission of the names of the crew of the second voyage leads to suspicions that Powell was willing to engage in an unseemly exploitation of the second trip to make the first more “marketable.” The sought after benefit for Powell, unlike the goal of many others who were drawn to the West, was not personal gain but rather part of his complex plan to rally support for science in the West.

Dolnick ensures that we understand what it took to accomplish the trip. He has interviewed today’s river runners, who seem to regard Powell with the same awe as did his contemporaries. The book is full of details—the dynamics of rivers, the design of boats, and how people have died—that are always of interest to river runners.

Dolnick’s fast moving narrative is reminiscent of recent adventure books, such as Into Thin Air and The Perfect Storm, both of which have captured the top of the bestseller list. Our fascination with danger and hardship is shared with previous generations, who also lived vicariously through newspaper accounts. Indeed, a false report that the members of the expedition had drowned seeded the public’s interest for the true story, and Powell and other members were to remain interesting to the public throughout their lives.

Adventure in the Wild West rightly captures our attention, but the entirety of Powell’s life is fascinating. His youth is one through
which American history can be viewed, from his restless immigrant
parents, to their encounter with U.S. attitudes toward slavery, to
Powell's very young life as a prairie agriculturist, to his search for
education in sparsely populated states, to his leadership and injury in a
bloody civil war battle. From there his accomplishments become part
of the public record: the voyages through the Canyon and then a life as a
public intellectual and policy activist. While less dramatic, the story is
equally engrossing to those who follow the peculiar political
relationships between the West and the powers in the Nation's Capital.
Nothing in Powell's character would have allowed him to simply live off
his voyage for the remainder of his years. Powell loved to philosophize,
and his career was characterized by engagement with some of the
greatest themes of the West.

Political Vision of the West

Powell's work brought him to conclusions about the West that
were contrary to much of the wisdom of the time. This took courage of a
different sort than had his youthful explorations, but the risks were as
severe in their own fashion, albeit to reputation and career. His life was
categorized by fidelity to science, and his own scientific orientation
told him that life in the West would be subject to limits, most notably the
limits imposed by aridity. In a famous moment later in life, he arrived at
the International Irrigation Congress and delivered the unwelcome
message that "there is still not sufficient water to irrigate all this arid
region" (Worster at 529), no matter how many dams were built. Not only
that, but "not one more acre of land should be granted to individuals for
irrigating purposes." (Id.) In words that are found on the wall in many a
water lawyer's office, he forecast today's water law practice: "I tell you,
gentlemen, you are piling up a heritage of conflict and litigation over
water rights, for there is not sufficient water to supply these lands." (Id).

Reasoning from the physical limits that he perceived, he
believed in the need to fashion new institutions for western settlements.
He propounded a populist, communitarian vision in which local
communities managed water, forestry, and grazing resources. The
monopolistic control of large capital over water resources was to be
avoided. Far better to have communities organized as the Mormons and
acequias of Northern New Mexico were organized, in which water
infrastructure was developed and controlled by a community. The
political implication was that governmental units should be based in
watersheds or basins, with diminished power in the federal government.

The West was a sparsely populated region when Powell first
encountered it, and it presented a canvas about which a young person
could fantasize. Worster notes that utopias were a popular form of fiction in both Europe and the United States at the time. Plato and Powell shared a conceptual issue: how would The Republic begin? Where would the first Guardians be found, and how would they be empowered to rule? For Powell, the question was who would restrain development while scientific order was imposed? In answering this question, he encountered his political downfall. His scientific training and temperament led to an inevitable collision with the populist constituency, leaving him without a political base for his ideas.

Powell’s vision should have been compelling to populists, one would assume. The division of the West’s resources, from land to minerals to water was not, as it was practiced, in accordance with anyone’s idea of good government. In the popular representation of the frontier, an individual family left the confines of the East and established a homestead. Living off the land, the family was able to support itself and create new communities. In fact, the railroads and large land entrepreneurs ended up with much of the public domain; the mining law led to large corporations controlling minerals, not the pick and shovel miner of the popular press; and water, of course, ended up in the control of irrigation districts and the federal government.

The dilemma for Powell arose when he wrestled with how land and water should be distributed to achieve his ideal. The difficulty was that he knew that there was not enough water to irrigate the entire West. He persuaded the Congress that an Irrigation Survey should be established to determine what lands could be irrigated, where dams should be sited, and how water should be distributed. Without this research, it was inadvisable to continue to establish homesteads, leading to potential heartbreak for the individuals who moved west without the likelihood of ever being able to sustain themselves. Just as dangerously, the Irrigation Survey was doing the speculators’ work for them by identifying irrigable waters and dam sites. For these reasons, a moratorium on new land claims made sense.

At the broadest level then, Powell saw a role for science, perhaps based in Washington, D.C., in making settlement decisions. This was a decidedly antipopulist position, even if it was not intended as such. The conflict between the people’s (and many special interests’) desire to develop the West and the principle of orderly development reached a climax when the solicitor general of the Interior Department determined that all public land should be closed to entry while the survey was underway. This move managed to infuriate all of the interests that were eyeing western lands.

Powell never came close to selling his vision of a West that was agrarian, democratically controlled, and watershed based. Although the
West continues to prove fertile ground for Utopias (see Callenbach's Ecotopia, and the present day People's Republic of Berkeley), our waters are managed according to political boundaries rather than political subdivisions based on hydrology. Federal water beneficiaries are not the farmers of Jefferson's (and Powell's) democracy; they are often agribusinesses that involve more and more capital and fewer and fewer owners.

A century has passed and Powell's vision is largely unknown. One pundit has traced an unbroken line of academics calling for river basin management, all as unheeded as Powell was. William deBuys addresses the question that concerns us: does it matter that Powell articulated this vision? He answers it convincingly:

The West of the American present is a turbulent, less-than-ideal place not simply because its people did not take Powell's advice but because of a thousand and one occurrences that intervened and in turn spawned myriad effects. And yet the West of the present would be a better place if the West of the past had earlier and more completely followed Powell's ideas. The proof of this proposition is all around us: As a society we have traveled a fair distance, falteringingly and gracelessly perhaps, in the direction Powell bade us go more than a century ago....

The conclusion to be reached is not that events followed Powell's plan but that his integrated understanding of the requirements of western land was profound, if not prophetic, and that we can still learn from him. (deBuys at 5).

The central prescription of Powell's vision is one that is still cited as the basis for much of the continuing policy and intellectual discussions of western resource management. Powell would have empowered those dependent on land and water resources to make collective decisions concerning its use.

The current debates over resource management too often have a tired character: federal government control versus state government. The continued vitality of this tension comes from a multitude of factors. State based organizations and politicians have every reason to perpetuate the conflict: organizing around a common enemy is a time proven route to leadership and, for organizations of states, perhaps the strongest basis for continued funding. The Association of State and Interstate Water Pollution Control Administrators, the Western Governors' Association, the Western States Water Council, etc. have all, at times, found protection from "the feds" the common denominator of their
membership. Even a transplanted Westerner can feel some of that resentment when Interior Department officials in remote offices on C Street, or lobbyists on K Street, or on the House Resources Committee, presume to make decisions affecting rivers they have never seen, much less fished or hiked along. As recent U.S. history developed, remote federal officials have also, in general, been more likely to protect environmental and Native American interests, so a balance of state and national interests has proven to have some benefits.

Powell's perspective was too communitarian for his time and is still too radical for a time in which resource politics are nearly frozen in warring positions. But, the call for management of resources across political boundaries is an unbroken call from academics, policy analysts, citizens, and others who continue to try to improve our relationship to the West's rivers. The recommendation that water be managed at a watershed level was the central and most controversial recommendation of the Western Water Policy Review Advisory Commission.

Trying to bring western development into line with natural resources was a radical enterprise. Powell was much more successful as a bureaucratic entrepreneur. From the beginning of his work, he managed to secure funding and support for one institution after another. The creation of the Geological Survey was a fitting pinnacle for this extraordinary career, and Worster's description of Powell's machinations is as useful a guide as any that are being written now about power and infighting in Washington.

The U.S. Geological Survey (USGS) is such a venerable institution that it was fascinating to read of the controversy that surrounded its birth. Should government conduct research, or should it be left to the private interests that might pursue projects? (This question became less salient when the inability of private capital to do so became evident and the course of history turned to the funding of Reclamation legislation.) Should the USGS support universities in pure research, or should the research have immediate application for the development of the West? These questions were not resolved and continue to surface in appropriations battles, but the value of the agency is no longer at issue.

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1. Research of the Natural Resources Law Center has addressed these issues for years. See especially Betsy Rieke and Douglas Kenney, Resource Management at the Watershed Level: An Assessment of the Changing Federal Role in the Emerging Era of Community-Based Watershed Management (report to the Western Water Policy Review Advisory Commission).

Powell was bruised in these battles, but his legacy is evident in an agency that continues to bring good science to the United States.

Relationship to Native Americans

It would be a rare geologist today who would pay much attention to the people who inhabited the lands she surveyed. Powell had an abiding interest in the Native Americans he encountered, leading him to successfully persuade the Congress to establish a bureau of ethnography to study the United States’ first people. There is no doubt that Powell’s relationship to the native people was in marked contrast to U.S. policy and to that of most of his contemporaries. In the years of exploration, Powell sought to understand the native people who lived in the West and had personal relationships that demonstrate empathy and friendship, as well as scientific inquiry.

Powell’s commitment to justice for Native Americans did not keep him from advocating the dispossession of tribes from their lands and the imposition of private property systems on them. In the formula for civilizing Indians, the tie to land must be broken:

*When an Indian clan or tribe gives up its land it not only surrenders its home as understood by civilized people but its gods are abandoned and all its religion connected therewith, and connected with the worship of ancestors buried in the soil; that is, everything most sacred to Indian society is yielded up.*

Such a removal of the Indians is the first step to be taken in their civilization....The great body of Indians of North America have been removed from their original homes. Only a few now remain to worship at the graves of their ancestors. This portion of the problem is almost solved, but the wisdom and patience of the American people must be solved for a few years longer—demanding as they should on the one hand, that the progress of civilization and the establishment of homes for millions of civilized people should not be retarded because of the interests and superstitions of a small number of savages, but demanding on the other hand that strict justice and the widest charity be extended to the Indians.

The second great step in the civilization of the Indians consists in inducing them to take lands and property in severalty. (quoted in Worster at 270–71)
Much more could be said about Powell's many relationships to the Indian peoples and nations. Indeed, his scholarly work encompasses many works describing Indian tribes, such as Introduction to the Study of Indian Languages (1877). He conceived of ethnological studies comprehending the "Science of Man" (Worster at 399), an enterprise located within the Smithsonian and of which Worster said, "it was clear that the Bureau of Ethnology was the most important institution in anthropology American had ever seen, and indeed it would remain among the most important such institutions American ever would see." (Id. at 409)

The broad mind that comprehended geology and ethnology was to continue his writings in what would now be regarded as a variety of disciplines. Truth and Error, or the Science of Intellection, was five years in the making and attempted to work within western philosophical traditions. This book had no apparent effect on others in the field and showed that Powell had reached the effective limits of his wide-ranging mind. Even the attempt to grasp so much of human thought is revealing when contrasted with our age. While a philosophy that comprehended all was beyond him, he did think comprehensively about the West.

Public Intellectual

In our time, no one would espouse "thinking nonholistically," but one would be hard pressed to name individuals who are successful at doing so. We have created institutions, such as the statutory requirement that an Environmental Impact Statement (EIS) be prepared in certain cases, that purports to capture the merits and demerits of a given proposal for action in a single analysis. But, the decision making that is justified by an EIS is rarely conducted by an individual with much grasp of the multiple disciplines that are fed into an EIS, and rarer still is a decision truly reflective of multiple perspectives.

When Powell worked, as deBuys reminds us, there was a smaller body of knowledge to be comprehended by a lay naturalist or anthropologist. One could opine about the best organization of human affairs without the need, for example, to review and acknowledge mind numbing political science studies concerned with the minutiae of implementation.

Are we better off living in an era of specialists rather than one of generalists? Perhaps a more relevant question is whether visionaries can find a home in contemporary America, leading us to a better society through their visions. One breed of visionary is evident enough: the loquacious politician whose promises of a brilliant life are easily given. Religious evangelists also awaken the shared desire for a better life. But who has been inspired lately by a text from a professor of geography, or
law, for that matter? Could this work be written now? The West has some magnificent writers such as Terry Tempest Williams, Barry Lopez, David Duncan, John McPhee, to name but a few. Because of the prevailing scientific perspective, which is built on reams of studies, it is less likely that a nation would turn to a generalist or a fiction writer to seek guidance about how we should live.

One final note: Powell was not a product of a conventional university education. He never received an undergraduate degree and attended several schools sporadically, due in large part to poverty. Worster uses the occasion of Powell's receiving an honorary doctorate of laws at Harvard to engage in a speculative but inviting portrait of the self-made man sitting on the podium:

Did he recall his first tutor, the backwoods savant Crookham, setting him down as a child to read Hume and Gibbon? Or did he remember reading John Bunyan as a teen-aged lad bumping along a wagon road with a load of wheat? Or did his mind flash back to his first site of the Rocky Mountains, about which he had read in Fremont's writings? Or did he think about the slow, difficult process of self-education that had opened to him the scientist's world of geology and ethnology, evolution and cosmology (Worster at 436).

Universities, with their divisions into disciplines and emphasis on research, discourage broad thinking in any but the tenured. Few survive the systematic discouragement of imagination.

**Environmentalist?**

One part of Powell's journey can no longer be undertaken. Glen Canyon Dam created Lake Powell, impounding Glen Canyon and covering side canyons under tons of water and silt. As far as can be told, Powell is respected by those who write about the West, those who are paid by federal agencies to administer its waters, and those who raft and fish its rivers. David Brower said this about the drowning of Glen Canyon: "John Wesley Powell dearly loved the place and named it for its many verdant glens. A tachometer would surely have spun over his grave the day the United States Bureau of Reclamation played Satan and named the reservoir that destroyed the canyon 'Lake Powell.'" (Holmes) The BOR intended the name as a monument to Powell, so national leaders must also have shared in Brower's respect, although presumably for different reasons.
Powell did not view the West as John Muir did, and there is little
evidence of environmental concern in his engineering aspirations for its
rivers. He believed that water that ran to the ocean was "wasted" and
that the agricultural capacity of each region could be based on complete
capture of river flows. The "waste" has been stemmed in many instances
but with disastrous effects on the West's ecosystems. In his later years,
Powell endorsed a worldview in which humans would transcend nature,
rather than be bound by it. But conservationists and tourism interests
were also beginning to claim an interest in the West's magnificent spaces
and his work had contributed to those movements.

The settlement of the West meant primarily bringing irrigation
to otherwise arid fields and Powell's surveys contributed to this. The
value of this was obvious to most, but it is no longer beyond dispute.
Recreation and tourism have placed an entirely different value on the
West's rivers and valleys. Western agriculture is no longer the mainstay
of the region's economy, although it is the dominant user of water.

We have certainly changed with respect to viewing the Grand
Canyon as a site for fun. The National Park Service now has a waiting
list of 12 years for private raft trips. A 15-day trip down the river runs
about $3000. The initial river trip was described by one of its participants
as "unending hell." Although one member expressed his preference for
rapids over flatwater, recreation was the furthest thing from their minds.

The landscape that Powell and his troupe encountered in the
Canyon is one of the most dramatic and beautiful in the world. One of
Powell's successes in his attempts to become the foremost of the West's
interpreters was to bring Thomas Moran to the Grand Canyon. His
paintings were an immediate success in the East. Powell benefited to
some unknown measure from the production of photographs and three-
dimensional images of the region. The dissemination of these images
immediately transformed the nation's perspective on its new lands.

Conclusion

Powell was a remarkable man. Worster helps us understand
how a boy from a small town, with a haphazard formal education, ended
up as a western adventurer, the founder of the Geologic Survey, the
creator of the Ethnological Bureau, and the author of text that attempted
to synthesize all human development. Powell both appealed to authority
and defied it during his long career. He appealed to authority for
funding and support of his expeditions and fed the Eastern
establishment to maintain its interest in the scientific exploration of the
West. Later in life, he contradicted the puffery of western hucksters and
thereby lost much of the celebrity and public regard that he had earned
from his heroic expeditions. Why did the man exhibit this sort of courage?

Worster provides insight into that based on Powell's upbringing. Despite living in a small Ohio town as a child, Powell's parents were drawn into the greatest debate of the day, the morality of slavery, and chose to open their home to the activists of the time. Their stands were not comfortable ones, and their son learned the costs of dissent. In this way, his story completes an American life: active involvement in public life and principled dissent were obligations that he gladly assumed.

Perhaps it is not helpful of a reviewer to suggest that each book has merit; winnowing or ranking is surely not too much to expect. Each of these books is worth reading, however, depending on what one wants to know. William deBuys gives us a well chosen selection of the man's own words in an elegantly presented text that allows one to sample a lifetime's wide ranging work. Edward Dolnick tells an engrossing action story that skillfully integrates some of the historical context for the river voyage. It would be a mistake to think one knew Powell after reading this book, but the story epitomizes a chapter in the settling of the West that would captivate any reader. Donald Worster is comprehensive, schooled in historical methods, and brings the full weight of his considered conclusions about western history and the western environment to this text. At 573 pages, without notes, his book will be the standard until another generation rediscovers Powell.

It is great to read these books with some magnificent photography at hand, especially if it refreshes memories of past trips. The two books of photography each call the canyons to mind. A decent map would have been a great aid or, now, a computer-generated map would allow one to follow the entire story on one's personal computer. What will the next 100 years hold for our explorations?

REVIEW


What is nature worth to us? This is the question that the Dutch environmental economist Dr. Roefie Hueting tried to answer in his seminal 1980 publication, New Scarcity and Economic Growth: More Welfare through Less Production. Hueting's criticism of traditional national income measures and his advocacy of a greener accounting spawned a lively debate in the field. The current book is the result of one of those public