CHAPTER 4

HEART MOUNTAIN

Introduction

Heart Mountain Relocation Center was located at about 44°40' N latitude and 108°57'W longitude, and at approximately 4,700 feet elevation in Park County of northwestern Wyoming (Figure 4.1). The site lies adjacent to the Vocation railroad siding, about 12 miles southwest of Powell and 13 miles northeast of Cody, the county seat, in the middle Shoshone River Valley. Yellowstone National Park is about 60 miles west while Billings, Montana lies about 85 miles north. The center was named for the prominent mountain about 8 miles west of Vocation.

The following pages address: 1) the physical and human setting in which Heart Mountain was located; 2) why northwestern Wyoming was selected for a relocation center; 3) the structural layout of Heart Mountain; 4) the origins of Heart Mountain’s evacuees; 5) how Heart Mountain’s evacuees interacted with the physical and human environments of northwestern Wyoming; 6) relocation patterns of Heart Mountain’s evacuees; 7) the fate of Heart Mountain after closing; and 8) the impact of Heart Mountain on northwestern Wyoming some 60 years after closing.

Physical Setting

Physiography, Geology and Landforms. The Heart Mountain Relocation Center occupied the Bighorn Basin of the Middle Rocky Mountains physiographic Province (Fenneman, 1931) (Figure 4.2). The Bighorn Basin is a structural (i.e., concerning the composition and orientation of rock units) and a topographic basin between the Absaroka, Beartooth and Owl Creek mountains to the west, and the Bighorn and Bridger mountains to the east (Brown, 1980). The setting is transitional between the Rocky Mountains to the west and the Great Plains to the east.

The geology of the northern Bighorn Basin is dominated by middle Paleozoic (approximately 400 million years old) to middle Cenozoic (about 30 million years old) sedimentary fill deformed by folds and faults (Pierce, 1997). The deformed older rocks are present on the margins of the basin while younger, less deformed units are present in the middle. The Heart Mountain Relocation Center occupied the geologic middle of the structural basin. Here, sedimentary fill of the early Cenozoic Fort Union Formation and Willwood Formation inundated the Bighorn Basin over more recent geologic time. The Fort Union Formation consists of sandstones, conglomerates, shales, and thin coal beds while clays, shales, and sandstones comprise the lower Eocene Willwood Formation (Pierce, 1997) (Figure 4.3).

Water has played a key role in shaping the sedimentary units of the Bighorn Basin. Intense precipitation associated with thunderstorms, meager vegetation cover, and readily erodible clay and shale units of the Willwood Formation have combined to form the rugged, highly dissected
Figure 4.1. Park County, Wyoming and adjacent counties. Adapted from Official State Highway Map of Wyoming (2003).
Figure 4.2. Heart Mountain and the Bighorn Basin within the Middle Rocky Mountain physiographic province. Map adapted from Fenneman (1931, Plate 1).
Figure 4.3. Geology of Heart Mountain Relocation Center and vicinity. Adapted from Pierce (1997).
landscape known as *badland topography* in a variety of places, including the McCullough Peaks area east of the Shoshone River and south of Ralston. In sandstone units at other locales in the basin, *Quaternary* (i.e., past 2 million years) streams and slopewash eroded the Willwood Formation in a more planar fashion leaving a low relief, thin, rock fragment-strewn, gently sloping *pediment* (i.e., low angle, planar surface created by stream and slope wash erosion) (Pierce, 1997). In the vicinity of the former relocation center, the pediment surfaces are found at the more intermediate elevations of the basin. *Quaternary* river terraces compose the lower portions of the basin and are associated with complex Shoshone River deposition, downcutting, and subsequent lateral erosion over time (Mackin, 1937; Moss and Bonini, 1961; Ritter and Kauffman, 1983). The gently east dipping terraces are composed of gravels, sands and silts (Pierce, 1997). The main portion of the center was located about 200 feet above the Shoshone River on the Powell Terrace (Mackin, 1937; Ritter and Kaufman, 1983) (Figure 4.4). The lower center lands (including most of the farmland) occupied the Cody Terrace, about 80 feet above the Shoshone River (Mackin, 1937; Ritter and Kaufman, 1983). Slope wash and alluvial fans from intermittent streams draining to the Shoshone River have deposited *alluvium* atop these terraces in places causing the terraces to slope toward the river (Mackin, 1937). Abrupt *risers* separate the *treads* of the terraces, and differentiate the Shoshone Terrace from the pediment surface above. The center’s farmlands were located on the terraces below. Total relief of the former center is about 740 feet with elevations ranging from approximately 5,200 feet at the Heart Mountain Canal to 4,460 feet where Eaglenest Creek joins the Shoshone River. The center lands generally slope down to the east.

*Weather and Climate.* The middle latitude, high elevation, continental setting leads to warm, dry summers and cold, dry winters (Figure 4.5). The climate of the area is classified under the Koppen system as a dry midlatitude steppe (BSk) (Griffiths and Driscoll, 1982).

The mid-latitude setting results in a systematic change in sun angles and temperatures throughout the year (Figure 4.5). The mid-continental location further enhances temperature extremes because of the relatively low specific heat of land as compared to water (i.e., land heats up and cools down more rapidly than water). The intermediate elevations of the site mean that it is generally colder than similar sites at lower elevations; however, the basin is prone to cold air drainage from the surrounding mountains, especially in winter, thus temperature inversions develop where lower areas are colder than adjacent higher areas (Western Regional Climate Center, n.d.a). Inversions in the basin are further enhanced by frequent clear skies and snow cover in the winter months (Cross, 1951). The 1931-1960 average January temperature at Powell was approximately 21 ºF while the average July temperature was about 71 ºF. The mean annual temperature during the same period was about 46ºF (Western Regional Climate Center, n.d.b). The surrounding mountains shield the area from most outbreaks of frigid air from the north. The growing season (i.e., last 32ºF killing freeze of spring to the first 32ºF killing freeze of fall) at Powell five out of ten years averages 133 days with the last killing freeze of spring typically occurring around 14 May and the first freeze of fall near 23 September (Western Regional Climate Center, n.d.b).
Figure 4.4. Topographic map of Heart Mountain Relocation Center and vicinity. Adapted from U.S. Geological Survey Powell, Wyoming and Cody, Wyoming 1:100,000-scale topographic maps.
Figure 4.5. Climograph showing 1931-1960 mean temperature and precipitation for Powell, Wyoming. Data from Western Regional Climate Center (n.d.b).
Annual precipitation during the 1931-1960 period was approximately 5.7 inches/year in Powell (Figure 4.5) but it varied significantly from year to year—i.e., 11.8 inches in 1932 to 3.6 inches in 1933 (Western Regional Climate Center, n.d.b). The general aridity of the site is a result of its continental interior location and its position in the lee of mountains—i.e., the Absaroka Range to the West and the Bighorn Mountains to the east (Western Regional Climate Center, n.d.a). These ranges effectively block Pacific Ocean as well as Gulf of Mexico air masses. While the site is generally arid, it also displays a strong seasonality in its precipitation pattern. Over 70% of the precipitation falls between April and September (Western Regional Climate Center, n.d.b). The summer-dominant precipitation reflects convective uplift of occasional humid air masses that are able to make it into the basin. The area receives between 20 and 30 thunderstorms per year. This number is less than more eastern sites in Wyoming because the Bighorn Mountains shield the area from the marine tropical air masses originating in the Gulf of Mexico. The Bighorn Basin also receives fewer thunderstorms than areas to the west because the Absaroka Mountains prevent moist Pacific air masses from entering the basin (Martner, 1986). Snowfall over the 1931-1960 averaged nearly 14 inches/year with March typically the snowiest month (Western Regional Climate Center, n.d.b). As in other semi-arid settings, drought is a common occurrence in the Bighorn Basin. Statewide drought, including the Powell and Cody areas, occurred between 1929 and 1942, and again from 1948-1962 (Paulson et al., 1991). Annual lake evaporation was approximately 42 inches/year during the 1946-1955 period, far out-pacing precipitation (Meyers, 1962).

To say that it is windy in the northern Bighorn Basin is an understatement. Winds are generally from the northwest in all months of the year at Powell. Conversely, winds in Cody typically come out of the west year round. These differences are probably caused by local topographic differences at each of the sites. Because of Heart Mountain’s similarities to Powell in terms of topography, it is likely that northwest winds also predominate there. Chinook winds are a common phenomenon in the winter thus providing welcome relief from extremely cold weather and clearing snow for grazing animals (Cross, 1951).

Soils. The soils of the northern Bighorn Basin are a function of the five soil forming factors—i.e., parent material, topography, climate, biota, and time. The generally semi-arid environment of the basin means that soils are poorly developed (i.e., entisols) or have subsurface accumulations of clays or salts because of their locations on stable surfaces but lack organic matter as a result of formation in an arid environment (i.e., aridisols) (Figure 4.6).

The soils of the former Heart Mountain Relocation Center formed primarily in alluvium under generally uniform climate and biotic regimes. They are, therefore, differentiated primarily by their location with respect to the Shoshone River and its terraces, and the various alluvial fans and pediment surfaces impinging on the Shoshone River terraces (Figure 4.4).

Soils of the pediment and alluvial fan remnants elevationally above the main portion of the relocation center are primarily aridisols (e.g., Clapper and Luhon series). These soils formed under the semi-arid conditions of the basin on stable surfaces. Pediment and alluvial fan soils
tend to be very deep, well drained, gravelly loams that are slightly to strongly alkaline. These soils are classified as Land Capability Classification (LCC) VIIs and VIIIs soils thus have severe to very severe limitations related to the gravelly, high pH substrate (U.S. Natural Resource Conservation Service–Powell Office, unpublished data, August 2004; Natural Resources Conservation Service, n.d.).

Soils of the upper (i.e., Powell) terrace (including the main portion of the former center and one center farm field) are entisols (Apron, Haverdad, Keeline, Kishona, and Lostwells) and aridisols (Copeman). The predominance of entisols at these elevations reflects the relative youthfulness of the terrace and alluvial fan surfaces. All are very deep and well drained, and range from clay loam to sandy loam in texture. All fall within the slightly to strongly alkaline range. These soils are classified as LCC IIe, IIs, IIIe, and IIIs with some to severe limitations associated with erosion or the gravelly, high pH substrate (U.S. Natural Resource Conservation Service–Powell Office, unpublished data, August 2004; Natural Resources Conservation Service, n.d.).

Soils of the lower or Cody terrace, including the bulk of the center’s farmlands, are aridisols (Copeman, Clapper, and Luhon series) and entisols (Apron, Haverdad, Keeline, Kishona, and Lostwells series). All are deep and well drained, and range from clay loam to sandy loam in texture. All fall within the slightly to strongly alkaline pH range. Most of these soils are LCC IIe, IIIe, and IIIIs thus have some to severe limitations associated with erosion or the gravelly, high pH substrate. A small portion of these lands are also VIIIs thus have very severe limitations related to the substrate (U.S. Natural Resource Conservation Service–Powell Office, unpublished data, August 2004; Natural Resources Conservation Service, n.d.). The soils of the Cody Terrace settled as much as 6 feet when they were initially irrigated. With the settling, the once-permeable soil became more susceptible to waterlogging (Swenson, 1957).

Water. The lands of the former Heart Mountain Relocation Center are situated within the Shoshone River Watershed. The Shoshone River originates immediately east and southeast of Yellowstone National Park in the Absaroka Range and flows northeast to join the Bighorn River near Lovell. The waters of the Shoshone ultimately reach the Gulf of Mexico via the Bighorn, Yellowstone, Missouri and Mississippi rivers. Headwaters of the Colorado and Columbia rivers, the other great rivers of the U.S., are nearby. Explorer John Colter in 1807 named the Shoshone River the “Stinking Water” because of bad odors emanating from sulfur springs near Cody. The Wyoming Legislature changed the name to the Shoshone River in 1902 (Urbanek, 1988).

The Shoshone River delineated, or lay very near, the eastern boundary of the former relocation center (Figure 4.4). Perennial Eaglenest Creek and intermittent Buck Creek, Iron Creek, Dry Gulch, and several other unnamed drainages pass through the former center’s lands and enter the Shoshone River from the west. Annual discharge of the Shoshone River once reflected the area’s seasonal precipitation and snowmelt patterns. However, since the completion of Shoshone Dam in 1910, the discharge of the river has been greatly impacted by human intervention (Figure 4.7). Annual discharge over the 1931–1960 period averaged approximately 919 ft³/second with the highest discharge (1661 ft³/second) in 1943 and the lowest during a severe dry spell in 1934 (446...
Figure 4.6. Soils of the Heart Mountain Relocation Center and vicinity. Data from the U.S. Natural Resources Conservation Service (n.d.). Note the relationship between soils and topography shown on Figure 4.4.

Bighorn Basin aquifers mirror their temporally-extensive geology. The basin includes Paleozoic to Cenozoic aquifers, most of which are in the porous sandstones of the area (U.S. Geological Survey, 1996). Prior to irrigation, little groundwater was present in the area. Only the more extensive terraces contained significant quantities of natural groundwater. One such area was Ralston Flats about four miles northeast of the Heart Mountain Relocation Center. Underlying bedrock aquifers contain only limited quantities of water, much of which is highly mineralized (Swenson, 1957).

**Biota.** Heart Mountain lies in the Intermountain Semidesert ecoregion province (Bailey, 1995) (Figure 4.8). Vegetation patterns in the area reflect climate, soil moisture, soil chemistry, and human land uses. The sagebrush steppe of the dry and low alkalinity upland sites is adapted to cold, dry winters and warm to hot, dry summers, and is dominated by big sagebrush (Artemisia
Figure 4.8. Ecoregion map showing Heart Mountain’s location within the Intermountain Semidesert ecoregion province. Adapted from Bailey (1995, Foldout Map).
More saline soils support greasewood- (*Sarcobatus vermiculatus*) dominated communities (Cross, 1951; Bailey, 1995; U.S. Forest Service, n.d.). Vegetation along water courses includes moisture-loving cottonwoods (*Populus* spp.) and willows (*Salix* spp.) plus various shrubs. Incision by the Shoshone River into the basin sedimentary rock limits the riparian vegetation zone to a narrow strip. Development of the Shoshone Reclamation Project early in the 20th century led to an influx of willow and beaver along canals and ditches (Bonner, 2002).

Common large mammals of the area include whitetail deer (*Odocoileus virginianus*), mule deer (*Odocoileus Hemionus*), pronghorn antelope (*Antilocapra americana*), coyote (*Canis latrans*), mountain lion (*Puma concolor*), and bobcat (*Lynx rufus*). Smaller mammals include Wyoming ground squirrel (*Spermophilus elegans*), prairie dogs (*Cynomus* spp.), deer mice (*Peromyscus maniculatus*), jackrabbits (*Lepus* spp.), and porcupine (*Erethizon dorsatum*). American bison (*Bison bison*) roamed this area until being extirpated in the 1880s. Various ducks and Canada geese (*Branta canadensis*) migrate through the area. Sage grouse (*Centrocercus urophasianus*) are a common species of the sagebrush steppe as are raptors including various hawks, prairie falcons (*Falco mexicanus*), golden eagle (*Aquila chrysaetos*), great horned owl (*Bubo virginianus*), and burrowing owl (*Athene cunicularia*). Reptiles include the prairie rattlesnake (*Crotalus viridis viridis*), horned lizard (*Phrynosoma* spp.), and sagebrush lizard (*Sceloporus graciosus*) (Cross, 1951; Bailey, 1995; U.S. Forest Service, n.d.).

**Human Setting**

**Race, Ethnicity, and Religion.** The Bighorn Basin in general, and the Shoshone River Valley in particular, has a very rich and mixed history encompassing Native Americans, French, Germans, Russian Germans, Mormons, Mexican Americans, and Japanese Americans.

The Bighorn Basin lies at the boundary of the Great Basin and Great Plains culture areas (Waldman, 2000). The Eastern Shoshone represented the Great Basin Culture Area while the Crow were the primary Native Americans of the Great Plains culture area. Two divisions of Crow existed—Mountain Crow, whose area included the Bighorn Basin, and the River Crow who ranged more to the north and west. Treaties signed with the U.S. government in 1868 limited the Crow’s area and tied them to Indian agencies. In 1883-1884, they moved to the Crow Agency near Hardin, Montana where they remain today (Voget, 2001). The Eastern Shoshone are also divided into two groups—the Buffalo Eaters and the Mountain Sheep Eaters. The Buffalo Eaters likely traveled through the Bighorn Basin in search of wild game while the Mountain Sheep Eaters frequented the northern Rocky Mountains. The Eastern Shoshone are now confined to the Wind River Reservation on the east side of the Wind River Range (Shimkin, 1986).

The first EuroAmerican to visit the Bighorn Basin was likely John Colter in the employ of fur trader Manuel Lisa (Lindsay, 1932). Lisa ordered Colter in Winter 1807-1808 to locate as many tribes as possible in the area to urge them to come to newly constructed Fort Raymond at the
confluence of the Yellowstone and the Bighorn rivers to trade (Oglesby, 1963). Colter’s travel
took him into the Shoshone River basin, as far upstream as present-day Cody (Lindsay, 1932).
Much later, a U.S. Government-sponsored expedition led by Captain F.W. Reynolds and
Lieutenant H.E. Maynadier explored the Bighorn Basin. In June 1860, the portion of the
expedition under the command of Lieutenant Maynadier crossed a “rushing and roaring”
Shoshone River just below McCullough Peaks, near the present-day site of Corbett Dam, only
after losing a wagon box, four mules, and scientific instruments (Figure 4.9) (Lindsay, 1932).

German immigrants came to the Bighorn Basin beginning in the 1890s. One German settlement
developed an irrigated area along the Bighorn River in the eastern part of the basin. Another
group of German settlers developed agriculture around the Bench Canal in the western part of the
basin and founded the community of Germania (Hodgson and Hills, 1977). Residents of
Germania changed the town’s name to “Emblem” to avoid Bighorn Basin residents’ accusations
of being disloyal to the United States during World War I (Figure 4.9) (Hendrickson, 1977).

Subsequent EuroAmericans included Church of Jesus Christ of Latter Day Saints (i.e., Mormons)
who migrated to the Bighorn Basin from Utah and Idaho in search of potentially irrigable lands
beginning in the early 1890s. The first wave of Mormons to the area included 50 families
(totaling about 300 individuals) who ventured to the Greybull River near the present site of
Burlington in 1893. Other Mormon communities were established at Otto (downstream of
Burlington), Meeteetse (upstream of Burlington), and along the Shoshone River. Mormons from
Utah and Idaho settled to the lower Shoshone River Valley at around the turn of the century to
irrigate and farm lands near present-day Byron, Cowley, and Lovell east of the future Heart
Mountain Relocation Center (Figure 4.9) (Lindsay, 1932).

Russian Germans migrated to the Bighorn Basin from nearby states as Wyoming’s sugar beet
industry grew. They initially centered around the towns of Lovell and Worland in 1915-1916
(Ripplley and Bauer, 1974; Redwine, 1979). However, most came to the state between 1920 and
1940. Eventually, they were able to rent and buy land of their own in the area (Hodgson, 1991).

Mexican immigrants first came to the Bighorn Basin in significant numbers during World War I
to work in the area’s sugar beet industry. The establishment of a Great Western Sugar Company
factory in Lovell and the development of associated sugar beet farms beginning in 1916 was the
draw for these early workers. They filled a void in the region’s labor pool created by World War
I and further compounded by an increase in sugar beet acreage to meet wartime sugar needs.
Mexicans working for the Great Western Sugar Company were American citizens as well as
Mexican “Nationals” who had earlier emigrated to the U.S. and lived in Texas, New Mexico, and
Colorado before coming to Wyoming. By 1923, Mexican Americans living in Lovell were
mostly part of a “colony” established to entice workers and their families to remain in the area
year-round. Like the Russian Germans that generally preceded them to the area, the Mexican
Americans of Lovell were able to save money to eventually buy their own farms. However, they
faced more racial prejudice than did the Russian Germans in a range of settings including Lovell-
area bars, pool halls, restaurants, and even the local Catholic Church (Redwine, 1979).
Figure 4.9. Cumulative historical map for Wyoming’s Shoshone River Valley including the Heart Mountain Relocation Center.
The first Japanese to enter Wyoming likely did so as railroad and mine workers in the southwestern part of the state sometime between 1890 and 1900 (Iwata, 1992; Gardner, 1996) (Figure 4.10). Indeed, southwest Wyoming’s Sweetwater and Uinta counties accounted for 85% of the state’s Japanese in 1900 (U.S. Census Office, 1901). Wyoming’s Japanese American population peaked in 1910 at 1,596. After declining in 1920 and 1930, it rebounded to 1,286 in 1940. These statewide patterns were likely shaped by economic, as well as weather, conditions combined with state and federal policies preventing persons of Japanese descent from becoming U.S. citizens and halting additional Japanese from entering the U.S. (Gardner, 1996; Georgen, 2003). The Japanese American population of northwest Wyoming and adjacent southern Montana reached its peak in 1900, dropped precipitously in 1910, rose in 1920, then declined through 1940 (Figure 4.10). Most of these Japanese Americans were centered in Montana’s Carbon, Gallatin, and Park counties, especially in 1900 and 1910. Japanese Americans began to show up in northwestern Wyoming’s Sheridan, Park, and Big Horn counties by 1910 (U.S. Bureau of the Census, 1913). Most of those in Sheridan County were hired as section hands on the Chicago, Burlington, and Quincy Railroad and in the coal mines of the area (Georgen, 2003). Park and Big Horn county Japanese Americans took up farming and ranching near Worland and Powell (Iwata, 1992). Park County’s Japanese population trend differed from the state’s during the first half of the 20th century by steadily increasing from 6 residents in 1910 to 41 in 1940 (U.S. Bureau of the Census, 1941). Prior to World War II, Japanese Americans operated five farms, mostly on leased land, in Park County (Iwata, 1993; Mackey, 2000).

The state’s Japanese population experienced racism throughout the early 20th century. Following the attack on Pearl Harbor, racial tensions increased between EuroAmericans and Japanese Americans, especially in southwestern Wyoming where all persons of Japanese descent working for the Union Pacific Railroad were laid off. Other railroads of the area soon followed suit because of concerns for national security. However, those working in the coal mines kept their jobs. When persons of Japanese descent were ordered to register with the U.S. Government following the bombing of Pearl Harbor, 11 registered from Park, two from Big Horn, seven from Hot Springs, and ten from Fremont counties (Gardner, 1996).

Economic Geography. The human population of the northern Bighorn Basin has long depended on the waters of the Shoshone River. This was true of the fur trappers and it has continued with basin agriculturalists. Economic activity in the basin prior to the construction of the Heart Mountain Relocation Center ranged from hunting and gathering by early Native Americans to fur trapping/trading, ranching, irrigated farming, and the petroleum industry.

The first known Native American occupants of the Bighorn Basin were the Crow and the Eastern Shoshone, both of whom moved through the area while hunting and gathering. Horses obtained after EuroAmerican contact defined the nomadic subsistence styles of both groups (Waldman, 2000). Horses allowed both to more effectively hunt bison. Crows used horses to enlarge their trade that, by the early 1800s, included furs with EuroAmericans at Fort Raymond at the mouth of the Bighorn River (Voget, 2001).
Cattlemen followed the fur traders and government explorers into the basin. Ranchers were raising cattle along the Shoshone River by the early 1880s. Sheep came into the area soon after. The open range ended by the late 1890s with cattle being largely displaced by sheep herds, small ranchers, and small farmers (Lindsay, 1932).

Without irrigation, the northern Bighorn Basin was agriculturally useful only for grazing. The climate was too arid even for dryland farming (Les and Nora Bovee, oral communication, 18 June 2003). Irrigated agriculture began in the area in the mid-1880s. The first formal irrigation application for Shoshone River waters under the U.S. Government’s Carey Act was by the Shoshone Land and Irrigation Company near the present-day location of Cody. William F. “Buffalo Bill” Cody was its president (Lindsay, 1932). The town of Cody was founded soon after these waters were appropriated (Works Project Administration 1941). Utah and Idaho Mormons were among the first to settle to the middle and lower Shoshone River Valley to irrigate and farm the lands near present-day Byron, Cowley, and Lovell (Figure 4.9) (Lindsay, 1932).
Because the Carey Act was not successful in developing significant irrigated acreage, another solution was needed. Following the passage of the Reclamation Act in 1902, the Shoshone Project was authorized by President Theodore Roosevelt for irrigation and ultimately power development (Churchill, 1979). Shoshone Dam (later renamed Buffalo Bill Dam) and Buffalo Bill Reservoir, the key structures of the Shoshone Project, were completed in 1910 (Figure 4.9). Up to 456,000 acre-feet of water could initially be stored in the reservoir and released as needed for irrigation. Corbett Dam downstream, and the subsequent Shoshone Mountain Conduit coming directly from Buffalo Bill Reservoir, diverted water into downstream areas for irrigation including the first two irrigation divisions of the Shoshone Project–Garland (on line in 1908) and Frannie (on line in 1917) (Figure 4.9) (Bonner, 2002; Churchill, 1979). Willwood Dam served the Willwood Division beginning in 1926 (Bonner, 2002). As of 1940, Shoshone River water was irrigating 125,000 acres (Cross, 1951). Work began on the Heart Mountain Division by 1940 but proceeded very slowly because of difficulties in obtaining a workforce and because of the low demand for irrigated homesteads. Water first flowed through the newly constructed Heart Mountain Canal in fall 1941.

Alfalfa was the main crop grown on the irrigated lands of the Shoshone Project until 1925 (Churchill, 1979). Other crops initially grown on the irrigated lands of the northern Bighorn Basin included potatoes, peas, sweet corn, and pumpkins (Brown, 1980). By the onset of World War II, crops also included dry beans, sugar beets, seed peas, sweet-clover seed, alfalfa seed, radish seed, small grains, and apples. Sugar beets began in the first decade of the 20th century in the vicinity of Lovell and were initially shipped to Billings for processing. A Great Western Sugar Company factory was completed at Lovell by 1916 and a Wyoming Sugar Company factory was present in Worland by 1917 (May, 1989). Cows, sheep, hogs, and turkeys were also raised in the area (Works Progress Administration, 1941; Churchill, 1979).

Development of the Shoshone River Project had its share of problems. The project didn’t develop the lands closest to Cody as the city officials had hoped. Cody was also negatively impacted by blowing dust during reservoir drawdown and downstream farms were damaged by winter ice jams. Salinization and waterlogged conditions were major issues until drainage systems were added to the farmlands by the 1930s (Bonner, 2002; Churchill, 1979).

Powell officially became a town in 1908 and served as the headquarters of the Shoshone Reclamation Project (Churchill, 1979). Prior to World War II, it also served as a trade center in this farming and oil producing area and had a population of 1,948. At the same time, Cody numbered 2,536 (Works Progress Administration, 1941; Cross, 1951).

The petroleum industry began to be a major player in the economy of the Bighorn Basin with the development of the Elk Basin north of Powell in 1915. Another producing area was in the Oregon Basin east of Cody (Mike Mackey, written communication, 11 February 2007). By 1940, the petroleum industry ranked second only to agriculture in the number of persons employed in the basin (Cross, 1951).
The Bighorn Basin and the river valleys within the Bighorn Basin have long served as transportation corridors. Mountain man Jim Bridger led several large groups of miners and immigrants through the eastern Bighorn Basin en route to Montana in the mid-1860s (Lindsay, 1932). The Chicago, Burlington, and Quincy railroad entered the basin from the north connecting Billings to Cody via Powell and the middle Shoshone River Valley in 1901 (Figure 4.9). Cody thus served as a railhead community and as the eastern gateway to Yellowstone National Park and surrounding environs (Works Progress Administration, 1941). In 1906, a spur extended from Frannie southward up the Bighorn River to Shoshoni (Works Progress Administration, 1941). Wyoming Highway 14 followed the Shoshone River from Lovell to Cody thus providing automobile access to the area. U.S. Highway 20 followed the Bighorn River from Shoshoni to Greybull, and U.S. Highway 20-14 linked Greybull to Cody (Works Progress Administration, 1941).

**Why this Location?**

Wyoming was likely chosen as a state in which to locate a relocation center because it lay outside military exclusion zones where Japanese Americans could relocate. The large amount of Federal land was attractive to the U.S. Government in siting such a center. These characteristics overrode the concerns of then-Wyoming Governor Nels Smith who, at an April 1942 meeting of the War Relocation Authority (WRA) and governors of western states in Salt Lake City, stated “People in [my] state have a dislike of any Orientals, and simply will not stand for being California’s dumping ground”. Further, if evacuees were allowed to relocate to Wyoming “there would be Japs hanging from every Pine tree”. Finally, Smith stated that Japanese Americans “should be kept in concentration camps—not reception centers, should be worked under guard, and should be removed at the end of the emergency” (Nelson, 1976, p. 10). It is unclear how well Smith represented the majority of Wyoming’s populace, especially given the fact that other Asians (i.e., Chinese) had been in the state since at least the late 1860s.

Several sites were examined in Wyoming prior to the selection of Heart Mountain. The Green River Community Club (southwestern Wyoming) and the Midvale Water District near Riverton (central Wyoming) each actively lobbied for a relocation center in their respective areas, primarily to help with the completion of irrigation projects (Nelson, 1976). Worland area residents, located on the Bighorn River (Figure 4.9), also lobbied for a relocation center (Mackey, 2000). Despite the cold winters and relatively short growing season, Heart Mountain was chosen for a relocation center site in mid-May 1942 because of its adequate water supply, road and railroad network, and power lines as well as public works opportunities and the likelihood that the nearby communities would not significantly oppose the project (Figure 4.11). Northwestern Wyoming residents accepted the relocation center because evacuees would be held in a secure facility under armed guards, and because they were seen as a labor force in an area that had a serious labor shortage. Further, center construction and ongoing operation would benefit businesses in the area. Cody residents and businesses were initially much less enthusiastic about the new relocation center than were those of Powell, likely because Cody’s tourism-based economy might suffer from its proximity to a relocation center (Nelson, 1976).
retrospect, Cody residents probably had little to fear because of the center’s location 13 miles to the northeast. Finally, the Heart Mountain site was attractive because it would occupy U.S. Bureau of Reclamation Shoshone Reclamation Project–Heart Mountain Division lands, most of which were thought to be irrigable but the infrastructure for which had not yet been completed (U.S. Army–Western Defense Command, 1943).

Building Heart Mountain

The U.S. Bureau of Reclamation officially transferred the administration of 20,000 acres of the Heart Mountain Division of the Shoshone Reclamation Project to the WRA on 1 June 1942. Construction began a week later on a center that would potentially house 11,000 residents at completion (Nelson, 1976). Some of the workers came from the Heart Mountain Division of the Shoshone Project because the relocation center pay was at least twice that of the Bureau of Reclamation. As a result, construction of the remaining portions of the Heart Mountain Division came to a standstill (Churchill, 1979). Other workers came from the Mexican migrant labor force brought to the Bighorn Basin to work the agricultural fields (Fiset, 1999). Center construction was slated to be completed within 60 days. At the height of building the project, 3,000 men labored day and night to finish the center. In time, carpenters could construct an entire barracks, from foundation to roof, in 58 minutes! By 10 August, Heart Mountain was declared ready for occupation by the WRA but latrine, barracks stove, and Celotex wall and ceiling insulation board installation was not complete until at least December 1942 (Nelson, 1976; Mackey, 2000).

The Heart Mountain Relocation Center consisted of the evacuee residential area plus administration, staff housing, military police, hospital, and warehouse areas, and adjacent agriculture-related areas (Figures 4.11 and 4.12). A barbed wire fence surrounded the entire project area. Nine guard towers were perched at regular intervals above this fence (Nelson, 1976).

The residential part of the center was laid out in 20 blocks separated by unpaved roads (Figure 4.12). All blocks except Block 7 had 24, 20 feet x 120 feet barracks, two 40 feet x 100 feet mess halls, two laundry-latrine-shower buildings, and one 20 feet x 100 feet recreation building. In total, 459 barracks were constructed to house the evacuees (Nelson, 1976; LaDonna Zall, written communication, 23 February 2007). Each barracks consisted of six, single-room apartments that ranged in size from 20 feet x 16 feet (for less than 4 people), 20 feet x 20 feet (up to 4 people), and 20 feet x 24 feet (up to 6 people). Each room had a coal heating stove, one bare light bulb, and army cots and mattresses (Mackey, 2000). Historical photographs show that the external walls and roofs were covered with heavy tar paper that was held down with wood battens (Figure 4.13). Initially, no ceilings were present in the barracks thus the triangular areas above the eight foot high walls were open for the entire length of each barracks (Noble, 1996). In this arrangement, noise could travel the length of the barracks and there was little to keep heat in each apartment, especially considering the initial absence of any form of insulation in the barracks. It was not until later in 1942 that thin insulation board was added to the inside walls (Sakauye,
Figure 4.11. Overall map of the Heart Mountain Relocation Center. Adapted from Burton et al. (2002, p. 130).
Figure 4.12. Detailed map of the central portion of the Heart Mountain Relocation Center. Adapted from Sakuye (2000, p. 29).
In addition to the residential blocks, this area also included a high school and two elementary schools (Figure 4.12).

Domestic water for the center came from the Shoshone River where it was filtered and pumped up more than 300 vertical feet and nearly two miles to a concrete reservoir atop the pediment surface west of the main portion of the center (Figures 4.4, 4.11 and 4.12) (Burton et al., 2002). The sewage treatment plant was located on the lower (i.e., Cody) terrace between the main portion of the center and the Shoshone River (Figure 4.12) (Burton et al., 2002). Presumably, treated water was subsequently released back into the Shoshone River. Transportation to and from the site was available via Wyoming State Highway 14 and the Chicago, Burlington & Quincy Railroad line (Figure 4.11).

The irrigated farming infrastructure was partially in place in fall 1942. Most canals had already been constructed as part of the Heart Mountain Division of the Shoshone Reclamation Project.
However, additional canals needed to be constructed and waterproofed before water could be delivered to farm fields. Further, sagebrush-covered land required clearing before cultivation (Burton et al., 2002). Farm fields were located on the lower (Cody) terrace surface immediately above the Shoshone River and adjacent to the highway and railroad tracks (Figure 4.14). Additionally, one farm field was located on the upper (Powell) terrace.

**Origins of the Evacuees**

Nearly all of the Heart Mountain Relocation Center’s original evacuees came from California via the Pomona (5,261) and Santa Anita (4,708) assembly centers (Figure 4.15). Evacuees also came from Washington State and Oregon by way of the Portland Assembly Center (U.S. Army–Western Defense Command, 1943). Specifically, the California evacuees were from Los Angeles (6,448), Santa Clara (2,572), San Francisco (678), and Alameda (124) counties as well as 22 other California counties. Another 950 evacuees came from central Washington state’s Yakima County (843) plus seven other Washington counties. Five Oregon counties contributed a total of 77 evacuees to Heart Mountain (U.S. War Relocation Authority, 1946). It is unclear why some eastern Washington and eastern Oregon counties were included in the military exclusion area while the remainder of the eastern portions of these states were not (Heuterman, 1995).

Most of the Heart Mountain population was urban (Japanese American National Museum, n.d.). Approximately 64% of the Heart Mountain evacuees were American citizens (U.S. War Relocation Authority, 1946). Evacuees traveled four days by rail from California and three days via rail from Oregon to reach Heart Mountain. The first to arrive were those from the Pomona Assembly Center on 12 August 1942 followed by the Portland and Santa Anita assembly centers. While most of the evacuees had arrived at Heart Mountain by mid-September, the last trainload did not arrive until 30 October (U.S. Army–Western Defense Command, 1943). Heart Mountain, with a maximum population of 10,767, became Wyoming’s third largest city behind Cheyenne (22,474) and Casper (17,964) in approximately 2.5 months (Nelson, 1976)!

**Interaction of Evacuees with Northwestern Wyoming’s Environments**

*General Interactions with the Physical Environment.* Evacuees described the Heart Mountain Relocation Center in a variety of ways, few of which were positive. “Black”, “bleak”, “desolate”, “barren”, “flat open desert”, “scrubby”, “lonely”, “dusty”, and “mechanical orderliness” were terms used to describe the center and its environment (Nelson, 1976, p. 19, 21, 24; Noble, 1996, p. 40; Mackey, 2000, p. 37). One evacuee recalled the Heart Mountain area as “a dull, gray brown tinged with faint green during spring and early summer (Girdner and Loftis, 1969, p. 227). Another said “For miles and miles around, you could look as far as your eye could see and you couldn’t see the first tree. No trees, nothing green, it was all brown and there was this mountain just sitting behind us. We thought, well maybe the mountain will act as protection for us” (Ishii, 1991, p. 67). The black tarpaper covering the walls and roofs of the barracks added to the dull appearance. Only the administration buildings, the hospital, nearby soldiers barracks, and the new high school were not black (Nelson, 1976; Sakauye, 2000). Like other relocation
centers, Heart Mountain’s environment was much different from those of the original communities of the evacuees.

Winters in the Bighorn Basin are typically harsh but the winter of 1942-43 was especially so lasting from late September until April (Nelson, 1976). The lowest temperatures of the center’s history-- -28°F--occurred on 18 and 19 January 1943 during an eleven day spell when ten of those days reached -9°F or colder (Staff, 23 January, 1943; Staff, 30 January; Sakauye, 2000). Demonstrating the vagaries of Wyoming weather, a “chinook” had melted the ice of the community ice skating rink the week prior to the very cold weather (Staff, 16 January 1943). The fact that most of the evacuees were from California made the adjustment to this type of weather more difficult. Worse yet, picture a 150 foot walk to the latrine late at night in that type of weather! Further hardship resulted when neither clothing, bedding, barracks insulation nor coal supplies were sufficient for this type of weather. Heavy World War I Navy surplus pea coats and other GI clothes were issued to fend off the cold (Mackey, 2000; Girdner and Loftis, 1969); however, clothing allowances did not show up until well past the promised September date when “winter” was already in full-swing (Nelson, 1976). Evacuees purchased much of their winter clothing, as well as other needed items, from the Sears-Roebuck catalog. Evacuees also obtained some winter clothing from a welfare agency in the center (Girdner and Loftis, 1969). Because of the haste in which the barracks were constructed, and due to the use of green lumber in their construction, numerous gaps were present in the walls, floors, and roofs of the barracks. Dean Meeker, one of the center construction workers, later noted:

I can remember the foreman’s comment when he found cracks in the building. He said, “Well, I guess those Japs will be stuffing their underwear in there to keep the wind out.” In my defense, I will say I applied a bit more diligence and care to my work when I realized people would actually have to survive a Wyoming winter in this housing. We all knew that there was no way anyone accustomed to California weather could possibly survive a Wyoming winter in those barracks. If they were from California, they probably didn’t even own proper clothing for a winter in Cody.”

Commission of Wartime Relocation and Internment of Civilians (1982, p. 159)

Evacuees did indeed fill the cracks with rags and newspaper to keep out the cold and dust. Insulation board became available for lining interior walls in December but evacuees were expected to install it to provide a measure of insulation in each apartment. Food to face this cold winter was also generally in short supply and generally poorly prepared until mess hall changes were made in January 1943 (Mackey, 2000). As a result of these problems, the 150 bed Heart Mountain hospital was soon overcrowded with evacuees. Cold weather also caused water lines to regularly break (Nelson, 1976).
The following quote sums up the feelings of many Japanese Americans regarding the first Winter at Heart Mountain:

\[
\text{Snow upon the rooftop,}
\text{Snow upon the coal;}
Winter in Wyoming–
Winter in my soul
\]

Aoyama (1943)

Overall, mean annual temperatures of 1942-1945 were each lower than the 1931-1960 average, but by no more than 1.1°F (Western Regional Climate Center, n.d.b). Winters generally did not display a colder or warmer trend during the 1942-1945 period; however, May through August temperatures in 1943, 1944, and 1945 were generally cooler than the 1931-1960 average. Average annual precipitation during 1942-1945 was very similar to the 1931-1960 average. Snowfall was significantly lighter than the long-term average with an annual average of approximately six inches each year as compared to the 1931-1960 average of nearly 14 inches/year (Western Regional Climate Center, n.d.b).

Wind and associated dust are often mentioned. Winds that blew over the land that was recently cleared of the shrub-steppe vegetation cover stirred up a “very fine, alkaline dust” (Hosokawa, 1984, p. 20). Dust blew everywhere when the ground was not snow covered (Nelson, 1976). According to one evacuee ... “Heart Mountain, that place was a dry, windy hell...in summertime the wind would blow like crazy raising the dust.” (Mullan, 1999, p. 7). Laundry was dried on clothes lines in and outside the barracks. Imagine the chagrin of those who hung clean clothes out to dry and later came back to find the clothes dirty from blowing dust. Wind resulted in blizzards as it whipped the dry snow into the air, and against the poorly constructed center buildings. Fire was an ever-present danger in this windy, dry environment. Fire danger was compounded by the presence of the coal stoves, overloaded wiring, and wood and tarpaper construction in each of the barracks apartments (Mackey, 2000).

Agriculture. The initial goals of the agricultural program were to feed the evacuees, trade and sell surplus crops, provide meaningful employment for evacuees, and leave behind lands ready for farming after the center closed. Agricultural program administrators planned to intensively farm 6,000-8,000 acres of irrigated lands plus develop an extensive livestock program. By early 1943, the crop program goals had been pared down to 1,129 acres based on the subsistence needs of the center’s residents (Hartman, 1945).

To accomplish these goals, the irrigation system was completed, lands were cleared and leveled, and soils were amended—all by evacuees. Once all of that was completed, crop agriculture was still a tenuous venture given the climate of the area and the fact that none of the project lands had been previously farmed. To bring water to the Heart Mountain lands from the Buffalo Bill Reservoir, approximately 5,000 lineal feet of the Main Canal had to be further excavated and
lined with water repellent bentonite clay. Main Canal excavation and lining, as well as the construction of other irrigation laterals, was complete by mid-June 1943 (Figure 4.16). While the irrigation infrastructure was being constructed, native vegetation was cleared from 1,100 acres of virgin land. Lands were then leveled, seed beds prepared (Figure 4.17), and crops planted. All of this had to be accomplished with a war-induced shortage of labor and equipment. These shortages, combined with snow, rain, and late frosts, pushed planting operations into June and July (Hartman, 1945). However, “hotbeds” (i.e., small greenhouses heated by sunlight and decomposing livestock manure) constructed in spring 1943 on the warm, south-facing slope of the Powell Terrace were used to start broccoli, cabbage, cauliflower, eggplant, peppers, and tomatoes before transplanting outside thus avoiding late frosts (Staff, 8 May 1943; Hartman, 1945). Once in the fields, the tender seedlings were protected by individual waxed paper “hot caps” (Staff, 10 June 1944; Sakauye, 2000). The ideas for hot beds and hot caps came from Yakima Valley, Washington evacuees who dealt with similar climate issues as at Heart Mountain (Sakauye, 2000). Because many of the Heart Mountain soils were low in nitrogen, livestock manure was added prior to the 1943 season and “green manure” was planted in fall 1943 and 1944 to be plowed in the following spring (Hartman, 1945; Staff, 8 May 1943). However, with soil and seed growing experts among the evacuee agricultural staff, agricultural administrators relied more on matching crops to soil types rather than amending soils to grow particular crops (Sakauye, 2000).

Despite the relatively short growing season, evacuee farmers found that crops matured rapidly in the long summer days and warm nights (Girdner and Loftis, 1969). Forty-five different crops were grown resulting in over 2.1 million pounds of produce on 638 acres of Heart Mountain lands in 1943 alone (Tables 4.1 and 4.2). Of the crops grown for human consumption in 1943, a considerable portion were traditional Japanese foods including daikon, gobo, shiru uri, and shingiku. In 1944, 528 acres yielded nearly 3.3 million pounds of produce (Hartman, 1945). These numbers also take into account farm damage caused by two 1944 thunderstorms. The first occurred on 14 June dumping marble-sized hail for 35 minutes that destroyed over 50 acres of truck crops including cucumbers, sweet corn, eggplants, tomatoes, spinach, and mustard greens (Staff, 17 June 1944). Another hailstorm hit Heart Mountain in late September 1944 destroying about 40 acres of sweet corn, cantaloupe, tomatoes, watermelon, popcorn, and peas, while damaging a variety of other crops (Staff, 7 October 1944). Harvest labor in both years was provided by Heart Mountain junior and senior high school students as well as hundreds of other center employees. In 1944, the center closed the high school for three weeks for the potato and other root crops harvest. Produce raised on the farm was eaten fresh, stored in root cellars near the Warehouse Area, pickled, and canned (Hartman, 1945). The Big Horn Canning Company in Cowley (Figure 4.10) canned the center’s green beans in 1943 (Staff, 28 August 1943). Later, plans called for the construction of canning and pickling plants (Staff, 11 March 1944). While it is unclear whether a canning plant was constructed, a large scale pickling operation was established in the center. In late 1944 alone, approximately 108,000 pounds of daikon, turnips, takana, and nappa (i.e., Chinese cabbage) were pickled to make tsukemono (Staff, 28 October 1944). Produce in excess of that eaten fresh, stored, canned, and pickled was shipped to other relocation centers or sold on the open market (Table 4.2).
Figure 4.16. An evacuee watches as the first water flows through the Highline Ditch, the main irrigation water source for the Heart Mountain Relocation Center. Charles Mace photograph, June 1943. Courtesy of the Bancroft Library, University of California, Berkeley. Volume 13, Section B, WRA # E-926, War Relocation Authority Photographs of Japanese-American Evacuation and Resettlement, Series 5: Heart Mountain Relocation Center, Heart Mountain, Wyoming.

Four feed crops were grown at Heart Mountain—barley, field corn, rye, and wheat. None were harvested in 1943; rather, they were plowed back into the soil as a green manure to enhance soil fertility. Feed crops, straw, and pea silage yielded 784,000 pounds in 1944 (Table 4.2). Only a small amount of this was used to feed animals at the center; rather much of it was shipped to other centers or sold (Hartman, 1945).

The Heart Mountain livestock program consisted of chickens and hogs. Over 700 pounds of dressed poultry and 2,070 dozen eggs were produced in 1943 despite delays caused by a lack of construction materials, labor difficulties, cold weather and initially uninsulated poultry buildings (Table 4.3). Two of the laying houses were constructed from Civilian Conservation Corps (CCC) buildings hauled in from Yellowstone National Park. Nearly 32,000 pounds of dressed poultry and over 93,000 dozen eggs were produced in 1944. Hogs were the center “recyclers”
feeding mostly on mess hall scraps. They yielded over 92,000 pounds of dressed pork in 1943 and more than 372,000 pounds of dressed pork in 1944 (Hartman, 1945).

Increased produce, feed crops, hogs, and poultry in 1944 (Tables 4.2 and 4.3) reflect improvements made based on a year of experience in irrigating, planting, and tending the crops as well as having the proper infrastructure in place for livestock. Center farm lands were not planted in spring or summer 1945 because of the imminent closure of the center. Instead, lands were rented to area farmers. All farm equipment, seed and fertilizer was sold at auctions in 1945 (Mackey, 2000).
Table 4.1. Produce, feed crops, and livestock raised at Heart Mountain Relocation Center in 1943 and 1944. Data from Hartman (1945) and Sakauye (2000).

<table>
<thead>
<tr>
<th>Produce</th>
<th>Produce (continued)</th>
<th>Feed Crops</th>
<th>Livestock</th>
</tr>
</thead>
<tbody>
<tr>
<td>adzuki</td>
<td>nappa</td>
<td>barley</td>
<td>chickens</td>
</tr>
<tr>
<td>beans (dry)</td>
<td>onions (dry)</td>
<td>field corn</td>
<td>hogs</td>
</tr>
<tr>
<td>beans (lima)</td>
<td>onions (green)</td>
<td>rye</td>
<td></td>
</tr>
<tr>
<td>beans (snap)</td>
<td>parsley</td>
<td>wheat</td>
<td></td>
</tr>
<tr>
<td>beets</td>
<td>parsnips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>broccoli</td>
<td>peanuts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cabbage</td>
<td>peas (China)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cantaloupe</td>
<td>peas (green)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>carrots</td>
<td>peppers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cauliflower</td>
<td>popcorn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>celery</td>
<td>potatoes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>corn</td>
<td>pumpkin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cucumber</td>
<td>radish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>daikon</td>
<td>rutabagas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dill</td>
<td>shingiku</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eggplant</td>
<td>shiro uri</td>
<td></td>
<td></td>
</tr>
<tr>
<td>garlic</td>
<td>spinach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ginger</td>
<td>squash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gobo</td>
<td>Swiss chard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>horseradish</td>
<td>tomatoes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lettuce (head)</td>
<td>turnips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lettuce (leaf)</td>
<td>watermelon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mizuna</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.2. Produce and feed crops raised at Heart Mountain Relocation Center, 1942-1945. Data from Hartman (1945).

<table>
<thead>
<tr>
<th></th>
<th>1942</th>
<th>1943</th>
<th>1944</th>
<th>1945</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Produce</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Acres Harvested</td>
<td>0</td>
<td>638</td>
<td>528</td>
<td>0</td>
<td>1,166</td>
</tr>
<tr>
<td>Total Production (lbs)</td>
<td>0</td>
<td>2,131,877</td>
<td>3,282,820</td>
<td>0</td>
<td>5,414,697</td>
</tr>
<tr>
<td>Consumed at Center (lbs)</td>
<td>0</td>
<td>1,802,133</td>
<td>2,738,913</td>
<td>0</td>
<td>54,541,046</td>
</tr>
<tr>
<td>Shipped to Centers (lbs)</td>
<td>0</td>
<td>135,000</td>
<td>45,518</td>
<td>0</td>
<td>180,518</td>
</tr>
<tr>
<td>Sold on Market (lbs)</td>
<td>0</td>
<td>1,875</td>
<td>129,781</td>
<td>0</td>
<td>131,656</td>
</tr>
<tr>
<td>Shrinkage &amp; spoilage</td>
<td>0</td>
<td>192,819</td>
<td>368,608</td>
<td>0</td>
<td>561,427</td>
</tr>
<tr>
<td>Market Value ($)</td>
<td>0</td>
<td>$76,063</td>
<td>$113,804</td>
<td>0</td>
<td>$189,867</td>
</tr>
<tr>
<td><strong>Feed Crops</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Acres Harvested</td>
<td>0</td>
<td>0</td>
<td>639</td>
<td>0</td>
<td>639</td>
</tr>
<tr>
<td>Total Production (lbs)</td>
<td>0</td>
<td>0</td>
<td>1,852,489</td>
<td>0</td>
<td>1,852,489</td>
</tr>
<tr>
<td>Fed at Center (lbs)</td>
<td>0</td>
<td>0</td>
<td>370,634</td>
<td>0</td>
<td>370,634</td>
</tr>
<tr>
<td>Shipped to Centers</td>
<td>0</td>
<td>0</td>
<td>1,163,130</td>
<td>0</td>
<td>1,163,130</td>
</tr>
<tr>
<td>Sold on Market (lbs)</td>
<td>0</td>
<td>0</td>
<td>318,725</td>
<td>0</td>
<td>318,725</td>
</tr>
<tr>
<td>Market Value ($)</td>
<td>0</td>
<td>0</td>
<td>$21,609</td>
<td>0</td>
<td>$21,609</td>
</tr>
</tbody>
</table>

One of the unintended consequences of irrigation canal seepage and actual irrigation on the Heart Mountain Relocation Center lands was the development of a water table and associated springs beneath about 2,000 acres of farmland on the Cody and Powell terraces of the area (Swenson, 1957). While unintended, it came as no surprise because of similar occurrences throughout the Shoshone Project lands since the second decade of the 20th century.

Overall, the agricultural program was successful in feeding the center, helping the war effort, and providing meaningful work for evacuees. The produce and hog operations were especially successful. Poultry was less successful, partly because of poor climate management within the poultry houses (Hartman, 1945, p. 30-31). The poultry operation may have also been hampered by theft of chickens. At one point, a chicken census revealed that 2,000 chickens were missing. The center’s veterinarian Dr. Minol Ota determined that the chickens had disappeared and died...
Table 4.3. Livestock raised at Heart Mountain Relocation Center, 1942-1945. Data from Hartman (1945).

<table>
<thead>
<tr>
<th></th>
<th>1942</th>
<th>1943</th>
<th>1944</th>
<th>1945</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chickens</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number Butchered</td>
<td>0</td>
<td>176</td>
<td>7,974</td>
<td>0</td>
<td>8,150</td>
</tr>
<tr>
<td>Meat Dressed Weight (lbs)</td>
<td>0</td>
<td>704</td>
<td>31,976</td>
<td>0</td>
<td>32,680</td>
</tr>
<tr>
<td>Market Value ($)</td>
<td>0</td>
<td>$204</td>
<td>$12,036</td>
<td>0</td>
<td>$12,240</td>
</tr>
<tr>
<td>Eggs (dozen)</td>
<td>0</td>
<td>2,070</td>
<td>92,797</td>
<td>0</td>
<td>94,867</td>
</tr>
<tr>
<td>Market Value ($)</td>
<td>0</td>
<td>$708</td>
<td>$29,296</td>
<td>0</td>
<td>$30,004</td>
</tr>
<tr>
<td><strong>Hogs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Butchered</td>
<td>0</td>
<td>491</td>
<td>1,794</td>
<td>0</td>
<td>2,285</td>
</tr>
<tr>
<td>Dressed Weight (lbs)</td>
<td>0</td>
<td>91,572</td>
<td>372,704</td>
<td>0</td>
<td>464,376</td>
</tr>
<tr>
<td>Market Value ($)</td>
<td>0</td>
<td>$18,314</td>
<td>$70,180</td>
<td>0</td>
<td>$88,494</td>
</tr>
</tbody>
</table>

as a result of “barracks sickness”. According to Ota, once a chicken had barracks sickness, it was taken to a barracks by an evacuee where it later died (Mackey, 2000, p. 135).

**Business and Industry.** The consumer cooperative Community Enterprises stores were scattered about the residential portion of the center. These included canteens, dry goods store, shoe store, fish store, rationed goods store, radio repair shop, dry cleaners, barber shops, and beauty shops (Sakauye, 2000).

Industry was limited at Heart Mountain. The center operated a sawmill west of Cody along the North Fork of the Shoshone River. The sawmill provided the center with ample rough cut lumber for a variety of construction projects including root cellars, chicken houses, and pig pens (Staff, 17 July 1943). A silk screen poster shop created multi-colored posters for the U.S. Navy and for center purposes (Staff, 17 July 1943). A bakery was also present in the center and among its products was tofu (Staff, 8 January 1944). Each of these enterprises employed evacuees who earned from $12/month (unskilled labor) to $19/month (professional or highly skilled labor) (Nelson, 1976).

**Landscaping and Gardening.** Landscaping, and flower and vegetables gardens adorned the main portion of the center. Besides beautification, trees, shrubs, and gardens helped reduce the dust generated in windstorms (Noble, 1996). In spring 1943, 2,500 trees and flowering shrubs were planted, but primarily in the administration, hospital, high school, and possibly the military police areas (Staff, 15 May 1943). It is unclear how successful these efforts were. Evacuees
gathered stone from the surrounding environment plus iris bulbs, lilac shoots, and various flowers from nearby farms to start flower gardens and beautify the stark landscape (Les and Nora Bovee, oral communication, 18 June 2003). Some were very successful with flowers in the residential area (Mackey, 2000, p. 38; Sakauye, 2000). At one point, eight acres of victory gardens were growing within the main portion of the center (LaDonna Zall, written communication, 23 February 2007). Given the successes of the center’s irrigated agricultural operation, any problems encountered in growing plants within the residential area may have been due to a lack of irrigation water (Staff, 15 May 1943; Les and Nora Bovee, oral communication, 18 June 2003). One evacuee also claimed that uncertainty about the future prevented some from planting gardens (Sakauye, 2000).

Education. With nearly 28% (3,043) of the center’s population age 5-19 (as of 1 January 1943), it was imperative that Heart Mountain have an education program. The goals of the program followed the larger goals of the WRA—i.e., to prepare for evacuees to successfully resettle in areas away from the West Coast—and the accreditation requirements of the Wyoming State Department of Education. Initially, five elementary schools and a high school were housed in barracks. A new high school was completed by spring 1943 but plans for two “real” elementary schools were scrapped after public outcry about “pampering the Japs” with new, expensive buildings. Instead, the five existing elementary schools were condensed into two larger elementary “barracks” (Inouye, 1999; Mackey, 2000).

Aside from the initial school buildings, numerous problems existed with the center’s education system in the first year, including: 1) disparity in pay between Caucasian teachers ($2,000-2,600/year + overtime) and evacuee ($228/year) teachers; 2) limited Wyoming teacher certificates for evacuees; 3) friction between Caucasian teachers and evacuee teachers because of racial prejudice; 4) very high student to teacher ratios; 5) sub-standard classrooms, equipment, and supplies; 6) a curriculum in constant flux because of changing WRA policy (e.g., education vs. vocation); 7) grade placement of students who had left their “home” schools in mid-year; 8) limited selection of courses, especially in science and foreign language; and 9) a high teacher and teaching assistant turnover rate because of the above-mentioned problems (Inouye, 1999; Mackey, 2000). However, many of these issues were resolved or set aside by the start of the 1943-44 school year and the school system ultimately worked for the students (Mackey, 2000). After not receiving a rating from the Wyoming State Board of Education in 1942-1943, Heart Mountain High School was rated as “Class One” in December 1943, meaning that graduates could attend the University of Wyoming without taking any additional examinations (Inouye, 1999). It certainly helped that the Issei (i.e., first generation Japanese Americans born in Japan) valued education and saw it as a vehicle for their children to rise within American society (Sakauye, 2000).

With the completion of the new high school and its associated gymnasium and auditorium, evacuees had not only a fine facility for their children but also a place for adult education classes and various special events (Mackey, 2000). Adult education courses began in fall 1942 and
included bookkeeping, English, fine arts, history, industrial arts, and mathematics, and by all reports were popular with the evacuees (Sakuye, 2000).

Recreation. Boredom was a key issue at Heart Mountain. The administration and evacuees thus established a strong activities program to help fight this.

Sports were a big part of the high school and overall Heart Mountain recreation program. The center’s high school fielded competitive football, basketball, baseball, and softball teams that played high schools from throughout Wyoming and southern Montana. These schools included Basin, Burlington, Byron, Cody, Cowley, Deaver, Lovell, Powell, Rawlins, Riverton, Shoshoni, Thermopolis, and Worland, Wyoming, and Carbon County, Hardin, and Rapelje, Montana (Inouye, 1999). Crowds of as many as 4,000 evacuees came to watch baseball games with outside teams. The football team lost only once in two years (Mackey, 2000; Mullan, 1999). Interestingly, Worland and Casper each had at least one non-interned Japanese American player on their high school teams (Inouye, 1999). Depending on the account, either baseball or basketball were the reigning sports of the center (Staff, 12 August 1944; Inouye, 1999).

Harry Honda and Herb Iseri, former members of the all-\textit{Nisei} (i.e., second generation Japanese Americans born in the U.S.) Wapato Nippons of the otherwise all-white Mt. Adams Baseball League in southcentral Washington state, helped organize softball and baseball at Heart Mountain. Baseball and softball began in June 1943. By the end of the summer, 15 Heart Mountain baseball teams were competing with each other. The center baseball and softball teams, often like those outside, formed around past and present occupations and locations so teams existed with names such as the “Engineers”, “Hospital”, “Mess 20”, and “Toppenish” (i.e., a town in Washington’s lower Yakima Valley). Baseball was not limited to the young males of the center. Heart Mountain had an “Old Timers” league that included 13 teams in 1945. Further, the Issei composed at least 50% of the spectators at softball and baseball games. Sports, especially baseball, were a means of psychological escape for those incarcerated at Heart Mountain (Mullan, 1999). Baseball, as America’s pastime, also offered evacuees the opportunity to demonstrate their loyalty to the U.S. Baseball, when played with teams from outside Heart Mountain, was also a way to show Caucasians that Japanese Americans were good citizens.

Swimming was a common summer activity after a large depression in the southeastern corner of the center was excavated, lined with gravel, and filled with water from an irrigation ditch in summer 1943 (Figure 4.12) (Mackey, 2000). The pool served an average of 200 swimmers on hot summer days (Staff, 22 July 1944). Ice skating (Figure 4.18) and sledding were popular winter sports. A large area was flooded and allowed to freeze at the site of the high school for the largest rink of the center. Following completion of the high school, a berm was constructed around the football field and the area within turned into a winter skating rink (Figure 4.12). Other small rinks existed within the residential blocks. Boxing, weightlifting, volleyball, and badminton were also common winter sports (Mackey, 2000).
Scouting was a popular activity for kids and adult leaders (Figure 4.19). Boy Scout and Girl Scout troops forming at Heart Mountain that offered kids the opportunity to leave the center’s confines for camping trips, trips to museums, etc. Scouting also offered interactions with the surrounding citizens and communities (Mackey, 2000); however, it was an ironic activity in its promotion of patriotism while those participating were incarcerated because of their racial and ethnic heritage.

With two theaters in converted barracks, attending movies was the most popular type of recreation at the center. Paid attendance at movies between October 1942 and September 1945 totaled nearly $601,000. This is especially significant when considering that price of admission was $0.10 for adults and $0.05 for children over five. Other activities included sewing, knitting, wood carving, ping pong, chess, checkers, card games, letter writing, and rock and fossil collecting (Mackey, 2000; Sakauye, 2000).
Culture and Art. As at other centers, the culture of Heart Mountain was purposefully American despite the ethnic backgrounds of the evacuees. The administration discouraged traditional Japanese cultural activities. However, one could catch glimpses of the impacts of Japanese culture throughout the center. In addition to the various American celebrations, Japanese traditions included *Bon Odori* (Buddhist Festival of the dead), New Years and the making mochi rice cakes for the New Year celebration, and Boys Day (a celebration of the healthy growth and development of young boys). Barracks and mess hall gardens reflected Japanese heritage, as did *Kabuki* (a type of Japanese theater), *ofuros* (traditional Japanese deep baths) (Figure 4.20), *goh* and *shogi* board games (Figure 4.21), *biwa* (a musical instrument similar to a lute), calligraphy, *haiku*, flower arranging, and *bonzai* (Sakauye, 2000). One of the artists interned at Heart Mountain was Estelle Ishigo, a Caucasian who chose to evacuate with her Japanese husband (Eaton, 1952; Mackey, 2000). Ishigo’s paintings depicted center life, including the center’s harsh weather.
Faith and Spirituality. Heart Mountain evacuees had “selective religious freedom” as they were free to worship in all but the Shinto faith (Sakauye, 2000). Churches were common in the recreation halls of the center with the Buddhists having the largest congregation. Buddhists, at the urging of administration officials, organized into one Buddhist congregation for space and scheduling reasons. Christian faiths included Baptists, Catholics, Methodists, Presbyterians, Reform Christian, Salvation Army, Seventh Day Adventists, and Union. For the same reasons as the Buddhists, the Protestant faiths also organized into a Community Christian Church. The Catholics, numbering about 100, had a separate congregation as did the Seventh Day Adventists (Noble, 1996; Mackey, 2000; Sakauye, 2000). Outside churches provided much needed relief, especially in the form of gifts for the center’s children at Christmas (Noble, 1996).

Health. Heart Mountain boasted a 100 bed, 17 wing hospital located in the northeastern corner of the center (Figure 4.12). It initially included one Caucasian doctor who oversaw the entire
hospital and evacuee physicians, dentists, pharmacists, nurses, and aides. From 1942-1945, approximately 1,000 operations were performed and nearly 570 babies were born in the hospital. Those requiring more complex surgery were sent to Powell, Cody, or Billings (Mackey, 2000; Sakauye, 2000; LaDonna Zall, written communication, 22 February 2007).

While some have touted Heart Mountain’s hospital as the best Wyoming, it faced a variety of issues. Medical furnishings and supplies were insufficient, especially during the first year of operation. Qualified medical staff was often in short supply because of relocation to the outside. A main factor in the relocation of medical personnel was the pay inside as compared to outside
Japanese American doctors were paid $19/month at Heart Mountain while they could make much more on the outside. In contrast, Caucasian registered nurses at Heart Mountain were paid $150/month (Mackey, 2000).

**Government.** Government within Heart Mountain consisted of two parallel bodies–Block Managers and Council Members–each ultimately operating under the authority of the Project Director. Block Managers from each block were appointed by the Project Director and were primarily Nisei. They dealt with daily issues including housing, mess halls, and repair and maintenance. They, in turn, advised center administrators on these issues. With the ratification of a charter in July 1943, each block was expected to elect a Council member who would make and enforce center rules and regulations. Most of the Councilmen were Issei. Ultimately, the Block Managers represented the Nisei while the Councilmen represented the Issei. Evacuees could vote in center elections but could not vote in standard Wyoming elections. It was not until May 1944 that it became clear that evacuees could vote via absentee ballot on elections in their hometowns (Sakauye, 2000).

While initially touted by center officials as “self-government”, all final decisions were made by the Project Director and his staff. As evacuees recognized the futility of the “self-government” in decision-making, they increasingly withdrew from participation in the government. In August 1944, conditions had deteriorated so much that only eight candidates were running for the twenty seats on the Community Council (Staff, 5 August 1944; Nelson, 1976).

**Community.** Conditions in the center were described as “tense” (Hosokawa, 1984, p. 21). This was especially true in the months immediately following the opening of the center, perhaps because of the severe injustice in being relocated, the living conditions in the center, and the bleak setting which the center occupied (Nelson, 1975). Strikes, work stoppages, protests, and petitions occurred among coal loaders, hospital staff, internal police, and the general populace because of everything from working conditions to the presence of the barbed wire fence surrounding the center (Nelson, 1975). These events were associated with anti-WRA factions led by young Nisei who were loyal to the U.S. but who viewed relocation as morally and legally wrong (Nelson, 1976). Other Nisei embraced the views of the Japanese American Citizens League (JACL) who emphasized their loyalty to the U.S. and chose not to resist the policies and practices of the WRA (Nelson, 1976).

Despite being held behind barbed wire at Heart Mountain and being classified as 4-C (“not acceptable for military service because of nationality or ancestry”), all men ages 17 to 36 were required to register for Selective Service. Only 38 Heart Mountain Japanese Americans responded to the requests to volunteer for military service in 1943. Because of high war casualties in the segregated military units, the U.S. Government reclassified Nissei males 17-36 years of age as 1-A. With this change in draft status, the “Fair Play Committee” formed at Heart Mountain. Formed from the Heart Mountain Congress of American Citizens, the Fair Play Committee was opposed to the drafting of Japanese Americans from Heart Mountain until their civil rights were restored and their citizen status clarified. Sixty-three evacuees eligible for the
draft refused to report for their pre-induction physicals. All 63 were accused of failure to report to the local draft board and were tried as a group in a non-jury trial. In June 1944, all were found guilty and sentenced to three years in a federal prison. Seven leaders of the Fair Play Committee were subsequently tried and convicted of conspiracy to evade the draft (Mackey, 2000). Despite the actions of the 63 evacuees and the Fair Play Committee, many Heart Mountain men and women ultimately served in the U.S. armed forces (see below).

Evacuation also heightened conflict between the Issei and Nissei. Issei had been the economic, social, cultural, and family leaders of the Japanese American communities prior to World War II. However, evacuation and incarceration in the centers had given more power to the Nisei, who as American citizens, could vote and hold office, and were more suited to the Americanized centers than were the Issei. Further, Nissei often believed that the “old country” ways of their parents were the reason they were imprisoned. At Heart Mountain, this resulted in the embittered Issei withdrawing from most facets of community leadership (Nelson, 1976).

Another issue that hampered the development of community within Heart Mountain, as well as the other relocation centers, was the turnover of evacuees within the center. This turnover occurred because of relocation to places outside, either seasonally or more permanently, or transfer to other centers (see below).

Interaction with Surrounding Areas

The Outside World. As at other centers, Heart Mountain residents interacted with those outside in a variety of ways and with a variety of results. Evacuee farmers sought advice from government agricultural experiment station personnel as well as local farmers. In turn, the large Heart Mountain agricultural operation was much like having another agricultural experiment station with which to advise local EuroAmerican farmers (Sakauye, 2000). Among the locals were those of Japanese descent. Issei from the area visited the center to again be able to speak Japanese with someone other than a family member (Girdner and Loftis, 1969).

The construction and occupation of the center by approximately 10,000 Japanese Americans, played a huge role in the economy of the northern Bighorn Basin. These impacts also went a long way towards smoothing the interactions between the evacuees and the surrounding primarily EuroAmerican population. Much of the approximately $5,000,000 spent on Heart Mountain construction remained in the state. Further, the center contributed roughly $500,000 to the state’s economy each year it was in operation (Larson, 1978). R.T. Baird, editor of the Powell Tribune, stated that the Heart Mountain Relocation Center was a “big boon to business—the biggest thing in the way of industrial and payroll activity that has ever come to Powell” (Mackey, 2000, p. 27). Local Powell businessmen vied for lucrative Government contracts with the center.

Other business owners relied on Japanese Americans shopping at their businesses when they were able to obtain passes to leave the center. Such shopping was possible because, early on, the fence surrounding the center was more symbolic than physically restrictive. Passage through the
front gate required a pass, authorized by someone in the administration and issued and collected by a soldier at the gate. Because of the ability to get shopping passes, evacuees contributed $25,000-50,000/year to the economy of Powell. The state and local government also benefitted from the increased sales and property tax revenues associated with the center. For example, $12,000 in sales tax revenues were paid by evacuees in just the first year of the center’s existence (Mackey, 2000).

The feelings of most prominent individuals in Cody and Powell were that a relocation center was acceptable as long as evacuees were closely guarded for the duration of their stay, and that once the war was over they did not remain in Wyoming. Powell seemed more welcoming than did Cody to Japanese Americans. The efforts of Powell Tribune Editor Baird and those of Powell Tribune evacuee columnist Mary Oyama Mittwer played a large role in these relations (Mackey, 2000). Conversely, signs reading “No Japs Allowed” could be seen in Cody storefronts (Murray, n.d.). At other Cody stores, Japanese American shoppers noted that merchants, while not overly friendly, were tolerant as long as evacuees were spending money (Girdner and Loftis, 1969). In retrospect, it is ironic that Powell and Cody residents wanted the evacuees available to labor in the nearby agricultural fields and some business owners wanted their business but otherwise did not want the evacuees in their towns or to remain after the war (Larson, 1954).

A popular center band, the “Hawaiian Surf Riders” and the center orchestra played at numerous events throughout the Bighorn Basin. Evacuees were able to leave center and hike west toward Heart Mountain searching for rocks, fossils and small evergreen trees for bonzai. Heart Mountain Boy and Girl Scouts had opportunities to camp in Yellowstone National Park in Summer 1944 (Mackey, 2000). As mentioned above, Heart Mountain sports teams played schools and organizations from throughout the Bighorn Basin. Prejudice could sometimes be seen in these interactions as well—e.g., Powell High School refused to play the Heart Mountain High School Eagles football team to determine the 1944, 6-man football champions (Mullan, 1999).

While Heart Mountain evacuees relations with local residents were generally satisfactory, the same cannot be said of state politicians and the state overall. Like Governor Carr in Colorado, the political fate of Wyoming Governor Nels Smith was partially determined by the Japanese American relocation issue. Smith moved slowly to resolve the issue of work releases for Heart Mountain evacuees thus costing farmers three weeks of the sugar beet harvest season. Farmers did not forget Smith’s actions in the November 1942 elections. The Wyoming Legislature introduced, and newly-elected Governor Lester Hunt signed into law in February 1943, a bill that prevented Japanese Americans from voting in any election held in Wyoming. Wyoming lawmakers subsequently made it illegal for any Heart Mountain evacuees to obtain Wyoming fishing and hunting licenses (Mackey, 2000). The intent of both of these actions was to discourage Japanese Americans from staying in Wyoming after the Heart Mountain center closed.
Otherwise, evacuees could leave the center on short-term, seasonal, and indefinite leaves. Short-term leaves ranged from several days to a few weeks, and were typically for personal business or medical issues. Seasonal leaves were granted to evacuees for seasonal agricultural employment. The purpose of indefinite leaves was to permanently depart the centers for relocation to the “outside world”, join the armed forces, be interned in a Department of Justice Internment Camp, committed to an institution, or repatriated to Japan (U.S. War Relocation Authority, 1946).

Seasonal leaves greatly benefitted area farmers. By the end of the 1942 harvest season, nearly 1,400 evacuees were working outside the center on farm labor contracts (Mackey, 2000). Farmer responses to these workers seems to have been quite positive; however, sugar beet farmers in Wyoming’s Big Horn County generally were not happy with the work done by Heart Mountain evacuees likely because most of the workers had little previous farm experience (Fiset, 1999). It is not clear whether the Heart Mountain evacuees had contact with the German and Italian prisoners of war (POW’s) held in branch camps in Worland, Lovell, and Basin. It seems likely, though, as the POW’s and the evacuees were working in the agricultural fields of the area at the same time (Larson, 1954).

Relocation from the center was encouraged early on but was generally slow until April 1943 (Figure 4.22). From then until the closure of the center in November 1945, no month had less than 100 long-term departures. Only 64 evacuees departed in 1942 but these were followed by 1,620 in 1943, 2,325 in 1944, and 8,552 in 1945 (U.S. War Relocation Authority, 1946). Heart Mountain evacuees relocated to at least 31 states (Figure 4.23). Most popular among the cities relocated to were Chicago, Denver, Detroit, Minneapolis-St. Paul, and New York City. Excessive paperwork and bureaucracy, daunting departure arrangements, travel costs, and uncertainty about employment and housing arrangement all conspired to slow relocation. The experiences of these relocating evacuees were mixed–some secured good jobs in supportive communities in Wyoming and other states while others encountered racism and hatred as they hunted for jobs (Mackey, 2000; Taira, 2001).

Over 650 Heart Mountain evacuees volunteered or were inducted into the U.S. Armed Forces. Most of these were inductees (M. Mackey, written communication, 24 June 2007). Many of the male volunteers and draftees joined the all-Nisei 442nd Regimental Combat Team, which included the 100th Infantry Battalion and the 522nd Field Artillery Battalion (Mackey, 2000). The 442nd earned the widespread respect of the military leadership for its bravery and fierce fighting in the European theater. The combat team’s motto “go for broke” epitomized the attitude of many of the Nisei soldiers. Approximately 16% (63) of the 347 Heart Mountain evacuees fighting in the war became casualties (U.S. War Relocation Authority, 1946).

Other Relocation Centers. Heart Mountain interacted with the other relocation centers through the transfers of evacuees, the exchange of goods, and in sporting events. A total of 988 evacuees from Heart Mountain transferred to Tule Lake because they or members of their family answered “no” to questions 27 and 28 on the “loyalty questionnaire” (Appendix C). Two evacuees were sent to the Leupp, Arizona Isolation Center. Heart Mountain, in turn, received 1,351 “loyal”
evacuees from Tule Lake. The loyalty questionnaire also resulted in 27 Heart Mountain evacuees being repatriated to Japan in late summer 1943 (U.S. War Relocation Authority, 1946).

As noted above, Heart Mountain shipped farm products to other centers. These included produce, pickled daikon, and cattle feed (Staff, 31 March 1945; Sakauye, 2000). One train carload of beef cattle was also received from Amache (Hartman, 1945).

Heart Mountain also hosted the Gila River Relocation Center baseball all-stars for a series of games in September 1944. Baseball legend Kenji Zenimura’s Gila River squad won the majority of the games in this exciting series (Staff, 16 September 1944).

**Closing Heart Mountain and Another Relocation**

Public Proclamation #21 on 17 December 1944 ended the West Coast Exclusion Order that had been in effect since 1942. As of 2 January 1945, evacuees could begin moving back to the West Coast. All relocation centers were to be closed by the end of 1945.

On 1 January 1945, more than 8,500 evacuees remained in the center (Figure 4.24). By 1 June, just over 7,000 evacuees were still at Heart Mountain (U.S. War Relocation Authority, 1946). To further spur evacuees to leave, WRA Director Dillon Myer moved the Heart Mountain
Figure 4.23. Geography of Heart Mountain indefinite leaves (i.e., relocations), September 1942-October 1945. Data from various issues of the *Heart Mountain Sentinel* and U.S. War Relocation Authority (1943).
closure date up to 15 November 1945 (Mackey, 2000). The center newspaper’s last issue came out on 28 July 1945. Slowly the center was closed around its residents. Approximately 5,000 evacuees remained on VJ (i.e., Victory over Japan) Day in August 1945 (U.S. War Relocation Authority, 1946). However, the center ended up closing ahead of schedule on 10 November 1945 when the last train of evacuees departed (Mackey, 2000). A community analyst wrote of the closing of Heart Mountain:

Heart Mountain was never a lovely place. But when it was full of people and one knew many of the people, even the barracks did not look so black and bleak. On Sunday and Monday, November 11 and 12 [1945], it was truly unlovely. It was cold, quiet, and empty. Trash heaps lined the streets. The atmosphere of desertion and desolation was made more marked by lonesome, hungry cats crawling over the trash heaps. The community was obviously and totally dead. Since then, the project staff, acting now in the role of morticians, have been preparing the physical remains for such disposition as awaits a dead community.

Hansen (1986, p. 37)

Impacts of Heart Mountain on Today’s Bighorn Basin Landscape

Evacuee Dispersion. Few Japanese American evacuees remained in northwestern Wyoming after the closing of Heart Mountain. The 1950 census shows 38 persons of Japanese descent living in Park County, Wyoming as compared to 41 in 1940 (U.S. Bureau of the Census, 1942; 1952). Long-time residents recall only two Japanese American evacuees remaining in the Cody-Powell area following the closure of Heart Mountain (Les and Nora Bovee, oral communication, 18 June 2003). Some stayed in the Greybull/Worland area where more arable land was available along the Bighorn River and the political climate was better (Paul Fees, oral communication, 19 June 2003). Those who did remain likely married into Wyoming families. Similarly, the Japanese American population of the northwest Wyoming counties as well as adjacent Montana counties declined slightly from 1940 to 1950 (U.S. Bureau of the Census, 1942b; 1952b). Statewide, persons of Japanese descent declined dramatically from 1,286 in 1940 to 438 in 1950 (Figure 4.10) (U.S. Bureau of the Census, 1942a; 1952a).

Land Dispersion. With the announcement in February 1945 that there would be no center-operated agricultural program on the Heart Mountain lands in 1945, center farmlands were declared surplus and reverted to the Bureau of Reclamation (Staff, 24 February 1945). By March 1945, numerous Park County farmers had bid on leases to 1,753 acres of the center’s former farmlands (Staff, 24 March 1945). The land leased from the State of Wyoming for the center sawmill was transferred to the Powell Girl Scouts for use as a summer camping site (Thye, 1947).
Following closure of the center, and clearing of much of the remains of the center from the surface, homesteaders moved into the area. The first drawing for Heart Mountain Division lands occurred in February 1947. Other drawings were held in 1948 and 1949. Ultimately, 217 farm units were transferred to new owners (Churchill, 1979).

Infrastructure Dispersion. Coincident with the announcement in February 1945 that there would be no center-operated agricultural program on the Heart Mountain lands in 1945, officials also declared all agricultural equipment and supplies as surplus (Staff, 24 February 1945). Buildings and various other center equipment were sold following the closure of the center (Burton et al., 2002). Each “homesteader” on the former center lands was entitled to 2, 20 feet x 120 feet barracks for $1 apiece. Each barracks was typically cut into thirds and hauled away (Les and Nora Bovee, oral communication, 18 June 2003) (Figure 4.25). Of the 720 barracks that the Bureau of Reclamation deemed sufficient to be houses for homesteaders, 326 were moved to homesteader lands on the division by 1948. Non-profit organizations received 70 structures and the Bureau of Reclamation kept 104. The remainder went to homesteaders in the 1948 and 1949 drawings (Churchill, 1979). Barracks and various other center buildings were transformed into homesteader houses as well as garages, barns, and various outbuildings. One can see these
former center buildings at farms along U.S. Highway 14-A between Cody and Powell (Figure 4.26). At least 23 partial to full barracks plus one “large quonset” were scattered throughout the area as of June 2003 (Heart Mountain Foundation, unpublished data, 18 June 2003). Lumber and items such as doors and bricks were incorporated into many remodels in the area and moved at least as far away as Riverton 150 miles south of the center (Les and Nora Bovee, oral communication, 18 June 2003; Murray, n.d.). That which was not trucked from the site was likely burned, buried, or shoved aside.

Remains of Heart Mountain. Burton et al. (2002) describe in detail the nature of Heart Mountain as of about 2000. Along with two students, I also visited the area in June 2003. Similar to Burton et al (2002), we observed remains of the center scattered about a large area.

Little is left of the evacuee residential portion of the center. Once buildings and other center debris were removed, this area was farmed. A small concrete building that may have been an engineering room remains at the site of the former high school (Figure 4.27). Several roads running through the farm fields may remain from the former evacuee area.

Figure 4.25. One-third of a barracks being moved from Heart Mountain Relocation Center to a homestead. Later, each would be remodeled for the new settlers. Image used by permission from Churchill (1979, p. 95).
Figure 4.26. Remains of barracks on farm near former Heart Mountain Relocation Center. Author photograph, June 2003.

The most intact portion is a 71 acre parcel owned by the Bureau of Reclamation that includes the former hospital, staff housing, and administration complexes (Figure 4.12). Three buildings of the hospital complex remain including the prominent and distinctive heating plant and its chimney (Figure 4.28), a warehouse, and a mess hall. One house remains in the staff housing area between the hospital and the administration area. Center-era power poles, concrete slabs, fire hydrants, manholes, concrete sidewalks, and concrete foundations are present in the hospital and staff housing areas. The administration area also includes the reconstructed Honor Roll that was reconstructed in 2004 and honors Heart Mountain veterans. A walking tour of the area was dedicated in 2005 (LaDonna Zall, written communication, 23 February 2007). Russian olive and cottonwood trees plus lilacs remain in the administration and staff housing areas (Figure 4.29).

Rock-lined walkways also remain in the open area between the hospital and the staff housing. Linear scraped areas near the abrupt edge of the hospital and staff housing escarpment and piles of debris at the escarpment indicate past bulldozing (Figure 4.30). Fresh-looking quartzite, gneiss, and granitic rocks in these debris pile may be the remnants of gardens in the evacuee or staff housing areas.
Figure 4.27. View east across former evacuee residential area, Heart Mountain Relocation Center. Arrow at right points to concrete engineering room at former high school. Arrow at left points to a road that may date to the relocation center. Note badland topography of McCullough Peaks area in background. Author photograph, June 2003.

Figure 4.28. Former hospital heating plant, Heart Mountain Relocation Center. Author photograph, June 2003.
Figure 4.29. Trees in former administration and staff housing areas, Heart Mountain Relocation Center. View southwest. Author photograph, June 2003.

Figure 4.30. Berms left between successive bulldozer passes within the former hospital and staff housing areas, Heart Mountain Relocation Center. Author photograph, June 2003.
In the warehouse area, a root cellar and concrete slabs remain. Part of the original perimeter fence also remains in the warehouse area (Figure 4.31). The swimming hole remains as a large depression (Burton et al., 2002).

Outlying areas also contain evidence of the former center. The foundation for the low level pumping plant remains on the left bank of the Shoshone River and the large concrete water reservoir remains on the pediment surface northeast of the former evacuee residential area. Seven Japanese Americans who were first buried in the center’s cemetery were reburied in the Crown Hill Cemetery in Powell (Figure 4.32) prior to the center cemetery being turned into farmland (Burton et al., 2002).

A small portion of the original center received National Historic Landmark status in September 2006 (U.S. Bureau of Reclamation, n.d.). The Heart Mountain Memorial Park and Honor Roll is located on this land. A historical monument is also located on U.S. Highway 14-A near the entrance to the center. The Buffalo Bill Museum archives and the Heart Mountain Foundation archives hold photographs and limited documents related to the center. The Heart Mountain Foundation has plans to work with the National Park Service to stabilize existing buildings, recreate a portion of an evacuee residential block, develop and lead walking tours, and build a resource learning center in which to hold their ever-growing archival materials (National Park Service, n.d.a; National Park Service, n.d.b).

Figure 4.31. Remains of wooden perimeter fence in former Warehouse area, Heart Mountain Relocation Center. Compare to more recent steel fence posts to the right. Author photograph, June 2003.
Wyoming’s Northern Bighorn Basin Today. The northern Bighorn Basin continues to be a primary agricultural area. Powell persists as an agricultural service center for the lands of the Shoshone Project, and is the home of Northwest College. Farmers on the irrigated lands of the Shoshone Project raise sugar beets, alfalfa, beans (Great Northern and pinto), and barley (for beer brewing) (Les and Nora Bovee, oral communication, 18 June 2003). Cody continues to thrive as a tourist gateway to Yellowstone National Park. U.S. Highway 14-A is a main route through the northern Bighorn Basin as is the Burlington Northern Santa Fe Railroad (formerly the Chicago, Burlington and Quincy Railroad).

As of 2005, the population of Park County was 26,664, a 3.4% increase since 2000. The population density of the county is lower than that of the overall state—i.e., 3.7 versus 5.1 persons per mi² as of 2000. Over 94% of Park County’s resident’s are white and non-Latino as compared to 88.6% statewide. In addition to whites, only Latinos have a significant impact on the race and ethnicity of the basin (U.S. Census Bureau, n.d.).
Beyond the distinctive hospital heating plant smokestack, the several hospital buildings, and the Heart Mountain memorial on Bureau of Reclamation lands as well as the Veterans of Foreign Wars monument on U.S. Highway 14-A, little obvious remains of the Heart Mountain Relocation Center. By looking harder, one can still see the barracks and various other center buildings scattered throughout the northern Bighorn Basin on various farmsteads. Perhaps the most lasting heritage of the center are the approximately 1,700 acres of farmlands developed by the evacuees that continue to be productively farmed (Figure 4.33).

Figure 4.33. Contemporary farmland on former ands of Heart Mountain Relocation Center. Farmland on Cody Terrace. Note riser leading to Powell Terrace and the lands of the main portion of the center. Also, note Hospital heating plant on skyline. Author photograph, June 2003.

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