Henry Rowe Schoolcraft. (Photograph courtesy of the U.S. Library of Congress.)
In the Words of Ornithologists Past . . .

H. R. Schoolcraft and Natural History on the Western Frontier, Part 1: Early Years

by Michael Mossman

In March of 1818 an isolated village of western New York swelled with an influx of uprooted families, adventurers, and drifters ready for the Allegheny River to rid itself of ice and transport them to the western frontier. Among them was 24-year-old Henry Rowe Schoolcraft (1793–1864), an aspiring, self-educated scientist rebounding from bankruptcy, and bound for exploration and possibly fortune in the Missouri Territory. So began a long career on the American frontier, by a remarkable man who would progress from explorer and mineralogist to Indian agent and ethnologist, and who would be intimately involved in the natural and human history of the Mississippi River valley and the upper Great Lakes.

Schoolcraft was tireless, disciplined, and a prolific writer, best known as the discoverer of the source of the Mississippi River, and as an early chronicler of Native American languages, myths, and customs. Yet he was, and remains, a controversial figure, in part from his ethnocentric views of the American Indian, and from self-promotion that sometimes compromised his writings. The latter is nowhere so obvious as in descriptions of him and his life, which serve well as an introduction to him. Here, first, are excerpts from an approved biography that appeared in one of his books (Schoolcraft 1851):

“He is an example of what early and continued zeal, talent, and diligence, united with energy of character and consistent moral habits, may accomplish in the cause of letters and science, by the force of solitary application, without the advantage of hereditary wealth, the impulse of patronage, or the prestige of early academic honors. Ardent in the pursuit of whatever engaged his attention, quick in the observation of natural phenomena, and assiduous in the accumulation of facts; with an ever present sense of their practical and useful bearing—few men, in our modern history, have accomplished so much, in the lines of research he has chosen, to render science popular and letters honorable. To him we are indebted for our first accounts of the geological constitution, and the mineral wealth and resources of the great valley beyond the Alleghanies, and he is the discoverer of the actual source of the Mississippi River in Itasca Lake. For many years, beginning with
1817, he stirred up a zeal for natural history from one end of the land to the other, and, after his settlement in the West, he was a point of approach for correspondents, as his personal memoirs denote, not only on these topics, but for all that relates to the Indian tribes, in consequence of which he has been emphatically pronounced “The Red Man’s FRIEND.”

“... Mr Schoolcraft’s persevering industry is so indomitable, that he has been known to write from sun to sun almost every day for many consecutive years, taking no recreation, and yet these sedentary habits of untiring application being regulated by system, have not impaired the digestive functions...”

“...the complete embodiment of temperance in all things. He rises early, eats moderately of simple food, never uses a drop of stimulant, and does not even smoke a cigar. In temperament he is among the happiest of human beings, always looks at the bright side of circumstances—loves to hear of the prosperity of his neighbors, and hopes for favorable turns of character, even in the most depraved. The exaltation of his intellectual pursuits, and his sincere piety, have enabled him to rise above all the petty disquietudes of everyday life.”

A recent historian’s account is less noble, yet more tantalizing:

“Many of his basic attitudes and ideas—nationalism, manifest destiny, anglophobia, his early model of cultural development, his status anxiety—... mirror widely shared beliefs and moods characteristic of the American society of his time. Nonetheless, the unusual circumstances of his residence on a remote Indian frontier, his marriages—first to a half-Chippewa woman in the far West and later to a neurotic South Carolina slaveowner, and a singular series of family events including sudden deaths, opium addiction, delinquency, murder and insanity, gave an intensely personal character to his quest for faith and meaning in an uncertain world. If at the beginning of his life his outlook was anything but original, by the end it had become idiosyncratic in the extreme.” (Bremer 1987).

Shortcomings aside, Schoolcraft’s voluminous writings help illuminate an era in Wisconsin history for which little first-hand information is available, and most of his natural history observations appear accurate. His narratives and memoirs cover several expeditions, primarily to present-day Missouri and Arkansas (1818–1819), Illinois (1821), Wisconsin, Minnesota, and Michigan’s Upper Peninsula (1820, 1831, 1832), and miscellaneous travels and experiences during his years as Indian agent at Sault St. Marie, at the eastern end of Lake Superior (1822–1841). In addition is his correspondence with other naturalists, the letters and journals of his associates on these same expeditions, and the miscellaneous scientific literature that resulted. Together, these paint colorful impressions of the unsettled Midwest (especially the upper Great Lakes region), how people experienced it, and the character of natural history study in the early 1800s.

General biographical information on Schoolcraft is presented in several publications, including Anon. (1845), Hough (1935), Marsden (1976) and the introductions to Schoolcraft’s (1851) Personal Memoirs, Expedition to Lake Iteas (Mason 1958), and Literary Voyager (Mason 1962). The most comprehensive information is that provided by Freeman (1969) and Bremer (1982, 1987). In addition, Schorger (1946) briefly summarized many of
Schoolcraft’s ornithological observations.

Schoolcraft was born in 1793 of English and German ancestry, near Albany, New York. At an early age he showed a proclivity toward study and writing. By the age of 13 he was working in the glassworks that his father supervised, and at age 14 was an overseer. As the senior Schoolcraft began to establish glassworks of his own, his precocious son assumed responsibility for the design, construction, and supervision of new sites in New York and Vermont. He was a dedicated, talented, and largely self-taught student of chemistry, mineralogy, and engineering. He also formed a short-lived, local literary society and published a newsletter entitled “The Cricket”. The development of Schoolcraft’s personality during these years is aptly described by Bremer (1987):

“He led the life of a rising young man with a taste for society and the usual gregariousness of youth. . . . Doubtless he cut a striking figure with his six foot frame, chestnut hair, and blue eyes set off by a good suit, silk gloves and handkerchief, and gold key. He wrote poetic tributes to a variety of young women . . . . Those early years proved critical in shaping the basic village bourgeois outlook that characterized Schoolcraft’s thought and behavior throughout his life. [He was among] a small coterie of individuals [who] rather self-consciously sought to emulate cultivated middle class society in the larger towns . . . . In such a setting the favorite son of the local factory superintendent could hardly avoid feeling keenly aware of his social position. This sensitivity manifested itself to the end of his life both in his efforts to display the dignified aloofness of the proper gentleman and in his desire to favorably impress his social and official superiors.”

The glassworks trade boomed during the War of 1812, but when the Treaty of Ghent re-established trade with superior European markets, the business of manufacturing glass, like many other endeavors inflated by the war years, suffered seriously. Caught in this situation by “a flood of paper money,” worthless notes in lieu of salary, and probably some poor business decisions, young Henry went bankrupt.

This was certainly humilitating, for, as portrayed in his later writings, Schoolcraft was extremely sensitive to failure or criticism. Add to this his difficulty in finding work in his trade, the disappointing response to his prospectus for a proposed book on glassmaking, and yet his ambitious and inquiring mind—and it is not strange that he would turn westward. He left home with mineralogical texts, specimens and field equipment, some clothing, and $60, to investigate and perhaps establish a claim in the poorly-known lead-mining district of Missouri. His experiences en route were probably typical for that period of westward migration into the Ohio and Mississippi valleys, which was urged by economic recession, a burgeoning populace, and the opening of land that followed the War of 1812. Wisconsin, then part of the Illinois Territory, was yet a wilderness belonging to its various native peoples; it would not receive its first major flood of settlers for another 20 years. Schoolcraft (1851) described the beginning of his journey thus:

“I reached Olean, on the source of the Allegheny River, early in 1818, while the snow was yet upon the ground, and had to wait several weeks for the opening of that stream. I was surprised to see the
crowd of persons, from various quarters, who had pressed to this point, waiting the opening of the navigation...

"I mingled with this crowd, and, while listening to the anticipations indulged in, it seemed to me that the war had not, in reality, been fought for "free trade and sailors' rights" where it commenced, but to gain knowledge of the world beyond the Alleghanies.

"Many came with their household stuff, which was to be embarked in arks and flat boats. The children of Israel could scarcely have presented a more motley array of men and women, with their "kneading troughs" on their backs, and their "little ones," than were there assembled, on their way to the new land of promise.

"To judge by the tone of general conversation, they meant, in their generation, to plough the Mississippi Valley from its head to its foot. There was not an idea short of it. What a world of golden dreams was there!

"I took passage in the first ark that attempted the descent for the season."

Descending the Allegheny and then the Ohio on various flat boats and keel boats, Schoolcraft took time for local geological explorations, and visits to factories and mines. "Every night we tied our ark to a tree and built a fire on shore... I had learned to row a skiff with dexterity... and turned this art to account by taking the ladies ashore, as we floated on with our ark, and picked up specimens while they culled shrubs and flowers... The river was constantly enlarging..."

They reached Louisville late in spring. "It was about this point, or a little above, that we first noticed the gay and noisy parroquet [Carolina Parakeet], flocks of which inhabited the forests... At Shawneetown, where we lay a short time, I went out hunting about the mouth of the Wabash with one Hanlon, a native of Kentucky, who was so expert with the use of the rifle that he brought down single [Passenger] pigeons and squirrels, aiming only at their heads or necks."

Thus, Schoolcraft's first bird notes were cursory. Had he anticipated their value to posterity, we might be graced with more vivid accounts, but we are left wondering. Fortunately, Alexander Wilson, the "Father of American Ornithology" had traveled down the Ohio 8 years before Schoolcraft. His experiences with these same, once-common species can be found in his American Ornithology (1803–1814), which was the first scientific text on North American birds, and the only one existent at the time of Schoolcraft's journey. Excerpts from it may help us comprehend the birdlife Schoolcraft encountered that spring. First, regarding the Passenger Pigeon:

"In descending the Ohio by myself, in the month of February, I often rested on my oars to contemplate their aerial maneuvers. A column, eight or ten miles in length, would appear from Kentucky, high in air, steering across to Indiana. The leaders of this great body would sometimes gradually vary their course, until it formed a large bend, of more than a mile in diameter, those behind tracing the exact route of their predecessors. This would continue sometimes long after both extremities were beyond the reach of sight; so that the whole, with its glittery undulations, marked a space on the face of the heavens resembling the windings of a vast and majestic river... As these vast bodies passed over the river near me, the surface of the water, which was before as smooth as glass, appeared marked with innumerable dimples, occasioned by the dropping of their dung, resembling the commencement of a shower of large drops of rain or hail."
“Happening to go to shore, one charming afternoon, to purchase some milk at a house that stood near the river, and while talking with the people within doors, I was suddenly struck with astonishment at a loud rushing roar, succeeded by instant darkness, which, on the first moment, I took for a tornado, about to overwhelm the house and everything around in destruction. The people, observing my surprise, coolly said, “It is only the Pigeons;” and, on running out, I beheld a flock, thirty or forty yards in width, sweeping along very low, between the house and the mountain, or height, that formed the second bank of the river. These continued passing for more than a quarter of an hour, and at length varied their bearing so as to pass over the mountain, behind which they disappeared before the rear came up.”

Regarding Carolina Parakeets, Wilson found them to be

“particularly and strongly attached [to] low, rich, alluvial bottoms, along the borders of creeks, covered with a gigantic growth of sycamore-trees, or button wood; deep, and almost impenetrable swamps, where the vast and towering cypress lifts its still more majestic head; and those singular salines, or, as they are called, licks, so generally interspersed over that country, and which are regularly and eagerly visited by the Paroquets... At Big Bone Lick, thirty miles above the mouth of Kentucky River [about 80 miles above Louisville], I saw them in great numbers. They came screaming through the woods in the morning, about an hour after sunrise, to drink the salt water, of which they, as well as the pigeons, are remarkably fond. When they alighted on the ground, it appeared at a distance as if covered with a carpet of the richest green, orange, and yellow: they afterwards settled, in one body, on a neighboring tree, which stood detached from any other, covering almost every twig of it, and the sun, shining strongly on their gay and glossy plumage, produced a very beautiful and splendid appearance. Here I had an opportunity of observing some very particular traits of their character: Having shot down a number, some of which were only wounded, the whole flock swept repeatedly around their prostrate companions, and again settled on a low tree, within twenty yards of the spot where I stood. At each successive discharge, though showers of them fell, yet the affection of the survivors seemed rather to increase; for, after a few circuits around the place, they again alighted near me, looking down on their slaughtered companions with such manifest symptoms of sympathy and concern, as entirely disarmed me... They fly very much like the Wild Pigeon, in close, compact bodies, and with great rapidity, making a loud and outrageous screaming, not unlike that of the Redheaded Woodpecker. Their flight is sometimes in a direct line; but most usually circuitous, making a great variety of elegant and serpentine meanders, as if for pleasure. They are particularly attached to large sycamores, in the hollow of the trunks and branches of which they generally roost, thirty or forty, sometimes more, entering into the same hole... They are extremely sociable, and fond of each other, often scratching each other’s heads and necks, and always, at night, nestling as close as possible to each other...”

Schoolcraft continued downriver from the Louisville area, and reached the Mississippi River on 1 July. His journal (Schoolcraft 1819) for that day reads:

“The dashing of the oars awoke me this morning at an early hour, and on quitting my birth [sic], I found the boat under rapid headway for the mouth of the Ohio, with the Mississippi in full view. The interest excited on approach-
ing the junction of these celebrated rivers, and a wish to survey with attention the physical character of the country, kept me constantly on deck. The morning was calm and serene, scarcely a cloud obscured the atmosphere, and the sun rose majestically above the horizon, clothing in light the most sublime and beautiful scene, which, until that moment, I ever beheld. The novelty of the scenery, the bold geographical outlines presented by the banks of the rivers, the heavy forests which cast their gloomy shadows upon the water, and the low murmur of two mighty streams hastening to mingle their currents, could not fail to present a scene replete with the highest interest, and capable, at once, of exciting our united wonder and admiration. . . . After having pursued the Ohio from Pittsburgh to its mouth, a distance of more than one thousand miles, . . . the traveller is insensibly led to a contemplation of its grandeur and beauty; he feels a mingled emotion of pride and satisfaction in riding down its majestic current, and cannot help feeling something like regret, to find it, at last, merely a tributary to the Mississippi—that mighty stream which draws its waters from a country equal in extent to the Roman Empire in its proudest days; and whose tributaries are rivers surpassing in size the Rhine, the Danube, or the Wolga [sic]. Such at least were my emotions on reaching the Mississippi, which we entered this morning at sunrise, and found ourselves suddenly transported from a gentle current and clear water, to a stream holding so much mud in suspension as to appear perfectly opaque; and a current so rapid that it is with difficulty navigated by ordinary boats.

During a pause at the confluence, Schoolcraft (1853) “amused myself by angling from the side of the vessel. The only fish I caught was a gar—that almost single variety of the voracious species in these waters, which has a long bill, with sharp teeth, for arousing its prey, apparently, from a muddy bottom.”

The boat then proceeded up the Mississippi for nearly a month, past forests of cottonwood, sycamore, and elm, almost to St. Louis. He walked much of the way while the barge he accompanied was poled and pulled slowly against the strong current, covering only 3–10 miles per day. The first night, “as evening came on, the mosquitoes were in hordes. It was impossible to perform the offices of eating or drinking without suffering the keenest torture from their stings” (Schoolcraft 1851). One night as the boat lay moored along the river, the crew prepared to defend themselves against what they thought was a grizzly bear: “As I carried nothing more deadly than a silver crucible and some acids, I remained on the upper deck of the barge. From this elevation I soon saw, by the dim moonlight, the whole party return, without having fired a gun. It turned out that the cause of this unusual disturbance was a large white hog, which had been shot in the head and snout with swan-shot, by some cruel fellows . . .” (Schoolcraft 1853).

About halfway to St. Louis he stated:

“We frequently meet the paroquet on the banks of the river, and have passed several large flocks to-day. This is a kind of parrot, a beautiful bird, which is very common in Louisiana, Missouri, and Kentucky. We have also met in this day’s voyage, a large flock of [white] pelicans, but could not approach nigh enough to kill any. This is a bird which frequents the waters of the Mississippi, but never ventures far into the interior. The wild turkey, [Bobwhite] quail, and squirrel, are daily met with on either shore, and
we find no difficulty in killing as many as we have occasion for...

"Nothing can equal the beauty of the varying landscape, presented for the last two days... There has appeared a succession of the most novel and interesting objects which the face of nature is capable of presenting. Whatever pleasure can be derived from the contemplation of natural objects, presented in surprising and picturesque groups, can here be enjoyed in the highest degree... the bleak and rugged cliff with the verdant forest, the cultivated field, or the wide extended surface of the Mississippi, interspersed with its beautiful islands, and winding majestically through a country, which only requires the improvements of civilized and refined society, to render it one of the most delightful residences of man. Nor is it possible to contemplate the vast extent, fertility, resources, and increasing population of this immeasurable valley, without feeling a desire that our lives could be prolonged to an unusual period, that we might survey, an hundred years hence, the physical and political condition of this country, and live to participate in the advantages, improvements, wealth, glory, and power, which is destined to crown the great basin between the Alleghany and Rocky Mountains..." (Schoolcraft 1819)

What might he have thought if he were actually to return in the 20th century, to find the Carolina Parakeet and Passenger Pigeon extinct, other species far reduced in numbers, the river laden not only with what he called the natural “broken-down materials of half a continent,” but also with the myriad effluents of “civilized and refined society”; and where contemporary naturalists would yearn for a visit to the year 1818? His was a time of prevailing assumption that natural resources were inexhaustible, before wilderness had become scarce, and before the writings of even Thoreau and Muir, when it was not so incongruous for a naturalist to extoll the beauty of near-wilderness while advocating its exploitation.

After reaching St. Louis, Schoolcraft returned rapidly downriver by steamboat, appreciating the extended time he had spent on the ascent:

"Had I passed it in a steamer, [upward] bound, as at this day, in forty-eight hours, I should have had none but the vaguest and most general conceptions of its character. But I went to glean facts in its natural history, and I knew these required careful personal inspection of minute as well as general features. There may be a sort of horseback theory of geology; but mineralogy, and the natural sciences generally, must be investigated on foot." (Schoolcraft 1851)

Schoolcraft spent August through October of 1818 investigating the mining district of east-central Missouri near Potosi, where miners and backwoods hunters had lived for decades, but where agricultural society had begun to develop only in the previous 5 years. On his first day there,

"The country lay in its primitive state. For the purpose of obtaining a good road, an elevated arid ridge had been pursued much of the way. In crossing this, I suffered severely from heat and thirst, and the only place where I saw water was in a rut, which I frightened a wild turkey from partaking of, in order to stoop down to it myself." (Schoolcraft 1851)

This work resulted in the book *A View of the Lead Mines of Missouri* (Schoolcraft 1819), which included a wealth of insightful observations not only of the mines, but also the area's geography, soils, geology, vegetation,
agriculture, and society. The text is straightforward, and relatively free of the affectation and self-glorification that often muddled his later works. Yet he still entertained his opinions, especially regarding cultural refinement, or lack thereof. The following selections exemplify his perceptions and concerns, beginning with his belief in careful, first-hand observation:

"A man who merely rides through a country, cannot be expected to publish much valuable information concerning it. The inquiry of a moment, the surmises of ingenuity, and the probability of things, can never atone for sound statistical information, practical remarks, and acknowledged facts. It is necessary to enter into details, before we can arrive at a general result... I allude to some works on the western country now generally read at the eastward... where we are served up with surmises instead of facts, with bloated descriptions instead of simple accounts; and the authors of which, in many instances, know not the countries they describe, and have neither admired the beauties, or shrunk at the deformities, which they picture..."

"The traveller, after he has viewed the rich uplands of Ohio—the heavy forests of Indiana—the woodland barrens of Kentucky—the craggy cliffs of Tennessee—and the unbounded prairies of Illinois, has still something to desire, for he may see them all together in one day's ride in the interior of Missouri... to behold at one view, cliffs and prairies, bottoms and barrens, naked hills, heavy forests, rocks, streams, and plains, all succeeding each other with rapidity, and mingled with the most pleasing harmony. I have contemplated such scenes while standing on some lofty bluff in the wilderness of Missouri, with emotions of unmixed delight, while the deer, the elk, and the buffalo, were grazing quietly on the plains below, and if any thing in the natural physiology of the earth, has the power to turn our thoughts from the pursuit of earthly glory, to the contemplation of celestial bliss... it must be a scene like this, where we are presented with an assemblage of all that is novel, beautiful, or sublime in the face of nature, far removed from the tumult, dangers, and deceptions of life, and encompassed on all sides by silence, tranquility and peace..."

"Respecting the wild quadrupeds in this part of the country, it may be observed, that they are annually decreasing, both in number and kind, and hunting is every year becoming less an object. Those, therefore, who are attached to this kind of life, are almost imperceptibly withdrawing further into the woods..."

"Of birds there is an endless variety. The wild turkey is still very common on the bottom lands, and during the heat of the day in the open post oak woods. The wild goose, duck, brant, and swan, are to be found on the streams. The pelican is occasionally seen on coming up the Mississippi, but never ventures into the interior. The prairie hen [Prairie-Chicken] is common, so are quails and pigeons; the latter, in some parts of the interior, are so numerous that the woods seem alive with them. Of singing birds there is a numerous tribe; some of them are strangers to me, and there is a great proportion whose colors are beautiful, and who sing sweetly. I think an ornithologist would find this a very interesting field. The Parrakeet is a beautiful bird; it is a kind of parrot; its colours are green, yellow, and red, all bright col-

"Wild goose” and “swan” undoubtedly refer to Canada Goose and Trumpeter Swan, but what Schoolcraft meant by “brant” is uncertain. Then, as now, ornithological texts reserved this name for the strictly coastal Branta (Anas) berniaca. However, “brant” has been used colloquially for various small to medium-sized geese, including White-fronted Goose, small races of Canada Goose, and white and blue phases of Snow Goose. The latter species seems most likely in Schoolcraft’s situation.
ours, and it is a pleasing sight to see a flock of them suddenly wheel in the atmosphere, and light upon a tree; their gaudy colours are reflected in the sun with the brilliance of the rainbow: they are a noisy bird, but their notes are disagreeable. This bird is first met with on descending the Ohio, about the falls [near Louisville], after which they become plenty; are constantly to be seen on the Kentucky or Indiana shore, and add to the delight a traveller feels in descending that beautiful river. Of birds of prey, the eagle, the turkey buzzard, and the raven, may be noticed; but I forbear to increase the catalogue, for the subject is exhaustless, and to do it justice would require a greater limit than I propose to allow myself in this entire view.

"... an atmosphere of unusual dryness, exempts the inhabitants from those pulmonary complaints which are more or less the consequence of an atmosphere surcharged with watery particles... Epidemics are unknown. Those diseases which prevail more or less every summer on the American bottom [along the Mississippi], and other rich and level tracts of Illinois, Ohio, and Indiana, have not found their way into the interior of Missouri, where there is no stagnant water,—no repositories for mud and slime, brought down by the annual floods, as is the case on the immediate banks of the Mississippi, Ohio, and other great western rivers,—and no pestilential airs from decaying vegetable, and drying ponds. The fever and ague is a very rare thing at the mines. Billious complaints are the most common, but they are not fatal..."

"A country thus situated, cannot fail to prove genial to the vegetable kingdom. It would be difficult to point out a section of country which affords a more interesting field for the botanist. Its prairies and barrens are covered with a profusion of wild flowers, shrubs, and plants, and its cultivated fields yield to the hands of the planter, a great proportion of the useful vegetables of the earth..."

"[The people] are robust, frank, and daring. Taught by the hardships and dangers incident to a frontier settlement, to depend for security and success upon their own individual exertions, they rely little upon extraneous help, and feel that true independence, flowing from a conviction that their own physical exertions are equal to every call, necessity, and emergency of life...

"With the advances in agriculture, a corresponding improvement has been effected in the manners and morals of the people. A large proportion of those formerly engaged in mining were persons of the most abandoned character, refugees from justice in the old States; and the mines were a continued scene of riot and disorder, and many atrocities were committed. Many of those persons have fled, others have been restrained from evil practices by the influence and example of virtuous and intelligent men... The French constitute a considerable proportion of the whole population, and it is but repeating a common observation to say, that in morality and intelligence they are far inferior to the American population...

"The hunter population in the territory, presents a state of society of which few have any just conception, and of which, indeed, I confess myself to have been wholly ignorant, previous to my tour through those regions where they are located. Composed of the unruly and the vicious from all quarters, insulated by a pathless wilderness, without the pale of civil law, or the restraints upon manners and actions imposed by refined society, this population are an extraordinary instance of retrogression of society... composed of persons from various sections of the Union, who have either embraced hunting from the love of ease or singularity, or have fled from society to escape the severity of the laws, and to indulge in unrestrained passion. Learning and religion are like disregarded, and in the existing state of so-
ciety among the Missouri hunters, we are presented with a contradiction of the theories of philosophers of all ages, for we here behold the descendents of enlightened Europeans in a savage state, or at least in a rapid state of advancement towards it..."

Having completed this investigation, Schoolcraft set out southward in early November to explore the Ozark wilderness, with a troublesome packhorse named Butcher, and a companion who "stood stoutly by me [though] he had not much poetry in his soul". During the ensuing 3 months they covered 900 miles among rugged, unmapped terrain, during which various mishaps brought them to face starvation, exhaustion, injury, and unpredictable backwoodsmen. Schoolcraft's journal of this trip is captivating and informative. It appeared in a nearly original form (Schoolcraft 1818–1819), an edited publication (Schoolcraft 1821), and a more popularized version (Schoolcraft 1853) that was published long afterward. Here are a few excerpts from the 1853 publication that deal specifically with birds, and, moreover, with the travellers' starving condition:

"Nov. 27th... Much of our way lay through open oak forests, with a thick bed of fallen leaves, and we several times searched under these for sweet acorns; but we uniformly found that the wild turkeys had been too quick for us—every sweet acorn had been scratched up and eaten, and none remained but such as were bitter and distasteful. On descending an eminence, we found the sassafras plentifully, and, breaking off branches of it, chewed them, which took away the astringent and bad taste of the acorns..."

"Nov. 28th. Daylight was welcome. I built a fire against the stump of a dead tree, which had been broken off by light-
Wild Turkeys were common in the Ozarks, and according to Schoolcraft’s account of frontier bartering here, a turkey was worth 25 cents, the same as a raccoon. Three could be traded for a pound of coffee, 4 for a gallon of wild honey, 6 for a bear skin, 8 for an otter skin or a butcher knife, or 32 for a Mackinaw blanket.

Schoolcraft returned to the lead district in February, where he spent 2 months writing his View of the Lead Mines:

“The months of February and March had now glided away. Too close a confinement to my room, however, affected my health. The great change of life from camping out, and the rough scenes of the forest, could not fail to disturb the functional secretions. An obstruction of the liver developed itself in a decided case of jaundice. After the usual remedies, I made a journey ... to the Mississippi River, for the purpose of ascending that stream on a barge, in order that I might be compelled to drink its turbid, but healthy waters... I returned in a short time ... in completely restored health.” (Schoolcraft 1851)

Schoolcraft had been more dubious of this practice when he ascended the Mississippi the previous summer:

“An opinion is prevalent throughout this country, that the water of the Mississippi, with every impurity, is healthful as a common drink, and accordingly the boatmen, and many of the inhabitants of the banks of the river, make use of no other water. An expedient resorted to at first, perhaps, from necessity, may be continued from an impression of the benefits resulting from it. I am not well enough acquainted with the chymical properties of the water, or the method in which it operates on the human system, to deny its utility, but to my palate, a glass of cool, clear, spring water is far preferable to the muddy lukewarm water of the Mississippi. I have seen a simple method pursued for clarifying it. It is done by sprinkling a handful of Indian meal on the surface of a pail of water, which precipitates the mud to the bottom, and the superincumbent water is left in a tolerable state of purity.” (Schoolcraft 1819)

Another observer of the time wrote of these “medicinal properties” to the editor of the American Journal of Science:

“My health being much enfeebled, necessity compelled me to take a trip to New Orleans for the sake of using the water of the Mississippi river. The effect was salutary and the voyage a pleasant one. The Mississippi water when freely drank, produces powerful effects—when filtrated it is very clear, and may be drunk in large quantities without burring the stomach. It certainly possesses some properties not common to other waters, but its qualities I believe have never been examined by chemists. (Anon. 1824)

Schoolcraft eventually traveled to New Orleans and then by sea to New York City, where he arrived in August 1819 with his manuscript and new mineralogical specimens. Here he won the attention of “men of science and gentlemen of enlarged minds” (Schoolcraft 1851), such as botanist John Torrey and zoologist Samuel Mitchell, and joined the New York Lyceum of Natural History, the first of several “learned societies” to which he would be elected. As he later recalled (1851), “The natural sciences were then chiefly in the hands of physicians, and there was scarcely a man of note in these departments of inquiry who was not soon numbered among my acquaintances.”
Late that fall he published his book on the lead district, which was well-received by the scientific and political communities. One reviewer (Anon. 1821) considered it “entitled to great respect, and we confess ourselves very much indebted to Mr. Schoolcraft for a great mass of valuable information, which, in a connected form, is, we believe, no where else to be found. His statements (as regards the most valuable part) are drawn from his own researches and observations, and have, evidently been the result of much effort, and of no small share of fatigue and personal privation. We trust that so valuable a work will not stop with a single edition.” However, the book was evidently too factual for the general public, and sold poorly.

Upon publication, Schoolcraft immediately took copies to Washington, where he impressed President Monroe and other political figures, and lobbied to create a federal position to administer the mineral rights of the West, for which he would be the likely candidate. Instead, Secretary of War Calhoun offered him the position of mineralogist and geologist on an expedition led by General Lewis Cass into the wilds of the Michigan Territory, which then consisted of present-day Michigan, Wisconsin, and that part of Minnesota north of the Mississippi River. According to Schoolcraft (1851), “[Calhoun] tendered me the place, and stated the compensation. The latter was small, but the situation appeared to me to be one which was not to be overlooked. I accepted it. It seemed to be the bottom step in a ladder which I ought to climb.” This initiated Schoolcraft’s 22-year career in the upper Great Lakes, then considered the northwestern frontier, and which will be the subject of the next articles of this series.

**Literature Cited**


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