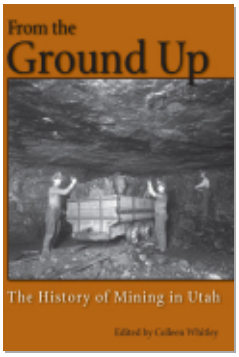
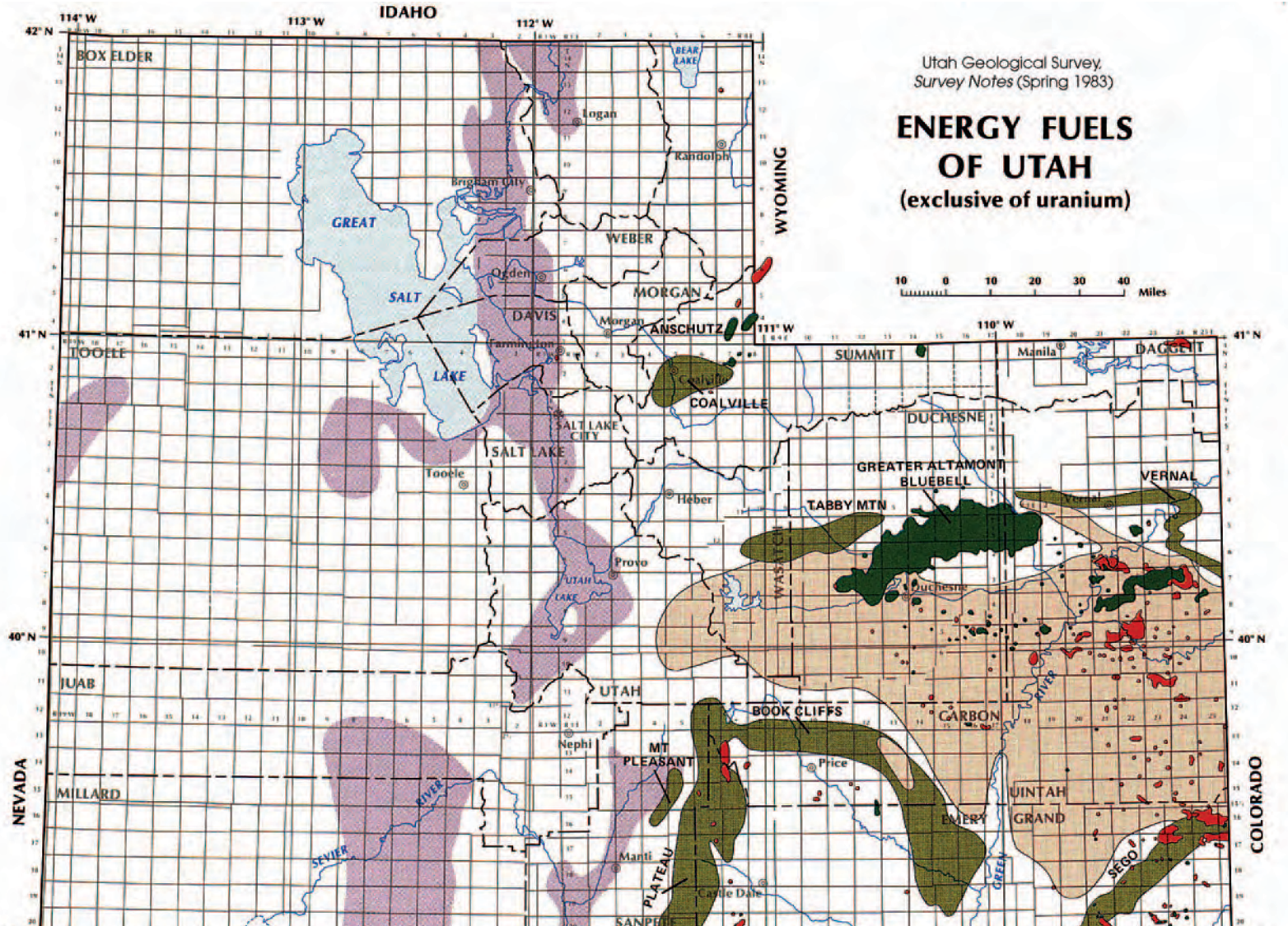
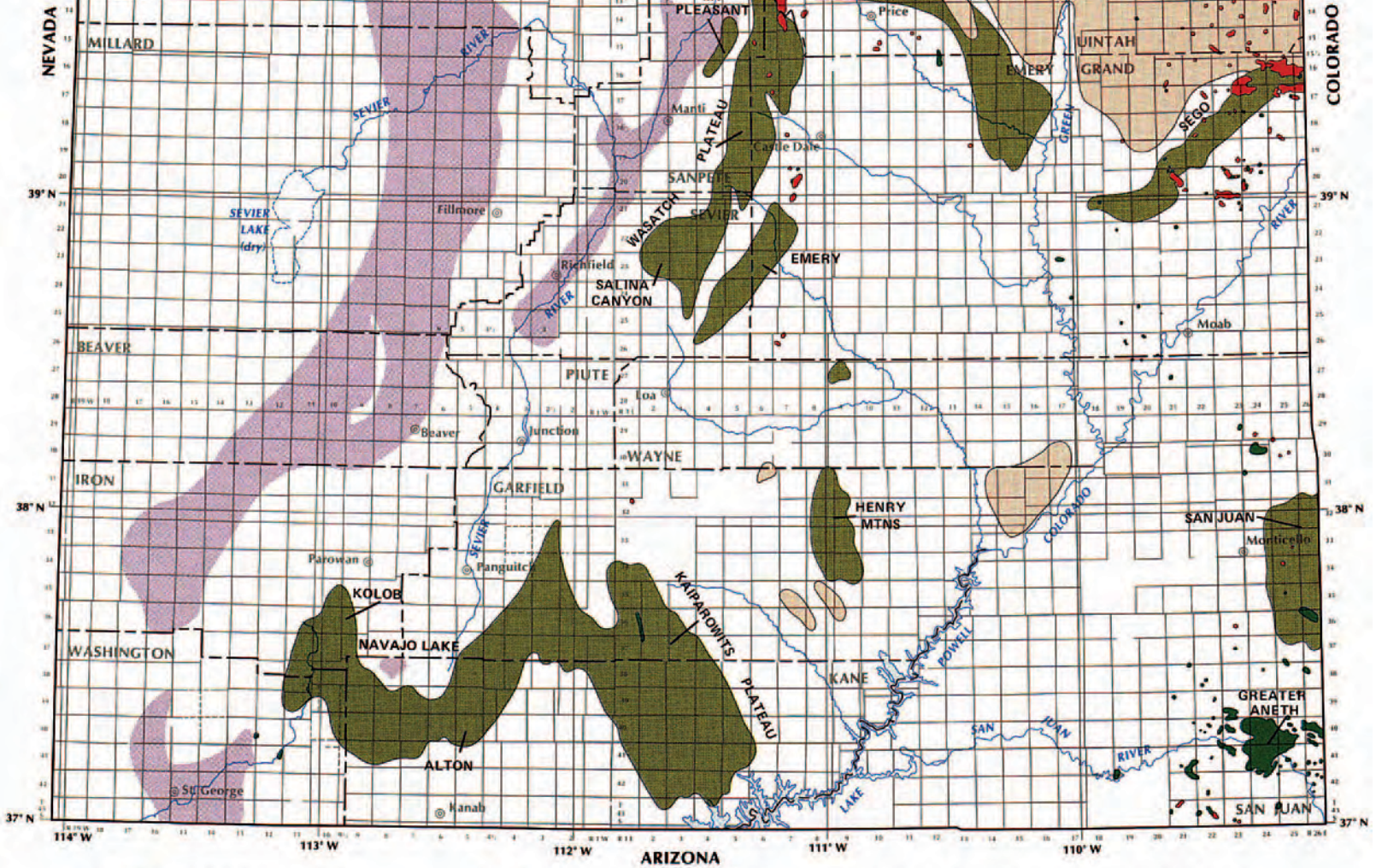
Maps - Energy Fuels of Utah: Maps follow page 130 in Chapter 6







OIL FIELD

GAS FIELD

PRINCIPAL OIL SHALE — TAR SAND AREA

PRINCIPAL COAL AREA

PRINCIPAL GEOTHERMAL AREA

in the fall after harvesting crops and took up residence in boardinghouses, tents, and the cabins of relatives or townspeople who had permanent homes in the coal camps. In the spring and summer when coal production fell off, they returned to their farms and another season of agricultural work. Some came as Mormon converts from the coal mines of England and Wales, where they had entered the mines as young boys and become skilled miners before their departure for Utah. Others came from older coal-mining areas of the United States in the East, Midwest, and such western states as Colorado, Wyoming, and Montana.

However, it was the immigrants from Finland, Italy, Greece, Austria, the Balkans, China, Japan, and other nations that brought a unique character to the Carbon County coal mines and towns, creating a legacy of diversity long before Americans at large began to celebrate its virtues. The first of these groups was the Chinese. They arrived in the Scofield area during the 1880s and helped open the Clear Creek mines. Their excellent pick work became legendary. However, as the flames of anti-Chinese sentiment were fanned by the Knights of Labor and other groups and individuals, the Chinese were forced out of the coal mines and moved on to other locations.

During the 1890s Finnish miners arrived at Winter Quarters, Clear Creek, and Scofield, where they became an important part of the workforce. They built amusement halls and a public sauna, and they adapted well to the long winters and short days of the high, mountainous Pleasant Valley. The size of the Finnish population is reflected in the tragic statistic that of the 200 miners killed by the Winter Quarters explosion, 62 were Finnish. Among these were the six sons and three grandsons of 70-year-old Abe Louma, who had traveled with his 65-year-old wife from Finland to join their seven sons and their families in Scofield just three months before the disaster.[12] In time most of the Finns left, though some stayed, and their descendants are still among the handful of year-round residents of Pleasant Valley.

While the Finnish immigrants were attracted to the Scofield-Winter Quarters-Clear Creek communities of Pleasant Valley, Italian immigrants found more employment opportunities in the Castle Gate and Sunnyside districts. By the mid-1890s, a few years after the Castle Gate Mine opened in 1888, Italians were recruited by labor agents in the East and made their way on the Denver and Rio Grande Western to Castle Gate. When the Sunnyside Mine opened in 1900, Carbon County was already a well-known destination for Italian immigrants traveling to the West.[13] By the end of 1903, Castle Gate was known as an Italian mine because the majority of the nearly 500 miners there were Italian. At the other camps, they were a substantial minority, as reported by the *Eastern Utah Advocate* in the following statistics: "At Sunnyside there are 358 English, 246 Italians, 222 Austrians; at Clear Creek, 128 Finns, 172 Italians, 95 English speaking; at Winter Quarters, 181 English speaking, 126 Finns, 74 Italians and a few others."[14] The Italians tended to divide into two groups—northern and southern, even establishing and joining fraternal organizations based on this split.[15]

If Castle Gate was the portal for Italian immigrants to enter Carbon County, Sunnyside served the same purpose for Austrian miners. While there were some

German-speaking coal miners in the county, the majority of those called "Austrian" were in reality Serbian, Croatian, and Slovenian, immigrants from lands that were part of the huge Austro-Hungarian Empire, which extended south from German-speaking Austria into the Balkans. Like the Italians who had come a few years before them and the Greeks who came a few years later, the Austrians were primarily rural peasants.[16] They did not remain only in Sunnyside but moved into other camps within the county and in the 1920s and 1930s made up a substantial part of the population in Spring Canyon and Gordon Creek.

By 1905 Carbon County caught the attention of another group of European immigrants, the Greeks, who began a large-scale exodus from their homeland after the currant crop failed in 1907, and labor and steamship agents began recruiting young Greek workers with promises of wealth and riches in the promised land of America. Leonidas G. Skliris, a Greek immigrant from Sparta who established headquarters at 507 West 200 South in Salt Lake City, was responsible for many Greeks coming to Utah. As a padrone or labor agent for the Denver and Rio Grande Western and Western Pacific Railroads, the Utah Copper Company, and coal mines in Carbon County, Skliris recruited Greek workers, receiving commissions from steamship companies for fares purchased by the immigrants in Greece. After their arrival, immigrants were obligated to pay Skliris for the jobs he had obtained for them.[17]

Greek immigrants constituted the largest of the ethnic groups in Carbon County. Their arrival in the county followed in the aftermath of the 1903–4 coal strike and as new coal mines opened, beginning with Kenilworth in 1906. Greek coffee houses sprang up in Price, Helper, and many of the coal-mining camps to provide a social center for the new immigrants.

Coming first as young men intent upon working for a few years to earn money for their sisters' dowry, to pay off family debts, and return to Greece to purchase farms or acquire small businesses, some of the immigrants sent to Greece for wives or "picture brides" and began to establish families and sink roots into a new homeland. The dedication of the Greek Orthodox Church of the Assumption in Price on 15 August 1916, attended by Greek miners from all over the county, forged a permanent bond between their new home in America and the Greek homeland.[18]

The story of Japanese coal miners in the area is less known. They came first to fill jobs on railroad gangs. Many were recruited in California by Edward Daigoro Hashimoto, who established headquarters in 1902 at 163 West South Temple in Salt Lake City's Japanese Town.[19] Japanese boardinghouses and amusement halls were built in Sunnyside, Kenilworth, and other coal camps in the county.

The operation and expansion of Carbon County's coal industry required an army of miners recruited among the longtime residents of the area and from the ranks of newly arrived immigrants from around the world. Following the practice in other mining and industrial centers in the United States, local coal operators fostered diversity among their miners to maintain control and help check labor unrest. The fact that the young immigrant miners spoke a dozen or so different languages hampered

communication and fostered mistrust. This strategy proved successful in many circumstances but not always, and the story of the miners' struggle to redress grievances and secure recognition by coal companies for their labor unions is the sequel to a strong current of ethnic hostility that was eventually extinguished through their common interests and collective action.

Miners' Unions Organize

The first effort at union organization in the coalfields occurred in the 1880s, when the Knights of Labor established a local in Pleasant Valley. During the winter of 1883, Pleasant Valley miners went on strike in the first recorded labor dispute in the eastern Utah coalfields. Most of the miners were members of the Church of Jesus Christ of Latter-day Saints, and at the request of their stake president, Abraham O. Smoot, who traveled from his home in Provo to meet with them, they called off the strike and returned to work.[20]

In the aftermath of the Winter Quarters Mine disaster, miners in Pleasant Valley went out on strike in January 1901.[21] The loss of many veteran coal miners and their replacement by inexperienced miners who thought the wages did not compensate for the hard work and danger led miners to demand increases of approximately 10 percent over the average pay of $2.50 and a recognition of the right of miners to appoint their own check weighman to insure that they received proper credit for the coal they mined.

The Pleasant Valley Coal Company insisted that the coal miners were paid as much as their counterparts in Wyoming, who were obligated to work 10 hours a day instead of the 8 provided for in the Utah State Constitution, adopted in 1896 when Utah became a state. The company asserted that profits were very low because of the already high wages. Agreeing to the general idea of the check weighman, company officials nevertheless insisted that before they could collect money from individual miners to pay for that person, the miners would have to give written permission for the deductions. The coal companies did not want to make easy what many officials considered the first step toward a coal miners' union.

The unrest began with miners at Winter Quarters, who voted on 13 January 1901 to go out on strike. They appointed committees to oversee the strike, meet incoming trains to discourage potential strikebreakers, and visit the miners in Clear Creek, Castle Gate, and Sunnyside to try to persuade them to join the strike. They were successful in nearby Clear Creek, where miners walked out two weeks later on 29 January. The strikers were less successful in Castle Gate, where, after a week's effort, the miners voted not to join the strike. In the aftermath, at least 20 Castle Gate miners were discharged for speaking out in favor of the strike.

Confined to the Scofield-Winter Quarters-Clear Creek area in the northwest corner of Carbon County, the strike dragged on for six weeks until it was called off on 20 February 1901. Miners who wanted to return to work were required to sign

yellow-dog contracts renouncing union membership, promising not to join a union if an attempt was made to organize one, indicating that they were satisfied with Pleasant Valley Coal Company wages and methods of doing business, and stating that if any grievances arose, they preferred to settle them directly with company officials rather than through union officers.[22]

The coal operators had a valid concern about Utah miners' union sympathies. In November 1903 miners throughout the county joined together in a strike that lasted more than a year.[23] Unlike the 1901 strike, the 1903 strike began in the eastern end of the county at Sunnyside and spread west to Castle Gate and finally Pleasant Valley. Furthermore, the strike was tied to one by Colorado coal miners earlier that fall, when the United Mine Workers of America (UMWA), following its successful anthracite strike of 1902 in Pennsylvania, undertook an organizing campaign among western coal miners. Where the 1901 strike had been a local effort without any UMWA involvement, the 1903–4 strike had strong support from outside the area as labor organizers were sent to Utah to lead it. Where the 1901 strike had involved English-speaking miners, supported by Finnish miners, and had not been successful in recruiting Italian miners at Castle Gate, in 1903 the UMWA saw its greatest success in recruiting Italian miners in Utah, though English-speaking and other immigrant miners, including the Finns and Slavs, joined the strike as well.

The threat of violence and the power of the coal companies brought the Utah National Guard to Carbon County to protect imported strikebreakers and those men who refused to join the strike. The guard also kept a close eye on strikers who had been evicted from their homes in the coal camps by company guards and had taken up residence in tent colonies established by the union. In April 1904 the legendary labor organizer Mother Jones arrived in Utah and spent a month in the state working for the strike. Her residency in a tent colony north of Helper at the mouth of Price Canyon led to a confrontation between local law-enforcement officers and the strikers that resulted in the arrest and incarceration of 120 Italian strikers in a "bullpen" in Price.[24]

The miners demanded a 10 percent pay raise, appointment of their own check weighman, an end to unfair practices at the company stores, adherence to Utah's eight-hour-day law for miners, and recognition of the UMWA. The strike quickly focused on the last issue because coal operators were adamant in their refusal to allow the UMWA to enter Utah coalfields.

Convinced that only through union recognition could any hard-won concessions be maintained and coal-company abuses curtailed, the strikers clung tenaciously to their demand. The coal companies countered with a barrage of measures designed to win public support. The agitation was described as a "strike by foreigners," who had no appreciation for American democracy and the opportunities it gave them. There were also claims that "real" miners could earn a decent living through their own skills and hard work and that the "old-time" miners did not support the strike. Labor organizers were branded as radicals and outside agitators, whose political philosophy was grounded in socialism or anarchy.

The strikers did win the support of the Utah Federation of Labor and some sympathy from national guardsmen sent to Carbon County; however, state officials were clearly distressed by the threat of high coal prices for heating fuel and the disruption that the union threatened to bring to Utah. Moving ever closer to an antilabor, pro-right-to-work position, some leaders of the Church of Jesus Christ of Latter-day Saints offered no support for the striking miners, a good number of whom were also members of the LDS faith, but assisted in recruiting strikebreakers among the farmers and residents of surrounding communities.

In the end the strike was defeated. Many of the striking Italian miners did not return to the coal mines but moved away or took up other occupations in Helper and other locations in the county. The overextended UMWA failed to honor its promises of ongoing support for the strikers, leaving bitter feelings against the union that lasted for nearly two decades. Greek immigrants, who were brought to the county as strikebreakers, in turn became the next immigrant group to be involved in labor disputes.

It did not take Greek miners long to begin to protest the injustices they experienced in Utah coal mines. In March 1907 recently imported Greek and Slavic miners at Winter Quarters walked out, claiming the coal company was cheating them at the weighing scales. The following year George Demetrakopoulos, a labor agent employed by Leonidas Skliris, was shot and killed by a fellow Greek, Steve Flemetis, who had been dismissed by the Utah Fuel Company at the instigation of the agent.[25] Two other deaths occurred at Kenilworth in February 1911, when Greek miners, also protesting cheating at the weighing scales and the discharge of several of their countrymen, walked out on strike. Armed with rifles and pistols, they took up positions in the rocks on the hills surrounding the mining camp. Shots were exchanged, leaving Thomas Jackson, a company guard, and Steve Kolasakis, a Greek striker, dead. The Greek miners returned to work, though tension in the coal camps continued as threats were made and other acts of intimidation committed.[26]

Utah coal miners kept abreast of developments and conflicts in other parts of the country, including neighboring Colorado, where two women and 11 children died in a strikers' tent colony at Ludlow on 20 April 1914.[27]

World War I provided a new opportunity for the UMWA in Utah: the demand for coal led to the expansion of existing mines and opening of new ones while United States Department of Labor policies reflected a much more benevolent policy toward organized labor in an effort to keep workers on the job and clear of disruptive labor conflicts. Union organizers returned to Utah, and UMWA locals were organized in a number of the coal camps, though often in secret and under the real threat that local officers would be dismissed and forced to move from company-owned housing. Utah miners did not join the November 1919 nationwide coal-miners strike; however, soldiers from Fort Douglas, Utah, and Camp Kearny, California, were sent to Carbon County to guard railroad bridges and mine tipples and insure that the shipment of Utah coal would not be curtailed.[28]

Tensions continued in the post-World War I years, and, with contracts due to expire on 1 April 1922, the UMWA prepared for another nationwide strike. This time Carbon County miners were full participants, joining with 650,000 other miners in the largest coal strike in American history.[29]

In the aftermath of World War I and its high demand for coal, by 1922 Carbon County miners saw wage reductions of approximately 30 percent as the rates for mined coal fell from 79 to 55 cents per ton. In addition, long-standing grievances, including coal companies' cheating on the weighing scales, high rents for company housing, mandatory trade at company stores, favoritism, and other abuses, compelled nearly three-fourths of Utah's coal miners to join the strike.

Tensions increased as company guards evicted strikers from company-owned houses and patrolled streets and roads to intercept organizers who sought to persuade undecided miners to join them. Violence flared as strikebreakers were brought into Carbon County under the protection of company guards. Shots were fired in Scofield, Kenilworth, and Standardville and on the Spring Canyon road, where a Greek immigrant striker, John Tenas, was killed by one of the coal-company guards. A month after the Tenas shooting, Arthur Webb, a company guard, was killed on 14 June 1922 when the strikers opened fire on a trainload of strikebreakers as it emerged from a tunnel near the mouth of Spring Canyon. In the aftermath of the Webb shooting, martial law was declared, and the Utah National Guard was sent to the coalfields to restore order and prevent further violence. Eight Greek strikers were arrested and tried for the murder of Arthur Webb. Five were found guilty and given prison sentences.

The nationwide strike lasted from 1 April until 16 August 1922, when John L. Lewis, president of the UMWA, signed an agreement with a majority of the nation's coal operators and ordered his men back to work. In Utah, however, miners did not return to work until September, when mine owners agreed to restore the previous wages but not before raising the price of coal to consumers. The agreement was only a partial victory as the coal operators steadfastly refused to negotiate with union leaders or recognize the UMWA as the legitimate representative of Utah coal miners.

After 1922 the UMWA struggled to maintain a presence in Carbon County. A strong antiunion sentiment emerged in the aftermath of the strike, reflected in the Utah Legislature passing a Right-to-Work Act in 1923 that guaranteed workers the right to employment without union affiliation even though a majority of the shop or industry workers had become organized. Local UMWA leaders such as Frank Bonacci were blacklisted, and industrial spies were hired to keep watch on clandestine organizing activities.[30] In 1928 a 20 percent wage cut was implemented, and the following year, a few months before the Wall Street stock-market crash of 1929 propelled the nation into the Great Depression, UMWA President John L. Lewis ordered an end to further organizing activities in Carbon County.

The Great Depression had a serious impact on the coal industry. Miners suffered layoffs and reduced hours. Carbon County coal miners supported the election

of Franklin D. Roosevelt in 1932 with his promise of a New Deal for the American people. For coal miners and other workers, one of the first benefits of the New Deal was the passage of the National Industrial Recovery Act (NIRA) in June 1933 and its all-important Section 7A—often called labor's Emancipation Proclamation because it recognized the right to organize.

While the NIRA was making its way through Congress, developments were already under way in Carbon County that led to a struggle between two unions—the National Miners Union (NMU) and the UMWA—to represent Utah's coal miners. The NMU, considered to be more militant, more radical, and communist directed, was formed in 1928 by discharged members of the UMWA who believed they had been sold out by John L. Lewis and the union during the 1927–28 strike in Pennsylvania.

Early in 1933 the NMU sent organizers to Carbon County and at a rally in Helper on 28 May 1933 announced that organization was under way with the selection of miners to work in their respective areas with union organizers; the establishment of a local headquarters at Millerich Hall in Spring Glen, a small community just south of Helper; the organization of a women's auxiliary and youth section; and the publication of a weekly newspaper, the *Carbon County Miner*.

When UMWA president John L. Lewis learned of the NMU campaign in Utah, he immediately sent back his own organizers, and throughout the summer of 1933, the two unions battled for the allegiance of the miners. In August 1933 the NMU struck against several coal companies, and the county seemed on the verge of civil war when local officials declared martial law and the UMWA joined with coal companies in a temporary and distrustful alliance to put down the strike.[31]

With the backing of the Roosevelt administration's NIRA legislation, the UMWA recognized that the situation in Carbon County presented the first real opportunity in its 43-year history to secure coal-company recognition of the union and that many miners were reluctant to support a communist-led labor union, so they worked quickly and effectively to establish locals in the Carbon County coal mines. On 8 November 1933, representatives of District 22 of the UMWA, headquartered in Rock Springs, Wyoming, but with jurisdiction over the Utah coalfields, met with officials of the Utah Coal Producers and Operators Association at the Newhouse Hotel in Salt Lake City to sign a joint contract which conformed to the provisions of the National Bituminous Code of the NIRA. Embodied within the agreement was recognition of the UMWA by Utah coal operators, and, as they signed the agreement, the nonunion era in Utah's coal-mining history came to an end.

Throughout the rest of the twentieth century, the UMWA played a leading role in county affairs. In the early 1950s, District 22 headquarters moved from Rock Springs to Price, where union affairs were conducted out of rented office space on Main Street until a modern building was constructed in 1976.

From Coal Camps to Towns

For Carbon County coal miners, the union experience was one thing, and life in the coal camps was another. That life was a paradoxical mix of rich social activity and opportunity with some unique restrictions imposed by the sometimes-benevolent, sometimes-oppressive watch of the coal company. James B. Allen writes of this ambivalence in company towns, where "company ownership and control was used to oppress employee-residents both economically and politically. 'I owe my soul to the company store' is a familiar expression which flashes into the minds of many whenever the term 'company town' is mentioned."[32] Exploitation of workers was a constant complaint and ever-present grievance when miners went on strike. Miners balked at requirements that they trade at the company store, where they had to purchase goods at exorbitant prices using the company scrip they were paid and credit they were offered. "Under such a system, . . . the employee was little more than a serf, tied to company property not only through the need for work but also through his perpetual debt."[33]

Company houses were provided, and occupants were under the careful supervision of company officials to ensure that houses and property were properly maintained. In the early years, individuals were permitted to build houses on company property; however, it was clear that this right was temporary and that permission could be withdrawn and residents evicted from the houses they had constructed at the discretion of the coal company. Thus, during labor disputes, one of the first actions taken by coal-company officials was expelling strikers from company-owned houses and others occupied by strikers on coal-company property.

Yet, as Allen continues, "While there is apparently much substance to these charges, it is also obvious that this is not the whole picture. On the contrary, owners of many company towns actually had the interests of their employees at heart in the cooperation of company houses, company stores, and other economic activities."[34]

There were 24 different company towns built in the Carbon County coalfields between the 1880s and 1942. These towns lay in four different areas of the region. The first one, Winter Quarters, was built during the mid-1880s and sat at the mouth of a canyon that opened into Pleasant Valley about a mile west of Scofield. A second company town in the Pleasant Valley area, Clear Creek, was established later, in 1899, in the mountains about four miles south of Scofield.

The railroad town of Helper served as the hub for the second area, which can be described as the north end of Castle Valley near the mouth of Price Canyon. North of Helper was Castle Gate, opened in 1888. East of Helper, the Kenilworth Mine opened in 1906. West of Helper, in the Spring Canyon area, were the towns of Spring Canyon, Standardville, Latuda, Rains, Mutual, and National. South of Helper in Gordon Creek were Coal City, Sweets, and Peerless. South of Price, on the east slope of the Wasatch Plateau, were the camps of Hiawatha, Blackhawk, Wattis, and

Mohrland. East of Price, Sunnyside was established in 1899, followed by Columbia and Dragerton, the last company town to be built in the county in 1942.[35]

Company towns existed first to provide accommodations that gave miners and company officials relatively easy access to the mines and tipples. Company stores offered the essentials—food, clothing, mining tools, and supplies—often at rates higher than those charged by stores in Price, Helper, and Scofield, but with ready access and easy credit that were convenient for the isolated miners. The company towns also tried to maintain some control over the miners, ensuring that malcontents, political agitators, and union organizers did not have easy access to company property and employees. In time most company towns integrated the principles of welfare capitalism by providing recreational and entertainment opportunities, educational facilities, and medical care in a nicely landscaped, well-maintained environment.

However, the early company towns had a long way to go as few facilities were provided—usually a boardinghouse and temporary tent accommodations that offered shelter but not much more. Sometimes miners built their own houses on land leased from the company. After this initial phase, company towns became more permanent by constructing uniform, four-room, wood-frame cottages that included two bedrooms, a kitchen, and a living room. Company officials and doctors resided in more elaborate houses, sometimes two stories high, that were built in the most desirable location in the camp—a section usually referred to as "silk-stocking row." Other sections often reflected the nationality of the dominant residents: Jap Town, Greek Town, Bohunk Town, Wop Town were commonly used names.[36]

At times this ethnic division carried over into public facilities—usually among the Japanese, who in some camps had their own bathhouse, boardinghouses, and amusement hall. Some company towns allowed the operation of a coffeehouse that functioned as the center of Greek life. When Greek coffeehouses were not allowed on company land, they were built on private property near the towns.

The heart of company towns was usually in the center and included the mine office, doctor's office, store, post office, school, and amusement hall. In Hiawatha a stone jailhouse was built near the mine office and amusement hall. Also in Hiawatha the company built two churches—one for members of the Church of Jesus Christ of Latter-day Saints and another used by other religious denominations. Amusement halls included basic facilities for dances, plays, movies, and public meetings. Others, including the Hiawatha Amusement Hall, were outfitted with "bowling alleys, pool and billiard tables, card tables, lodge rooms, a dance floor, reading rooms and rooms where the women of the community may entertain and hold their parties."[37]

If the amusement hall nurtured the social and recreation life of the camp, the company doctor provided health care that almost always equaled and often exceeded that in nonmining Utah towns. Company doctors were expected to meet every need for any member of the family. A company doctor had to be able to set and treat broken and crushed bones, severed limbs, and cuts and lacerations; perform

tonsillectomies and appendectomies; extract teeth; diagnose communicable diseases and enforce quarantines; deliver babies; give physical examinations; treat venereal disease; patch up those injured in barroom brawls and shootings; and handle any other medical emergency that might come along.[38]

Company towns offered inexpensive housing, a sense of community, recreational opportunities, and much more. Yet all this came at a price. It was always clear that the coal company was the landlord and could fire miners and evict residents at will. Conformity with company rules was expected and usually demanded. Consequently, many coal-camp residents came to resent the restrictions and the always-present, if not always-spoken, fear of retaliation for misconduct.

Beginning in the 1930s, several factors led to the demise of coal-company towns. As more and more miners acquired private automobiles and could commute to the mines from surrounding towns, the need to live within walking distance evaporated. Recognition of the UMWA by Utah coal operators led to demands from the union that miners not be required to live in company-owned housing as part of their employment. Finally, coal companies discovered that with miners providing housing on their own, the surplus of coal miners after World War II, the difficulties of being landlords, and the opportunities to sell company houses to residents or sell and move them to other locations in the area, it was prudent to end the company-town era in Utah's coal-mining history. In a sense the demise began only a few years after the last company town—Dragerton—was built in 1942. Nevertheless, it was a process that stretched across the decades of the 1950s and 1960s and into the 1970s.

Growth in the Late Twentieth Century

The last quarter of the twentieth century brought other changes. The construction of coal-fired power plants in Emery and Millard Counties saw a significant increase in coal production. By 2001 electric utilities were consuming 22.3 million tons or 83 percent of the 27.02 million tons mined in Utah that year.[39] Utah coal mines supplied more than 27 million tons of coal in 1996 (27,071,000 tons) and 2001 (27,024,000 tons), marking the two highest production years in Utah's history. Moreover, the output came from the fewest number of miners since the earliest days of Utah's pioneering efforts at coal mining in the 1870s. In 1996 2,077 employees mined 27.07 million tons of coal for a productivity rate of 5.91 tons per miner hour. In 2000 the productivity rate jumped to 6.91 tons per miner hour with 1,672 employees mining 26.92 million tons of coal. Compared with a productivity rate of 2.05 tons per miner hour less than two decades earlier, when 4,296 employees had mined 16.91 million tons of coal in 1982, it was clear that fewer and fewer miners were producing more and more coal. State officials maintained that "Utah's high productivity is largely credited to excellent management, a capable engineering and geological staff, a high degree of mechanization, and a highly skilled workforce."[40] The high degree of mechanization is obvious from one statistic for 2001, when eight long-wall panels accounted for 21.5

million tons, or 79 percent of the total production, while 18 continuous-miner sections produced 5.5 million tons; these two methods accounted for virtually all of the 27.02 million tons mined in 2001.[41]

Accompanying this expanded production by fewer miners was a shift from the traditional Carbon County coal mines to ones in Emery and Sevier Counties. According to the Utah Department of Natural Resources, "during the 1960s and 1970s Carbon County was the leading producer, with Emery County second, and Sevier County producing small amounts. During the 1980s, coal production from Carbon and Emery Counties was roughly equal, but by the 1990s Emery County became the leading producer. In 1999, Sevier County moved past Carbon County into second place in coal production."[42]

With the ever-increasing demand for energy and the untapped coal resources in Utah, coal mining will continue to play an important role in Utah's economy into the foreseeable future, though technology will enable fewer and fewer miners to produce the coal. It seems that the days of mine disasters killing hundreds of men are over—as are the days of bitter labor disputes that engulfed whole communities. Coal-camp life is a thing of the past, but the influx of immigrant miners and their families with their vibrant heritage and cultures remains preserved in the churches they built, the festivals that commemorate their ethnic heritage, the oral histories that have been collected, the books and articles that have been written about their experience, and the artifacts they left, which are now exhibited in such places as the Helper Mining and Railroad Museum.