Surveying the Minds: New Trends and Key Classics in Mining History

By Brian James Leech and Eric C. Nystrom

he most exciting variation from the crushing drudgery of placer sluicing was, for the early California miner, the day the headgate shut and the water stopped running. It was time to see what all that hard work had produced: clean-up day. On clean-up day, the nuggets and dust would be carefully gathered from the sluice boxes, and, under a watchful eye, the final stages of separating the gold from sand took place. Clean-up day was when the earth yielded a payday.

Mining historians likewise need to occasionally pause to gather up the good stuff and assess the work that has been done in our subfield.¹ As a starting point we are fortunate to have the invaluable bibliographic compilations of Lysa Wegman-French and Richard Lingenfelter to draw upon.² However, we believe it is time to consider the picture from a larger frame of reference. Mining history has undergone significant shifts over the last few decades—many of which mirror trends in the larger field of history. No recent guide to mining history exists that considers both the long-run and recent work in the same frame, but we think any effort in that direction would be useful for multiple audiences.

We also think newcomers could benefit from a deeper view of mining scholarship. Many graduate students and recent Ph.D.s are working in mining history, but they often think of themselves as something else—environmental historians, labor historians, historians of technology, business historians—not as mining historians. Hence, when they start to think about this history, they often do not consider older books in mining history as important to their projects. New scholarship would surely be enriched if it considered many of the great mining histories written in past decades.

Other people invested in mining history are not sure what they really need to read amongst the many newly published books. They risk missing out on path-breaking new research that would help them to better understand the mining past. Who are the intellectual heirs of Rodman Paul, Clark Spence, Duane Smith or Sally Zanjani? How are they tunneling new drifts? What new books are doing something completely new, digging beyond classic scholarship and into brand new glory holes?

In the winter and spring of 2019, the authors of this article decided that one way to get some traction on these questions would be to survey as many people invested in mining history as we could. What books—whether classic works or recent histories—should everyone read? After gaining institutional approval and setting up our survey instrument, we reached out to Mining History Association members, and to others involved in mining history, through the MHA newsletter, e-mails, and social media. We received forty full responses, which, after the data was cleaned and summarized, provided us with an excellent bibliography and a total of 134 distinct books.

This article will discuss the results of this survey, using some of the key works cited to suggest how the "doing" of mining history has changed in focus over the last few decades. From the beginning, we anticipated that our survey would be, at best, a snapshot of the thinking of just some members of our subfield, but we believe such an endeavor to be a valuable undertaking—that is, we hope as much to prompt questions and debate as to provide solid answers. Therefore, in addition to our analysis below, we also invite you to take a look at the survey results yourself. The bibliography can be found at the end of this article, the data in an online repository known as Zenodo, and more survey information at http://ericnystrom.org/mining-books-survey/.3

Respondent Data

The occupational diversity of mining historians is an important feature of the subfield, so we were careful not to assume everyone came from the same background. The greatest proportion of our respondents were historians (18, 45 percent), representing nearly half of all those surveyed. "Mining or Metallurgy professionals" were next, with six (15 percent). The categories of amateurs or enthusiasts, museum and heritage professionals, writers/journalists, compliance/environmental professionals, and "other occupation" also received multiple respondents. A geologist, an attorney, and an archeologist rounded out the list.

Of the survey respondents, twenty-four considered themselves "active" in their profession (60 percent), with thirteen "retired" (32.5 percent), and three noting some other status. No respondents self-identified as students. While 83 percent of the historians considered themselves active in the profession (15/18), by contrast, all but one of the mining professionals responding to our survey were retired (5 of 6, also 83 percent), as were two out of the three "amateurs/enthusiasts." These data suggest that audiences may come to mining history at different points in their professional careers.

Survey respondents were largely from the United States (32/40, 80 percent), with three from Canada, four from Europe (each from a different country), and one from Africa. Of those from the United States whose state was known (29), 62 percent were from Western states, with six Coloradans representing the single largest state turnout. Six respondents (20.7 percent) were from midwestern states, and five (17.2 percent) were from eastern states. The western bias here mirrors that of the Mining History Association itself. One important gap in respondents is "coal country." Though some states that have produced coal are represented, several of the most iconic coal producers, including West Virginia, Kentucky, and Wyoming, did not appear among respondents to the survey.

The Questions

We hoped to capture both the long-time essential readings as well as exciting new works, so we asked our respondents for a list of the three best "classic" books in mining history. Then we asked them for a list of the "best recent" books in mining history. Both of these questions were deliberately vague, to be interpreted by the respondent, which makes parsing the results a bit awkward. We purposefully did not use dates for "classics," although we certainly were thinking they would be older works; nor did we provide a date range for "recent" books.

The result is that seventeen books actually received votes on both lists, including older books, like Clark Spence's now almost fifty-year-old book Mining Engineers and the American West, and a few quite new ones, like Arn Keeling and John Sandlos' edited collection Mining and Communities in Northern Canada: History, Politics, and Memory (2015). Since we asked about "classics" and "recent," the characteristics of our list can be explained. Yes, the 1980s clearly produced more than six great books, but many respondents likely thought the 1980s neither qualified as "classic" nor as "recent."

In an effort to be expansive and inclusive, we also did not say what exactly qualified something to be a "mining history." Hence, the final bibliography includes memoirs, published diaries, global or national surveys, and in-depth looks at specific mining districts during very specific periods. Few books that were not explicitly framed as about mining made the list, though. Books that feature mining largely as a step towards mineral processing, such as books about copper smelting or steelmaking, make few appearances on our list, nor do books that feature mining mostly as a catalyst or a backdrop. For example, Elliott West's popular *The Contested Plains*, which describes the gold rush to Colorado's front range, doesn't actually feature

very much mining and so it never received a vote, nor did Susan Johnson's Bancroft Prize-winning *Roaring Camp*, which describes the social world of southern California's gold rush.⁵

The Classics

Survey respondents provided 119 classics, and there was a wide range among these responses. Almost half—52—only appeared once in this list. Twenty-one books received multiple votes in the classics category, accounting for 56 percent of the responses (67/119). The dates ranged widely as well. We had books first published in 1556 (Agricola, counted as the 1912 Hoover translation), 1876, and the early decades of the twentieth century. But we also had five votes for books first published in the 2010s, and sixteen votes for books first produced in the 2000s. The median year for all our classic vote-getters was 1976.6

So what classic books should every mining historian read? Respondents provided us with the following ranked list:

2019 Survey:

Paul, Rodman W. *Mining Frontiers of the Far West: 1848-1880*. New York: Holt, Rinehart and Winston, 1963 (reprint: University of New Mexico Press, 1974); 9 votes (including one vote specifically for the revised edition with Elliott West from 2001).⁷

Spence, Clark C. Mining Engineers and the American West: The Lace-Boot Brigade, 1849-1933. New Haven: Yale University Press, 1970 (reprint: University of Idaho Press, 1993); 8 votes.

Crampton, Frank A. *Deep Enough: A Working Stiff in the Western Mine Camps*. Denver: Sage Books, 1956 (reprint: University of Oklahoma Press, 1993); 6 votes.

Francaviglia, Richard V. Hard Places: Reading the Landscape of America's Historic Mining Districts. Iowa City: University of Iowa Press, 1991; 5 votes.

Agricola, Georgius, Herbert Hoover, and Lou Henry Hoover. *De Re Metallica*. London: The Mining Magazine, 1912; 4 votes.

This list differs a bit from previous lists, including a survey of senior mining scholars compiled for the Mining History Association newsletter in 1998.8

1998 Survey:

Spence, Clark C. Mining Engineers and the American West: The Lace-Boot Brigade, 1849-1933. New Haven: Yale University Press, 1970.

Smith, Duane. Rocky Mountain Mining Camps: The Urban Frontier. Niwot: University Press of Colorado, 1967.

Wyman, Mark. *Hard Rock Epic: Western Miners and the Industrial Revolution*. Berkeley: University of California Press, 1979.

Young, Otis. Western Mining: An Informal Account of Precious-Metals Prospecting, Placering, Lode Mining, and Milling on the American Frontier. Norman: University of Oklahoma Press, 1970.

- (tie) Greever, William. *The Bonanza West: The Story of the Western Mining Rushes*. Moscow: University of Idaho, 1963.
- (tie) Paul, Rodman W. Mining Frontiers of the Far West: 1848-1880. New York: Holt, Rinehart and Winston, 1963.

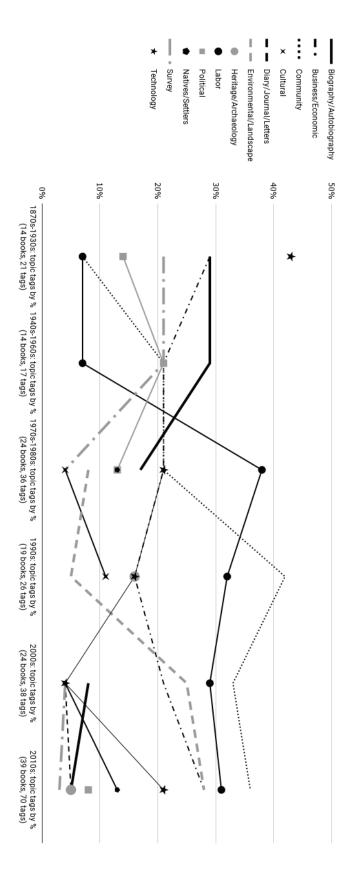
That earlier survey placed Spence's Mining Engineers and the American West first. That book sits second in our survey. Rodman Paul's Mining Frontiers of the Far West was tied for fifth in 1998. It is likely that Elliott West's revised and expanded edition of Paul's classic, published in 2001, helped to keep that particular classic relevant. While most of the earlier top ten received votes in our survey, a few did not receive a single vote, including Duane Smith's Rocky Mountain Mining Camps (although four of Smith's other books made our lists), William Greever's Bonanza West, Richard Lingenfelter's Hard Rock Miners, and

Malcolm Rohrbough's Days of Gold.9 This result might be partly due to these books' age, the smaller number of entries we requested, changing tastes, or maybe even the slightly broader reach of our survey, which led to a book like Agricola's De Re Metallica making our list. The 1998 survey also asked for the "best introductions or case or regional studies" on the topic of mining history. This wording may have implied that regional surveys should be privileged over first-hand accounts like Deep Enough. The new big winner is probably Richard Francaviglia's Hard Places, which has become the progenitor of a few recent trends in mining historiography, especially those doing landscape or geographical analysis, those focusing on environmental history, and those concerned with decline in once-prosperous mining areas.

Long-Standing Themes: Rushes, Business, Biographies, and Technology

When we take a look at a decade-by-decade breakdown of the results, a number of major themes emerge. There remains a long-standing interest in the excitement of mining rushes, the initial stage in most mining stories. If we just focus on the U.S. West, one top vote-getter, Rodman Paul's *Mining Frontiers of the Far West*, starts with ideas that harken back to the dean of Western History, Frederick Jackson Turner, and his interest in the settlement and character of America's West through the operation of a frontier process.¹⁰

Historians have continued to ask questions about how mining rushes have shaped settlement, but most have moved beyond the older frontier framing. They instead look at borderlands, settler-native interactions, and even international comparisons. Good examples reported in the survey might be the edited collection by Benjamin Mountford and Stephen Tuffnell, *A Global History of Gold Rushes* (2018), or the environmental analysis of what conditions are needed to trigger a gold rush in Kent Curtis' *Gambling on Ore* (2013).¹¹



Another long-standing theme that voters deemed important was business and economic history. No matter the period, between 20 and 30 percent of voters' choices fit this category of analysis. Some reached back to classics like Clark Spence's British Investments and the American Mining Frontier (1958), but a number of books have continued this theme, whether studying a specific branch of mining, like Charles Hyde's Copper for America (1998), the dealings of a specific firm, like John Fahey's Hecla: A Century of Western Mining (1990), or the impacts of mining speculation on global finances, like Richard Lingenfelter's two-volume Bonanzas and Borrascas, which won the Mining History Association's Clark Spence Award in 2012.¹²

Biographies and autobiographies from earlier eras sat among the most commonly voted books. Frank Crampton's Deep Enough: A Working Stiff in the Western Mine Camps made it to number three on our list of classics. Not as many biographies or autobiographies published in recent decades showed up on our lists—although a few recent journals, diaries, and edited collections of letters did, such as All for the Greed of Gold: Will Woodin's Klondike Adventure (2016), edited by Catherine Spude, and The Gold Rush Letters of E. Allen Grosh and Hosea B. Grosh (2012), edited by Ronald James and Robert Stewart.¹³ Rarer yet are autobiographies or memoirs from miners after World War II, though many of the ones on our bibliography, such as Onofre Tafoya's Mother Magma and Stephen Voynick's Making of a Hard Rock Miner, are beloved because of the intricate detail about working practices and miners' lives they provide.14

A few categories boomed and then busted, only to boom again. The history of mining technology featured prominently on both people's classics lists and "best recent books" lists. Books treasured from the late nineteenth and early twentieth centuries most commonly gave a big role to technological description and analysis. Among books people cited from the middle decades of

the twentieth century, technology disappears, only to make a strong comeback in recent decades in the form of books like Hjalmar Fors' *The Limits of Matter: Chemistry, Mining, and Enlightenment* (2014), Jeffrey Manuel's *Taconite Dreams: The Struggle to Sustain Mining on Minnesota's Iron Range, 1915-2000* (2015), or Eric Nystrom's *Seeing Underground: Maps, Models, and Mining Engineering in America* (2014).¹⁵

Social History's Growth

One trend that jumps right out is the great growth in important social histories—probably in place of earlier autobiographies—as a way for people to better understand mining places. The first boom came in the 1970s, when labor history came into vogue across the larger field of history. People interested in mining history similarly decided to look at the work of everyday miners and their union activity. A book like Ronald Brown's Hard-Rock Miners: The Intermountain West, 1860-1920 (1979) is a good U.S. example, but voters similarly recognized other pioneering labor histories from this era, such as June Nash's We Eat the Mines and the Mines Eat Us: Dependency and Exploitation in Bolivian Tin Mines (1979), and Charles van Onselen's Chibaro: African Mine Labour in Southern Rhodesia 1900-1933 (1976). 16

By the 1990s, the social histories being told about mining places had clearly gone beyond working conditions and unions—ethnicity, race, and gender helped historians to take ever-deeper looks at specific communities. You can see a big rise in community-based social histories during the 1990s—over 40 percent of the books voters endorsed from that decade were community social histories, whether about Africa's Copperbelt, like James Ferguson's Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt (1999), or the western Rockies, like Elizabeth Jameson's All That Glitters: Class, Conflict, and Community in Cripple Creek (1998). 17

That trend continues. Community social

histories remained the most common category for books that voters chose from the 2000s and the 2010s. Even if we only look at votes for U.S.focused books, most major mining regions had a community-based book that received a vote for the best recent mining history, including Christopher Huggard and Terrence Humble's Santa Rita Del Cobre: A Copper Mining Community in New Mexico (2011), Larry Lankton's Hollowed Ground: Copper Mining and Community Building on Lake Superior, 1840s-1990s (2010), Alessandro Portelli's They Say in Harlan County: An Oral History (2011), and Mark Vendl, Duane Smith, and Karen Vendl's My Home at Present: Life in the Mine Boarding Houses in the San Juan Mountains, Colorado (2013).¹⁸

Although fine-grained community studies stand out as a trend, it is also true that voters cited very few books about a number of racial and ethnic groups. The omission of mining-oriented and award-winning studies like Liping Zhu's A Chinaman's Chance: The Chinese on the Rocky Mountain Frontier (1997), Katherine Benton-Cohen's Borderline Americans: Racial Division and Labor War in the Arizona Borderlands (2011), and Monica Perales' Smeltertown: Making and Remembering a Southwest Border Community (2010) seems particularly striking.¹⁹

The New Trends: Environmental and Transnational Histories

The category of favorite book that emerged seemingly out of nowhere during the last two decades are those that focus on environmental history and landscape change. In the 1970s, 1980s, and 1990s, votes for favorite books only bestowed that honor on one book per decade with that kind of focus: K. Ross Toole's *The Rape of the Great Plains* (1976), Duane Smith's *Mining America* (1987), and Richard Francaviglia's aforementioned *Hard Places* (1991).²⁰ The growing subfield of environmental history, while going gung-ho in analyzing agriculture, waterways, and lumber, failed

to do very much with the mining industry until the 2000s. After that, 25 percent and 28 percent of the books chosen by voters for best recent mining history for the 2000s and 2010s, respectively, should be classified as environmental histories.

Although all environmental histories, these works take many different approaches. Some, like David Robertson's Hard as the Rock Itself: Place and Identity in the American Mining Town (2006), take a Francaviglia-like approach to geographical analysis, while also paying attention to questions of place-based identity.²¹ Others explain how miners dealt with the unseen, the unpredictable, and unknown, like Andrew Isenberg's Mining California: An Ecological History (2005) or Liza Piper's The Industrial Transformation of Subarctic Canada (2009).²² Timothy LeCain's Mass Destruction (2009) tackles the coalition of technological and natural forces at work in a mine, while other books combine social and environmental history, like Thomas Andrews' Killing for Coal: America's Deadliest Labor War (2008) or Brian Leech's The City That Ate Itself: Butte, Montana and Its Expanding Berkeley Pit (2018).²³

A growing sub-topic within the environmental history of mining is that of environmental justice. Here the analysis focuses on the people at the bottom who suffer when mining goes wrong. Some of these books look at native peoples who experienced pollution from mining. A number of recent books consider the legacy of uranium mining in the U.S. Southwest and Canada, like Judy Pasternak's Yellow Dirt: A Poisoned Land and the Betrayal of the Navajos (2011), and Traci Brynne Voyles' Wastelanding: Legacies of Uranium Mining in Navajo Country (2015).24 But this theme, which combines health history with colonial legacies and environmental analysis, also includes books on other geographical regions, such as Arn Keeling and John Sandlos' aforementioned Mining and Communities in Northern Canada or Jessica van Horssen's A Town Called Asbestos: Environmental Contamination, Health, and Resilience in a Resource Community (2016).²⁵

One other theme that we can see through at least a few of these book choices is that, although the broad survey book is not very common, mining history is clearly internationalizing, even if only bit by bit. It is not as if international, global, or transnational approaches to mining history are new. Certainly, Clark Spence's work in the 1950s suggests that would be an incorrect assumption. However, a number of recent books indicate that this perspective has become an important new trend. A good example is the book edited by John McNeill and George Vrtis, Mining North America: An Environmental History since 1522 (2017). It showcases the scale and scope of mining's transformation of the environment across North America. Most chapters cover only one mining district; however, the book attempts to develop a greater understanding by comparing these distinct places to each other.²⁶

Where Will Mining History Go Next?

When we asked survey respondents about what they wanted to see more of, a number of them identified global/international connections as a continued need. Others asked for additional environmental histories. Many simply requested a book on specific mining districts that they felt ill served by the current literature, like the great Carajas iron mining complex in the Brazilian Amazon, or on types of mining they felt had been neglected, like quarrying. A few asked for more modern, post-World War II histories.

A few respondents asked for mining histories to do better to reach beyond mining itself. One respondent wrote that the subfield needs "a book that clearly shows the relevance of mining history to broader processes of social change. It is still too often the case that non-mining historians think:

'Why should we care about mining?'" Another agreed that mining historians should "continue working to get mining history out of its 'silo' and weave it throughout other subfields: environmental history, labor history, history of technology, gender and sexuality." Mining history can only be seen as more important to others if we help them to see just how central it has been to global history. The way forward might mean a big history, more connections to other fields and parts of the world, or perhaps simply more books for a general audience.²⁷

When those California miners working the wet placers paused on clean-up day, it usually didn't mean the mine was through. Quite the contrary—stopping to clean up meant the ground was producing wealth. The field of mining history, as our survey suggests, remains vibrant, and is perhaps even increasing in relevance to new audiences. Classic scholarship continues to anchor our studies, even as historians quickly integrate new approaches of relevance. That is pay dirt—and from the look that our survey provides, we can be optimistic that the box will be heavy with gold in future clean-ups too.

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Bibliography of Books Mentioned by Survey Respondents

Agricola, Georgius, Herbert Hoover, and Lou Henry Hoover. *De Re Metallica*. London: Mining Magazine, 1912.

Andrews, Thomas G. Killing for Coal: America's Deadliest Labor War. Cambridge, MA: Harvard University Press, 2008.

Backus, Harriet Fish. *Tomboy Bride*. Boulder, CO: Pruett Press, 1969.

Barclay, Robert Edward. *Ducktown: Back in Raht's Time*. Chapel Hill: University of North Carolina Press, 1946.

Beik, Mildred A. *The Miners of Windber: The Struggles of New Immigrants for Unionization, 1890s-1930s*. University Park: Pennsylvania State University Press, 1996.

Berton, Pierre. *The Klondike Fever: The Life and Death of the Last Gold Rush.* 1st ed. New York: Knopf, 1958.

Brown, Ronald C. *Hard-Rock Miners: The Intermountain West*, 1860-1920. College Station: Texas A & M University Press, 1979.

Bryceson, Deborah Fahy, Eleanor Fisher, Jesper Bosse Jønsson, and Rosemarie Mwaipopo (eds.). Mining and Social Transformation in Africa Mineralizing and Democratizing Trends in Artisanal Production. London: Routledge, 2014.

Buys, Christian J. The Lost Journals of Charles S. Armstrong: From Arkport, New York to Aspen, Colorado 1867-1894. Montrose, CO: Western Reflections, 2002.

Cleveland, Todd. *Diamonds in the Rough:* Corporate Paternalism and African Professionalism on the Mines of Colonial Angola, 1917-1975. Athens: Ohio University Press, 2015.

Cogut, Ted, and Bill Conger. *History of Arizona's Clifton-Morenci Mining District: A Personal Approach*. 2 vols. Thatcher, AZ: Mining History, 1999.

Coulson, Michael. *The History of Mining:* The Events, Technology and People Involved in the Industry That Forged the Modern World. Petersfield, UK: Harriman House, 2012.

Crampton, Frank A. *Deep Enough: A Working Stiff in the Western Mine Camps*. Denver: Sage Books, 1956.

Croll, Andy, Stefan Berger, and LaPorte, Norman (eds.). *Towards a Comparative History of Coalfield Societies*. London: Routledge, 2017.

Crush, Jonathan, Alan H Jeeves, and David Yudelman. *South Africa's Labor Empire: A History of Black Migrancy to the Gold Mines*. Boulder, CO: Westview Press, 1991.

Curtis, Kent A. *Gambling on Ore: The Nature of Metal Mining in the United States, 1860-1910.* Boulder: University Press of Colorado, 2013.

De Quille, Dan. History of the Big Bonanza: An Authentic Account of the Discovery, History, and Working of the World Renowned Comstock Silver Lode of Nevada; Including the Present Condition of the Various Mines Situated Thereon; Sketches of the Most Prominent Men Interested in Them; Incidents and Adventures Connected with Mining, the Indians, and the Country; Amazing Stories, Experiences, Anecdotes, &c., &c. and a Full Exposition of the Production of Pure Silver. Hartford, CT; San Francisco, CA: American Publishing Company; A. L. Bancroft & Co., 1876. http://archive.org/details/historyofbigbona00dequ.

Dennis, Norman, Fernando Henriques, and Clifford Slaughter. *Coal Is Our Life: An Analysis of a Yorkshire Mining Community*. London: Eyre & Spottiswoode, 1956.

Dew, Charles B. Ironmaker to the Confederacy: Joseph R. Anderson and the Tredegar Iron Works. New Haven: Yale University Press, 1966.

Dolph, Jerry. Fire in the Hole: The Untold Story of Hardrock Miners. Pullman, WA: Washington State University Press, 1994.

Eavenson, Howard Nicholas. *The First Century and a Quarter of American Coal Industry*. Pittsburgh, Pa.: Koppers Building (privately printed), 1942.

Eckes, Alfred E., Jr. *The United States and the Global Struggle for Minerals*. Austin: University

of Texas Press, 1979.

Eilers, David. Slag and the Golden Age of Lead-Silver Ore: The Eilers Family from Immigrants to Smelting Magnates Culminating in Their 1920s Fight against the Guggenheims. San Bernardino, CA: CreateSpace, 2016.

Eklund, Erik. *Mining Towns: Making a Living, Making a Life*. Sydney: University of New South Wales Press, 2012.

Elliott, Russell R. *Nevada's Twentieth-Century Mining Boom: Tonopah, Goldfield, Ely.* Reno: University of Nevada Press, 1966.

Ellis, Anne. *The Life of an Ordinary Woman*. Boston: Houghton Mifflin Co., 1929.

Emmons, David M. *The Butte Irish: Class and Ethnicity in an American Mining Town, 1875-1925.* Urbana: University of Illinois Press, 1989.

Evans, George Ewart. From Mouths of Men. London: Faber, 1976.

Fahey, John. *Hecla: A Century of Western Mining*. Seattle: University of Washington Press, 1990.

Fell, James E. *Ores to Metals: The Rocky Mountain Smelting Industry*. Lincoln: University of Nebraska Press, 1979.

Ferguson, James. Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt. Berkeley: University of California Press, 1999.

Fetchenhier, Scott. *Ghosts and Gold: The History of the Old Hundred Mine.* s.l.: s.n., 1999.

Fontaine, Marion. Fin d'un Monde Ouvrier: Liévin, 1974. Paris: Ecole des hautes études en sciences sociales, 2014.

Fors, Hjalmar. *The Limits of Matter: Chemistry, Mining, and Enlightenment*. Chicago: University of Chicago Press, 2014.

Francaviglia, Richard V. Hard Places: Reading the Landscape of America's Historic Mining Districts. Iowa City: University of Iowa Press, 1991.

Freese, Barbara E. *Coal: A Human History*. Cambridge, MA: Perseus Books, 2003.

Gillet, Marcel. Les Charbonnages Du Nord de

La France Au XIXe Siecle. Paris: Mouton, 1973.

Glasscock, Carl B. *The War of the Copper Kings: Builders of Butte and Wolves of Wall Street.* Indianapolis: Bobbs-Merrill, 1935.

Green, James R. *The Devil Is Here in These Hills: West Virginia's Coal Miners and Their Battle for Freedom*. New York: Grove Atlantic, 2015.

Hammond, John Hays. *The Autobiography of John Hays Hammond*. 2 vols. New York: Farrar & Rinehart, 1935.

Hawley, Charles Caldwell. A Kennecott Story: Three Mines, Four Men, and One Hundred Years, 1887-1997. Salt Lake City: University of Utah Press, 2015.

Huggard, Christopher J., and Terrence M. Humble. *Santa Rita Del Cobre: A Copper Mining Community in New Mexico*. Boulder: University Press of Colorado, 2011.

Huston, Richard C. A Silver Camp Called Creede: A Century of Mining. Montrose, CO: Western Reflections, 2004.

Hyde, Charles K. Copper for America: The United States Copper Industry from Colonial Times to the 1990s. Tucson: University of Arizona Press, 1998.

Isenberg, Andrew C. *Mining California: An Ecological History*. New York: Hill and Wang, 2005.

Jackson, William Turrentine. *Treasure Hill: Portrait of a Silver Mining Camp.* Tucson: University of Arizona Press, 1963.

James, Ronald M. *The Roar and the Silence:* A History of Virginia City and the Comstock Lode. Reno: University of Nevada Press, 1998.

James, Ronald M, and Robert E Stewart (eds.). *The Gold Rush Letters of E. Allen Grosh and Hosea B. Grosh*. Reno: University of Nevada Press, 2012.

Jameson, Elizabeth. *All That Glitters: Class, Conflict, and Community in Cripple Creek*. Urbana: University of Illinois Press, 1998.

Joralemon, Ira B. *Romantic Copper: Its Lure and Lore.* New York: D. Appleton-Century Co., 1934.

Joralemon, Ira Beaman. *Adventure Beacons*. New York: Published by the Society of Mining Engineers of AIME for the Mining and Metallurgical Society of America, 1976.

Keeling, Arn, and John Sandlos. *Mining and Communities in Northern Canada: History, Politics, and Memory*. Calgary, AB: University of Calgary Press, 2015.

Kelly, Sheila. *Treadwell Gold: An Alaska Saga of Riches and Ruin*. Fairbanks: University of Alaska Press, 2010.

Lankton, Larry D. Hollowed Ground: Copper Mining and Community Building on Lake Superior, 1840s-1990s. Detroit, MI: Wayne State University Press, 2010.

Lavender, David. *One Man's West*. Garden City, NY: Doubleday, Doran & Co., Inc., 1943.

LeCain, Timothy J. Mass Destruction: The Men and Giant Mines That Wired America and Scarred the Planet. New Brunswick, N.J.: Rutgers University Press, 2009.

Leech, Brian James. *The City That Ate Itself: Butte, Montana and Its Expanding Berkeley Pit.* University of Nevada Press, 2018.

Limbaugh, Ronald H. *Tungsten in Peace and War, 1918-1946*. Reno: University of Nevada Press, 2010.

Lingenfelter, Richard E. *Bonanzas and Borrascas*. 2 vols. Norman, OK: Arthur H. Clark, 2012.

Long, Priscilla. Where the Sun Never Shines: A History of America's Bloody Coal Industry. New York: Paragon House, 1989.

Lowell, J. David. *Intrepid Explorer: The Autobiography of the World's Best Mine Finder*. Tucson: University of Arizona Press, 2014.

Lynch, Martin. *Mining in World History*. London: Reaktion Books, 2002.

Malm, Andreas. Fossil Capital: The Rise of Steam Power and the Roots of Global Warming. London: Verso, 2015.

Malone, Michael P. The Battle for Butte: Mining and Politics on the Northern Frontier, 1864-1906. Seattle: University of Washington Press,

1981.

Manuel, Jeffrey T. *Taconite Dreams: The Struggle to Sustain Mining on Minnesota's Iron Range, 1915-2000.* Minneapolis: University of Minnesota Press, 2015.

Marshall, John, and Zeke Zanoni. *Mining the Hard Rock in the Silverton San Juans: A Sense of Place, a Sense of Time*. Silverton, CO: Simpler Way Book Co., 1996.

McNeill, John Robert, and George Vrtis. *Mining North America: An Environmental History since 1522*. Oakland: University of California Press, 2017.

Meyerriecks, Will. *Drills and Mills: Precious Metal Mining and Milling Methods of the Frontier West.* Tampa, FL: W. Meyerriecks, 2001.

Misa, Thomas J. A Nation of Steel: The Making of Modern America 1865-1925. Baltimore, MD: Johns Hopkins University Press, 1995.

Moodie, T. Dunbar, and Vivienne Ndatshe. *Going for Gold: Men, Mines, and Migration*. Berkeley: University of California Press, 1994.

Morse, Kathryn Taylor. *The Nature of Gold:* An Environmental History of the Klondike Gold Rush. Seattle: University of Washington Press, 2003.

Mouat, Jeremy. *Metal Mining in Canada,* 1840-1950. Ottawa: National Museum of Science and Technology, 2000.

Mountford, Benjamin, and Stephen Tuffnell (eds.). *A Global History of Gold Rushes*. Oakland: University of California Press, 2018.

Murphy, Mary. *Mining Cultures: Men, Women, and Leisure in Butte, 1914-41*. Urbana: University of Illinois Press, 1996.

Nash, June. We Eat the Mines and the Mines Eat Us: Dependency and Exploitation in Bolivian Tin Mines. New York: Columbia University Press, 1979.

Nossaman, Allen. Many More Mountains: An Illustrated History of the Earliest Exploration in the High San Juans of Southwestern Colorado and the Settlement and Founding of Silverton, Colorado. Denver, CO: Sundance Publications, 1989.

Nystrom, Eric C. Seeing Underground: Maps, Models, and Mining Engineering in America. Reno: University of Nevada Press, 2014.

Olsen, Gregg. *The Deep Dark: Tragedy and Redemption in America's Richest Silver Mine*. New York: Crown Publishers, 2005.

Parsons, A. B. *The Porphyry Coppers*. New York: American Institute of Mining and Metallurgical Engineers, 1933.

Pasternak, Judy. Yellow Dirt: A Poisoned Land and the Betrayal of the Navajos. New York: Free Press, 2011.

Paul, Rodman W. *Mining Frontiers of the Far West: 1848-1880*. New York: Holt, Rinehart and Winston, 1963.

Paul, Rodman W., and Elliott West. *Mining Frontiers of the Far West, 1848-1880*. Rev. and expanded. Albuquerque: University of New Mexico Press, 2001.

Peele, Robert. *Mining Engineers' Handbook*. New York: John Wiley & Sons, 1918.

Pereira, Osny Duarte. Ferro e Independência: um Desafio à Dignidade Nacional. Rio de Janeiro: Civilização Brasileira, 1967.

Peters, Edward Dyer. *Modern American Methods of Copper Smelting*. New York: Scientific Publishing Company, 1887. http://archive.org/details/modernamericanm03petegoog.

Piper, Liza. *The Industrial Transformation of Subarctic Canada*. Vancouver: UBC Press, 2009.

Plazak, Dan. A Hole in the Ground with a Liar at the Top: Fraud and Deceit in the Golden Age of American Mining. Salt Lake City: University of Utah Press, 2005.

Portelli, Alessandro. *They Say in Harlan County: An Oral History*. New York: Oxford University Press, 2011.

Priest, Tyler. Global Gambits: Big Steel and the U.S. Quest for Manganese. Westport, CT: Praeger, 2003.

Punke, Michael. Fire and Brimstone: The North Butte Mining Disaster of 1917. New York: Hyperion, 2006.

Reeves, John A. The Mines of Coal Basin

1956-1991: It Was Never Easy: The Untold Story. Glenwood Springs, CO: Gran Farnum Pr. and Pub., 2012.

Reynolds, Terry S, and Virginia P Dawson. *Iron Will: Cleveland-Cliffs and the Mining of Iron Ore, 1847-2006.* Detroit, MI: Wayne State University Press, 2011.

Rickard, T. A. *A History of American Mining*. New York: McGraw-Hill Book Co., 1932.

——. Man and Metals: A History of Mining in Relation to the Development of Civilization. 2 vols. New York: McGraw-Hill Book Co., 1932.

Robertson, David. *Hard as the Rock Itself: Place and Identity in the American Mining Town.* Boulder: University Press of Colorado, 2006.

Sagstetter, Beth, and Bill Sagstetter. *The Mining Camps Speak: A New Way to Explore the Ghost Towns of the American West.* Denver, Colo.: BenchMark Pub. of Colorado, 1998. http://books.google.com/books?id=q3IvAQAAMAAJ.

Saunders, R. D. *Underground and Radioactive: Adventures of a Uranium Miner in 1970s New Mexico*. Jefferson, NC: McFarland & Company, 2017.

Shepherd, Grant. *The Silver Magnet: Fifty Years in a Mexican Silver Mine*. New York: E.P. Dutton & Co., 1938.

Shogan, Robert. *The Battle of Blair Mountain: The Story of America's Largest Labor Uprising.* Boulder, CO: Westview Press, 2004.

Smith, Duane A. *Colorado Mining: A Photographic History*. Albuquerque: University of New Mexico Press, 1976.

——. Horace Tabor: His Life and the Legend. Boulder: Colorado Associated University Press, 1973.

——. Mining America: The Industry and the Environment, 1800-1980. Lawrence: University Press of Kansas, 1987.

Spence, Clark C. British Investments and the American Mining Frontier, 1860-1901. Ithaca, NY: Cornell University Press, 1958.

——. A History of Gold Dredging in Idaho.

Boulder: University Press of Colorado, 2016.

——. Mining Engineers and the American West: The Lace-Boot Brigade, 1849-1933. New Haven: Yale University Press, 1970.

Spude, Catherine Holder, ed. *All for the Greed of Gold: Will Woodin's Klondike Adventure*. Pullman: Washington State University Press, 2016.

Steeples, Douglas W. Treasure from the Painted Hills: A History of Calico, California, 1882-1907. Westport, CT: Greenwood Press, 1999.

Stewart, John C. *Thomas F. Walsh: Progressive Businessman and Colorado Mining Tycoon.* Boulder: University Press of Colorado, 2007.

Tafoya, Onofre. *Mother Magma: A Memoir of Underground Life in the San Manuel Coper Mine*. Apache Junction, AZ: Hispanic Institute of Social Issues, 2006.

Thompson, Jonathan P. River of Lost Souls: The Science, Politics, and Greed behind the Gold King Mine Disaster. Salt Lake City, UT: Torrey House Press, 2018.

Tillson, Benjamin Franklin. *Mine Plant*. New York: American Institute of Mining and Metallurgical Engineers, 1938.

Tippett, Thomas. *Horse Shoe Bottoms*. New York: Harper & Brothers, 1935.

Toole, K. Ross. *The Rape of the Great Plains: Northwestern America, Cattle and Coal.* Boston: Little, Brown, and Co., 1976.

Trempé, Rolande. Les Mineurs de Carmaux, 1848-1914. Paris: Les Éditions Ouvrières, 1971.

Trennert, Robert A. Riding the High Wire: Aerial Mine Tramways in the West. Boulder: University Press of Colorado, 2001.

Twitty, Eric. Blown to Bits in the Mine: A History of Mining and Explosives in the United States. Ouray, CO: Western Reflections, 2001.

——. Riches to Rust: A Guide to Mining in the Old West. Montrose, CO: Western Reflections, 2002.

Van Horssen, Jessica. A Town Called Asbestos: Environmental Contamination, Health, and Resilience in a Resource Community. Vancouver, BC: UBC Press, 2016.

Van Onselen, Charles. *Chibaro: African Mine Labour in Southern Rhodesia 1900-1933*. London: Pluto Press, 1976.

——. New Babylon, New Nineveh: Every-day Life on the Witwatersrand, 1886-1914. Johannesburg: Jonathan Ball Publishers, 2001.

Vandiver, Frank E. *Ploughshares into Swords: Joshia Gorgas and Confederate Ordnance*. Austin: University of Texas Press, 1952.

Vendl, Mark A., Duane A. Smith, and Karen A. Vendl. *My Home at Present: Life in the Mine Boarding Houses in the San Juan Mountains, Colorado*. Lake City, CO: Western Reflections, 2013.

Voyles, Traci Brynne. Wastelanding: Legacies of Uranium Mining in Navajo Country. Minneapolis: University of Minnesota Press, 2015.

Voynick, Stephen M. The Making of a Hardrock Miner: An Account of the Experiences of a Worker in Copper, Molybdenum, and Uranium Mines in the West. Berkeley, CA: Howell-North Books, 1978.

White, Paul J. *The Archaeology of American Mining*. Gainesville: University Press of Florida, 2017.

Wicke, Christian, Stefan Berger, and Jana Golombek (eds.). *Industrial Heritage and Regional Identities*. London: Routledge, 2018.

Williams, Billy M. *Playing in a Big Boy's Sandbox: Asarco's Mission Mining Complex.* s.l.: s.n., 2018.

Williams, Rosalind H. Notes on the Underground: An Essay on Technology, Society, and the Imagination. Cambridge, MA: MIT Press, 1990.

Wilson, A. J. *The Pick and the Pen*. London: Mining Journal Books, 1979.

Wilson, Forbes. *The Conquest of Copper Mountain*. New York: Atheneum, 1981.

Wyman, Mark. Hard Rock Epic: Western Miners and the Industrial Revolution, 1860-1910. Berkeley: University of California Press, 1979.

Young, Otis E., Jr. *Black Powder and Hand Steel: Miners and Machines on the Old Western Frontier*. Norman: University of Oklahoma Press, 1976.

———. Western Mining: An Informal Account of Precious-Metals Prospecting, Placering, Lode Mining and Milling on the American Frontier from Spanish Times to 1893. Norman: University of Oklahoma Press, 1970.

Zanjani, Sally. A Mine of Her Own: Women Prospectors in the American West, 1850-1950. Lincoln: University of Nebraska Press, 1997.

Notes:

- 1. Several earlier examples to have appeared in these pages include: Elliott West, "High Grade Yield: An Assay of Recent Writings on the Mining West," Mining History Journal 3 (1996): 115-20; Sally Zanjani, "The Best and the Worst: Mining Historians Look Back at the Millennium," Mining History Journal 7 (2000): 5-10; Clark C. Spence, "My Personal Reflections on Fifty Years of Mining History," Mining History Journal 10 (2003): 1-5; Eleanor Swent, "Proven and Possible Reserves," Mining History Journal 15 (2008): 1-5. One key bibliographical essay on western mining that influenced later writing is: Clark C Spence, "Western Mining," in: Michael P. Malone, Historians and the American West (Lincoln: University of Nebraska Press, 1983), 96-120.
- 2. Especially valuable are Lysa Wegman-French's compilations of recent work, assembled annually for the Mining History Journal for two decades. See: Lysa Wegman-French (ed.), "Recent Publications on the History of Mining," Mining History Journal 8 (2001): 109-14; MHJ 9 (2002): 83-9; MHJ 10 (2003): 143-8; MHJ 11 (2004): 68-75; MHJ 12 (2005): 99-109; MHJ 13 (2006): 93-107; MHJ 14 (2007): 52-64; MHJ 15 (2008): 91-9; MHJ 16 (2009): 64-77; MHJ 17 (2010): 126-36; MHJ 18 (2011): 98-112; MHJ 19 (2012): 69-77; MHJ 20 (2013): MHJ 94-107; MHJ 21 (2014): 96-108; MHJ 22 (2015): 104-126; MHJ 23 (2016): 97-111; MHJ 24 (2017): 74-99; MHJ 25 (2018): 95-124; MHJ 26 (2019): 87-101. See also earlier compilations in the Mining History Association's newsletter: Lysa Wegman-French (ed.), "Recent Publications on the History of Mining," Mining History News, Mar. 1992, May 1993, Dec. 1994, Aug. 1995, Sep. 1996, Aug. 1997, July 1998, Dec. 1999, Oct. 2000. Each year's compilation, excluding the two most recent years, is available as part of the Mining History Journal or the Mining History News in open access format through the Mining History Association's website: http://mininghistoryassociation.org/journal.htm. For an earlier period, see the two-volume bibliography: Richard E. Lingenfelter, The Mining West: A Bibliography and Guide to the History and Literature of Mining in the American and Canadian West, 2 v. (Lanham, MD: Scarecrow Press, 2003).
- 3. The data is in Eric C. Nystrom and Brian James Leech, *Historians' Perspectives of the Importance and*

- Impact of Mining History Scholarship [Data set]. Zenodo (1 July 2020): doi:10.5281/zenodo.3926826.
- Clark C. Spence, Mining Engineers and the American West: The Lace-Boot Brigade, 1849-1933 (New Haven: Yale University Press, 1970); Arn Keeling and John Sandlos, Mining and Communities in Northern Canada: History, Politics, and Memory (Calgary, AB: University of Calgary Press, 2015).
- Elliott West, The Contested Plains: Indians, Goldseekers, and the Rush to Colorado (Lawrence: University of Kansas Press, 1998); Susan Lee Johnson, Roaring Camp: The Social World of the California Gold Rush (New York: W.W. Norton, 2000).
- That is the median of the publication year of all "classic" votes; e.g. Spence1970 appears 8 times in the list that was used to generate this number. The mean of this list is 1971.67.
- 7. Rodman W. Paul and Elliott West, *Mining Frontiers of the Far West, 1848-1880*, rev. and expanded ed. (Albuquerque: University of New Mexico Press, 2001).
- Robert Spude, "The Most Recommended Mining History Books," Mining History News 9, no. 3 (July 1998): 3-5 (http://mininghistoryassociation.org/News/1998-n3-July.PDF).
- Richard Lingenfelter, Hard Rock Miners: A History of the Mining Labor Movement in the American West (Berkeley: University of California Press, 1974); Malcolm Rohrbough, Days of Gold: The California Gold Rush and the American Nation (Berkeley: University of California Press, 1997).
- 10. Frederick Jackson Turner, "The Significance of the Frontier in American History," *American Historical Association Annual Report for 1893* (Wash., D.C.: American Historical Association, 1894), 199-227.
- 11. Benjamin Mountford and Stephen Tuffnell (eds.), *A Global History of Gold Rushes* (Oakland: University of California Press, 2018); Kent A. Curtis, *Gambling on Ore: The Nature of Metal Mining in the United States*, 1860-1910 (Boulder: University Press of Colorado, 2013).
- 12. Clark C. Spence, British Investments and the American Mining Frontier, 1860-1901 (Ithaca, NY: Cornell University Press, 1958); Charles K. Hyde, Copper for America: The United States Copper Industry from Colonial Times to the 1990s (Tucson: University of Arizona Press, 1998); John Fahey, Hecla: A Century of Western Mining (Seattle: University of Washing-

- ton Press, 1990); Richard E. Lingenfelter, *Bonanzas and Borrascas*. 2 v. (Norman, OK: Arthur H. Clark, 2012).
- 13. Catherine Holder Spude (ed.), All for the Greed of Gold: Will Woodin's Klondike Adventure (Pullman: Washington State University Press, 2016); Ronald M. James and Robert E Stewart (eds.), The Gold Rush Letters of E. Allen Grosh and Hosea B. Grosh (Reno: University of Nevada Press, 2012).
- 14. Onofre Tafoya, Mother Magma: A Memoir of Underground Life in the San Manuel Coper Mine (Apache Junction, AZ: Hispanic Institute of Social Issues, 2006); Stephen M. Voynick, The Making of a Hardrock Miner: An Account of the Experiences of a Worker in Copper, Molybdenum, and Uranium Mines in the West (Berkeley, CA: Howell-North Books, 1978).
- 15. Hjalmar Fors, The Limits of Matter: Chemistry, Mining, and Enlightenment (Chicago: University of Chicago Press, 2014); Jeffrey T. Manuel, Taconite Dreams: The Struggle to Sustain Mining on Minnesota's Iron Range, 1915-2000 (Minneapolis: University of Minnesota Press, 2015); Eric C. Nystrom, Seeing Underground: Maps, Models, and Mining Engineering in America (Reno: University of Nevada Press, 2014), which was the MHA Clark Spence Award winner for 2013-2014.
- Ronald C. Brown, Hard-Rock Miners: The Intermountain West, 1860-1920 (College Station: Texas A&M University Press, 1979); June Nash, We Eat the Mines and the Mines Eat Us: Dependency and Exploitation in Bolivian Tin Mines (New York: Columbia University Press, 1979); Charles van Onselen, Chibaro: African Mine Labour in Southern Rhodesia 1900-1933 (London: Pluto Press, 1976).
- 17. James Ferguson, Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt (Berkeley: University of California Press, 1999); Elizabeth Jameson, All That Glitters: Class, Conflict, and Community in Cripple Creek (Urbana: University of Illinois Press, 1998).
- 18. Christopher J. Huggard and Terrence M. Humble, Santa Rita Del Cobre: A Copper Mining Community in New Mexico (Boulder: University Press of Colorado, 2011), the MHA Clark Spence Award winner for 2011-2012; Larry D. Lankton, Hollowed Ground: Copper Mining and Community Building on Lake Superior, 1840s-1990s (Detroit, MI: Wayne State University Press, 2010); Alessandro Portelli, They Say in Harlan County: An Oral History (New York: Oxford University Press, 2011); Mark A. Vendl, Duane A Smith, and Karen A Vendl, My Home at Present: Life in the Mine Boarding Houses in the San Juan Mountains, Colorado (Lake City, CO: Western Reflections Publishing Co., 2013).
- 19. Liping Zhu, A Chinaman's Chance: The Chinese on the Rocky Mountain Mining Frontier (Niwot: University

- Press of Colorado, 1997); Katherine Benton-Cohen, Borderline Americans: Racial Division and Labor War in the Arizona Borderlands (Cambridge, MA: Harvard University Press, 2011); Monica Perales, Smeltertown: Making and Remembering a Southwest Border Community (Chapel Hill: University of North Carolina Press, 2010).
- 20. K. Ross Toole, The Rape of the Great Plains: Northwest-ern America, Cattle and Coal (Boston: Little, Brown, and Co., 1976); Duane A. Smith, Mining America: The Industry and the Environment, 1800-1980 (Lawrence: University Press of Kansas, 1987); Richard V. Francaviglia, Hard Places: Reading the Landscape of America's Historic Mining Districts (Iowa City: University of Iowa Press, 1991).
- 21. David Robertson, *Hard as the Rock Itself: Place and Identity in the American Mining Town* (Boulder: University Press of Colorado, 2006).
- 22. Andrew C. Isenberg, *Mining California: An Ecological History* (New York: Hill and Wang, 2005); Liza Piper, *The Industrial Transformation of Subarctic Canada* (Vancouver: UBC Press, 2009).
- 23. Timothy J. LeCain, Mass Destruction: The Men and Giant Mines That Wired America and Scarred the Planet (New Brunswick, N.J.: Rutgers University Press, 2009); Thomas G. Andrews, Killing for Coal: America's Deadliest Labor War (Cambridge, MA: Harvard University Press, 2008), the MHA Clark Spence Award winner 2007-2008; Brian James Leech, The City That Ate Itself: Butte, Montana and Its Expanding Berkeley Pit (Reno: University of Nevada Press, 2018), the MHA Clark Spence Award winner for 2017-2018. Both Mass Destruction and Killing for Coal won the American Society for Environmental History's George Perkins Marsh Prize for the best book in environmental history, suggesting the growing importance of mining studies for environmental history.
- 24. Judy Pasternak, Yellow Dirt: A Poisoned Land and the Betrayal of the Navajos (New York: Free Press, 2011); Traci Brynne Voyles, Wastelanding: Legacies of Uranium Mining in Navajo Country (Minneapolis: University of Minnesota Press, 2015).
- 25. Keeling and Sandlos, Mining and Communities in Northern Canada; Jessica van Horssen, A Town Called Asbestos: Environmental Contamination, Health, and Resilience in a Resource Community (Vancouver, BC: UBC Press, 2016).
- John Robert McNeill and George Vrtis, Mining North America: An Environmental History since 1522 (Oakland: University of California Press, 2017).
- 27. Some recent examples of a more global, interconnected mining history that appear on our list are: Martin Lynch, *Mining in World History* (London: Reaktion Books, 2002); Mountford and Tuffnell, *Global History of Gold Rushes*.