CHAPTER 11
CONCLUSIONS

Thus far, this study has focused on the geography of each Japanese American relocation center located in the Western United States. However, much can be learned about the overall geography of Japanese American relocation through comparison and contrast of the various sites. In this concluding chapter, the emphasis is on the similarities and differences between the centers. As you will see, many parallels exist between the various western relocation centers. At the same time, the sites differ in significant ways.

Location

The eight western relocation centers ranged over 12° of latitude. The northernmost of the centers—Heart Mountain—was located at nearly 45°N latitude while the southermost—Gila River—resided at approximately 33°N latitude. All sites are in the mid-latitudes.

All western centers were located west of the 100th meridian with Tule Lake the westernmost at 121°W and Amache the furthest east at 102°W longitude. All could be considered continental (as opposed to marine) in location with Tule Lake and Manzanar lying approximately 150 and 200 miles inland, respectively, and on the inland side of prominent mountain ranges. Heart Mountain, at 750 miles inland, and Amache, at about 1,100 miles inland, were the most continental sites.

Because of the elevated nature of much of the inland, western U.S., most of the sites were located at moderate elevations. The highest—Heart Mountain—was located at about 4,700 feet above sea level (asl). All except Gila River and Poston were situated above 3,500 feet asl. Poston was the lowest site at 300 feet asl.

Physical Setting

Physiography, Geology & Landforms. Most of the sites were located in the Basin and Range Physiographic Province (Table 11.1). The bedrock geology varied from sedimentary rocks at Amache to intrusive igneous rocks and metamorphics at Manzanar to volcanics at Tule Lake. However, the location of the centers on low relief plains, valleys or basins means that all were situated to some degree on recent sedimentary fill, typically deposited by streams (e.g., Poston), lake wave action (e.g., Tule Lake), or wind (e.g., Minidoka).

The landforms of the centers ranged from pediments and river terraces at Heart Mountain to volcanic plains at Minidoka to alluvial fans at Manzanar. Three of the centers (Tule Lake, Topaz, and Manzanar) were located in late Pleistocene lake basins. Minidoka’s topography was
Table 11.1. Physical geography of the eight western Japanese American relocation centers.

<table>
<thead>
<tr>
<th></th>
<th>Amache</th>
<th>Heart Mtn.</th>
<th>Minidoka</th>
<th>Tule Lake</th>
<th>Topaz</th>
<th>Manzanar</th>
<th>Poston</th>
<th>Gila River</th>
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<tbody>
<tr>
<td>Physiographic Province</td>
<td>Great Plains</td>
<td>Middle Rockies</td>
<td>Columbia Plateaus</td>
<td>Basin-n-Range</td>
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<td>Bedrock</td>
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<td>Extrusive Igneous</td>
<td>Extrusive Igneous</td>
<td>Extrusive Igneous</td>
<td>Intrusive Igneous</td>
<td>Extrusive Igneous</td>
<td>Intrusive Igneous &amp; Extrusive Igneous</td>
</tr>
<tr>
<td>Dominant Landform</td>
<td>Interfluve/ Floodplain</td>
<td>Pediment, Terraces</td>
<td>Volcanic Plain</td>
<td>Lake Basin, Tuff Cone</td>
<td>Alluvial Fan</td>
<td>Alluvial Fan</td>
<td>Floodplain</td>
<td>Pediment, Alluvial Fan</td>
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<tr>
<td>MAT</td>
<td>54°F</td>
<td>48°F</td>
<td>48°F</td>
<td>47°F</td>
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<td>59°F</td>
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<td>Annual Temp Range</td>
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<td>50°F</td>
<td>50°F</td>
<td>35°F</td>
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<tr>
<td>Growing Season</td>
<td>162 days</td>
<td>133 days</td>
<td>123 days</td>
<td>80 days</td>
<td>117 days</td>
<td>210 days</td>
<td>297 days</td>
<td>247 days</td>
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<tr>
<td>MAP</td>
<td>14.2 inches</td>
<td>5.7 inches</td>
<td>9.8 inches</td>
<td>10.3 inches</td>
<td>6.4 inches</td>
<td>4.6 inches</td>
<td>4.3 inches</td>
<td>8.4 inches</td>
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<td>Koppen</td>
<td>BSk</td>
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<td>BSk</td>
<td>Csb</td>
<td>BWk</td>
<td>BWk</td>
<td>BWh</td>
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<tr>
<td>Dominant Soils</td>
<td>Aridisols, Entisols</td>
<td>Aridisols, Entisols</td>
<td>Aridisols Entisols, Inceptisols, Mollisols</td>
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<tr>
<td>Discharge</td>
<td>173 cfs</td>
<td>919 cfs</td>
<td>1,828 cfs</td>
<td>?</td>
<td>179 cfs</td>
<td>?</td>
<td>13,969 cfs</td>
<td>346 cfs</td>
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<tr>
<td>SAR</td>
<td>12</td>
<td>?</td>
<td>4</td>
<td>?</td>
<td>40</td>
<td>?</td>
<td>12</td>
<td>19</td>
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<tr>
<td>Dominant Biota</td>
<td>Steppe</td>
<td>Shrub</td>
<td>Steppe</td>
<td>Steppe-Mixed Forest</td>
<td>Shrub</td>
<td>Shrub</td>
<td>Shrub</td>
<td>Desert</td>
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<tr>
<td></td>
<td>Steppe</td>
<td>Steppe</td>
<td>Steppe</td>
<td>Steppe</td>
<td>Steppe</td>
<td>Steppe</td>
<td>Steppe</td>
<td>Desert</td>
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partially shaped by a mega-flood released from late Pleistocene Lake Bonneville, the largest of the late Pleistocene lakes.

*Weather and Climate.* The weather and climate of the sites have four distinct commonalities—large temperature ranges, aridity, windiness, and high evaporation. Seven of the eight sites were classified as deserts based on the Koppen climate classification system. Tule Lake is classified as a Mediterranean climate.

Because of the inland, moderate elevation locations, and associated clear, dry, and thin air, each site experiences large daily and annual temperature ranges (Table 11.1). However, the large range in latitude and elevation leads to much variability in terms of mean annual temperatures ranging from 46°F at Heart Mountain to 72°F at Poston. As a result of a range in latitude, elevations, continentality, and local topography, growing seasons range from 80 days at Tule Lake to 297 days at Poston.

Also because of the inland, as well as, leeward locations, each is arid. Precipitation ranges from 4.3 inches/year at Poston to 14.2 inches/year at Amache. The most inland sites—Amache and Heart Mountain—have distinct summer precipitation maxima because of convective uplift associated with continental heating. Conversely, the more continental margin and northerly sites—Minidoka, Tule Lake, and Manzanar—have winter precipitation maxima associated with the passage of mid-latitude cyclones. Those sites that are more intermediate in continentality and located further souths—Topaz, Poston, and Gila River—experience winter and summer precipitation maxima associated with convective uplift (summer) and passage of mid-latitude cyclones (winter).

Because of the lack of vegetation and relief in the immediate areas of the centers combined with the position of each in mid-latitude storm tracks, and the development of local pressure gradients related to differential heating, each site is windy. Associated with the wind as well as arid conditions, annual evaporation far out paces precipitation ranging from 38 inches at Minidoka to 84 inches at Poston.

*Soils.* The soils of each of the sites were shaped by the five soil forming factors—parent material, climate, topography, biota, and time. The parent material for most of the soils was alluvium associated with low gradient floodplain and deltaic deposits, alluvium and colluvium of alluvial fans, eolian dune sand or loess, volcanic sediments, and residuum associated with weathered bedrock. Because of the youthful nature of most of the geologic deposits, soils are commonly immature entisols and inceptisols (Table 11.1). Aridisols reflect the generally arid or semi-arid conditions of each of the eight sites. The sparse native vegetation of the sites has added little organic matter to these soils over time. Nearly all soils are alkaline because of the dry climate. Poor drainage in some situations also combines with aridity to cause saline soils. Most of the center soils had moderate to very severe limitations for irrigated agriculture because of alkaline and sometimes saline characteristics, combined with poor drainage, stoniness, or erosion issues.
**Water.** Despite the generally arid conditions, each site is characterized by its proximity to an exotic river originating in often distant, humid mountains. Annual average discharge in these rivers ranged from 173 cfs on the Arkansas River (Amache) to 13,969 cfs on the Colorado River at Poston (Table 11.1). The former relocation centers lie in the great watersheds of the U.S. including the Mississippi (Heart Mountain and Amache), Colorado (Poston and Gila River), and the Columbia (Minidoka). Three of the settings (Manzanar, Topaz, and Tule Lake) lie in the hydrologic Great Basin where water that enters departs only via evaporation.

Only Manzanar is located near perennial streams of local origin. All other sites are characterized by ephemeral streams resulting from thunderstorms or rapid snowmelt. Surface water at most of the relocation center reflects the aridity of the region with moderate to high levels of salinity and sodium hence elevated specific conductance and sodium adsorption ratios. Because of the river valley or tectonic basin settings of most of the sites, groundwater is located at generally shallow depths. Groundwater, like surface water, is typically alkaline and saline. The better quality groundwater is typically found at greater depths.

**Biota.** The vegetation of the sites are classified as steppe (Amache), shrub steppe (e.g., Heart Mountain), mixed forest-steppe (Tule Lake) or desert (e.g., Poston) (Table 11.1). Vegetation communities in each of the settings reflect the generally arid conditions as well as the limited riparian conditions of the settings, soil chemistry, and human land uses. Uplands are characterized by xerophytic shrubs, grasses, and cacti. Halophytic shrubs and grasses are present in more saline, moist settings at each of the sites. Despite the overall aridity of the areas, hydrophytes and phreatophytes may be found in moist and wet settings along rivers. Gallery forests traditionally dominated by cottonwood and willow are present at Amache, Heart Mountain, Poston, and Gila River. More recently, tamarisk has become a key invasive species in these settings.

Wildlife at each of the settings includes mammals (large and small), birds, and reptiles. Of particular note, Amache, Heart Mountain, and Minidoka were all frequented by bison until the mid- to late 19th century. Adjacent to Tule Lake, the Tule Lake National Wildlife Refuge was established because of the abundant waterfowl of the area.

**Human Setting**

**Race, Ethnicity and Religion.** A variety of racial and ethnic groups influenced the areas subsequently occupied by each of the western relocation centers. Additionally, religious groups played a role in cultural geography patterns at several of the centers.

Each of the areas was frequented by Native Americans. In some cases, Native Americans lived for a significant portion of the year in the vicinity of the subsequent relocation center (e.g., Gila River, Manzanar, Poston, and Tule Lake). Early Native American agriculture made this possible at Manzanar, Poston, and Gila River. At the remainder of the sites, Native Americans primarily passed through the area in search of food and other resources. Akin to what happened
throughout Western North America, Native Americans initially co-existed with EuroAmericans; however, this changed over time. Battles occurred between Native Americans and EuroAmericans near the subsequent locations of Amache, Tule Lake, Topaz, Manzanar, and Poston. The most famous of these conflicts was the Modoc War in the Tule Lake Basin. Because of these conflicts, the U.S. military had a presence in nearly all of these settings. Two of the relocation center sites were ultimately located on Indian reservations—i.e., Poston and Gila River.

Spaniards, either as explorers or as clergy, were the first EuroAmerican visitors to the more southern of the sites including Gila River, Poston, and Amache, as well as Topaz. Conversely, American, French, and British fur trappers explored and trapped the rivers and tributaries of each of the centers. Chinese immigrants in the vicinity of the future sites of Gila River, Manzanar, and Minidoka were employed as railroad laborers, miners, and cooks. Mexicans populated the areas near Amache, Heart Mountain, Minidoka, and Gila River serving as laborers in the sugar beet industry or at mines near Manzanar. Russian Germans settled the areas near Amache and Heart Mountain working in sugar beet agriculture prior to the establishment of the relocation centers. Czechoslovakian immigrants settled near Minidoka and Tule Lake where they homesteaded while Greeks and Basques settled Idaho’s Snake River Plain. The Church of Jesus Christ of Latter Day Saints (i.e., Mormons) played a key role in the settlement and economic patterns at Heart Mountain, Topaz, and Gila River through their collective influences on irrigated agriculture.

In general, the counties in which the relocation centers were subsequently established were not places frequented by Japanese Americans prior to evacuation and construction of the centers. Persons of Japanese descent were present in the vicinity of each of the future relocation centers prior to their establishment but in much lower numbers than the other racial and ethnic groups mentioned above. For example, Park County, Wyoming, with 41 in 1940, had the highest number of Japanese Americans of any of the counties that was subsequently selected for a western relocation center. Conversely, Pinal County, Arizona, subsequent home of Gila River, had no Japanese Americans in 1940. When considering the relocation center county as well as all adjoining counties, Manzanar was situated in the area with the greatest Japanese American population (7,493) while Tule Lake and Amache each had less than 100 in 1940.

_Economic Geography._ A variety of economic activities have occurred on and adjacent to the lands on which the eight western Japanese American relocation centers were located in 1942 including hunting and gathering, agriculture, mining, and transportation. Each of these activities have somehow been related to water, either as precipitation or as runoff in the area’s streams and rivers.

Native Americans used a combination of hunting, fishing, and gathering in each of the areas. Bison were hunted with horses on the plains adjacent to Amache and Heart Mountain. The close proximity to mountains in the Basin and Range settings of Tule Lake, Topaz, and Manzanar meant that hunters and gatherers could exploit basin floor to alpine resources in different
seasons. These patterns were epitomized by the Modocs of the Tule Lake Basin who began harvesting fish, waterfowl eggs, and roots in the lowlands in spring before moving to higher elevations for roots, small game, big game, and berries as the summer and fall progressed. Winter found them back on the shores of Tule Lake where they fished and hunted as well as lived off their preserved foods.

Despite aridity, variable growing seasons, and generally poor soils, agriculture was the dominant economic activity in historical times in all of the areas subsequently selected for relocation centers. Many of the areas were grazed by cattle early in the EuroAmerican settlement. Transhumance occurred in the vicinity of Minidoka and Manzanar in a similar pattern to that of Native American hunter gatherers who followed resources upslope as the year progressed. All of the relocation center sites were too dry for successful non-irrigated agriculture in most years. Even southeastern Colorado, with approximately 14 inches of average annual rainfall over the 1931-1960 period, experienced prolonged drought that did not bode well for dryland agriculture. The combination of dryland agriculture attempts and dry years led to this area being part of the severely eroded area known as the Dust Bowl.

Native Americans paved the way for successful irrigated agriculture well prior to the arrival of EuroAmericans at Manzanar, Poston, and Gila River. Because irrigation often requires cooperation in labor and funding, Mormons were instrumental in the development of EuroAmerican irrigation in the vicinity of Heart Mountain, Topaz, and Gila River beginning in the mid-19th century. However, it was not until the passage of the Carey Act in 1894 and the Reclamation Act in 1902 that irrigated agriculture really took off in these areas. Sugar beets, alfalfa, and various small grains were common to Amache, Heart Mountain, Minidoka, Tule Lake, and Topaz. Fruit was grown at Amache, Heart Mountain, Minidoka, and especially, Manzanar. Melons were common in the three more southerly sites. U.S. Bureau of Reclamation project lands in northwestern Wyoming (Shoshone), south central Idaho (Minidoka), and north central California (Tule Lake) were prime agricultural lands ripe for development as of 1942. The subsequent establishment of relocation centers on these lands greatly aided in their development and settlement following World War II. Early irrigators encountered a variety of problems in these areas including waterlogging and salinization of the soils. This was especially true in the vicinity of Heart Mountain, Minidoka, Tule Lake, Topaz, and Poston. Waterlogging, and subsequent salinization was so bad near Topaz that these conditions, combined with drought, insect infestation, and overall economic conditions, led to the abandonment of lands there prior to World War II.

Over time, each of the western relocation center areas was in a prominent transportation corridor for travelers on foot, wagon, stage, railroad or automobile. This was especially true because none of these areas were particularly attractive destinations. Two of the sites were located on major immigrant trails. Approximately 50,000 immigrants traveled the Oregon Trail between 1836 and 1861 just south of the future Minidoka Relocation Center. Tule Lake was located near the Southern Emigrant (or “Applegate”) Trail that paralleled the Oregon Trail from Fort Hall to the Willamette Valley. Additionally, it was located on the California-Oregon Trail that extended
from western Oregon to central California. The area adjacent to Amache received railroad service earlier than any other center—1873—while railroad service did not reach the Tule Lake Basin until the late 1920s. Tourism sparked development of transportation systems in two of the areas. Visitors traveled through Wyoming’s Bighorn Basin by railroad or automobile to Yellowstone National Park. Tule Lake Basin visitors came via automobile to see Lava Beds National Monument as well as waterfowl at the Tule Lake National Wildlife Refuge. Further, the Manzanar site was adjacent to the Alabama Hills, a prime movie-making spot since before 1920. An important, although not always paved, highway passed near each of the sites as of 1942.

All of the centers were located within 15 miles of a small town. These ranged from 330 residents at Sacaton, Arizona to nearly 2,000 at Powell, Wyoming and Jerome, Idaho. Most, however, lay distant from cities. Other than Gila River’s location within 30 miles of Phoenix, all were more than 125 miles from a major city. While generally distant from large cities, the fate of at least one of the settings was determined by a large city. The City of Los Angeles began buying land and water in the Owens River Valley in the first decade of the 20th century. By 1933, it owned 95% of all Owens Valley farmland, and 85% of all property thus controlling land use and human populations in the valley.

Why There?

The U.S. War Relocation Authority, with the help of various U.S. Government agencies, selected the sites because each: 1) lay inland from the West Coast; 2) had ample available land; 3) had relatively level land conducive to construction; 4) had agricultural potential; 5) was distant from key military sites; 6) had adequate water supplies for irrigation and domestic uses; and 7) was near roads and railroads necessary to provide access to evacuees and supplies. Four of the eight sites lay outside the Military Exclusion Zone including Amache, Heart Mountain, Minidoka, and Topaz.

Most of the sites were on public lands. Heart Mountain, Minidoka, and Tule Lake were situated on U.S. Bureau of Reclamation lands. Manzanar was located on City of Los Angeles lands while Poston and Gila River lay on Indian Reservation lands. Only Amache and Topaz were located on private lands that required purchase by the U.S. Government. All sites were chosen over the objections of area residents. Gila River and Poston were chosen against the wishes of their respective Tribal Councils. Only Colorado Governor Ralph Carr welcomed evacuees. Some governors were ambivalent to the prospects of evacuees coming to their states while Idaho Governor Chase Clark and Wyoming Governor Nels Smith were outright opposed to Japanese American evacuation to their respective states. While the siting of the centers was generally opposed by residents in each of the chosen settings, the blow was softened by the view that Japanese American evacuees were potential farm laborers, and would aid in the development of the three U.S. Bureau of Reclamation areas and the Indian Reservation lands.
Building the Centers

Construction of each of the centers began in spring or summer 1942, and was generally sufficiently complete to house Japanese American evacuees within two to three months. This meant that the infrastructure for complete towns of about 7,300 at Amache to nearly 19,000 at Tule Lake, were constructed during this time period. This included roads, water, sewer, electricity, housing, mess halls, administration, offices, schools, and warehouses. The construction of the centers, and associated payrolls and purchase of supplies and services, was a welcome boost to the local economies, especially given that some of the areas were still feeling the effects of the economic Depression that began in the late 1920s.

Most centers were laid out in a grid pattern aligned with True North. However, topography at Minidoka, an existing highway at Manzanar, and a railroad at Tule Lake caused the WRA to deviate from this pattern. Each of the centers had generally similar patterns of construction with a main area that included evacuee housing, mess halls, hospitals, schools, and community cooperative businesses. These were typically separated by a fence from administration, warehouse, staff housing, military police, and motor pool facilities. This main area was often surrounded by a fence punctuated by guard towers. Only at Minidoka and Gila River was the area unfenced. The main areas of each of the centers was surrounded by, or adjacent to, agricultural operations. Gila River and Poston differed from the rest of the centers in that they consisted of multiple camps—Canal Camp and Butte Camp at Gila River, and Poston I, II, and III at Poston. The construction of three relocation centers—Amache, Heart Mountain, and Topaz—included reuse of old Civilian Conservation Corps (CCC) buildings.

Evacuee housing blocks occupied the majority of the main portions of each of the centers. Typically, 12-14 barracks were present in each residential block with each block designed to serve 250-300 evacuees. Heart Mountain was an exception with 24 barracks per block. Construction of the evacuee barracks followed a modified U.S. Army “Theater of Operations” design that provided maximum housing for minimal investment. All were one-story, gable-roofed structures. However, designs of barracks varied slightly because of different U.S. Army Corps of Engineers offices overseeing construction of the various centers. The norm was a 120 feet long by 20 feet wide structure elevated 1-2 feet above ground on concrete piers and wooden posts. Typically, the barracks were supported by widely spaced 2 inch by 4 inch “studs” sheathed with horizontally laid 1 inch by 6 inch shiplap siding. Tarpaper held down by wood battens provided the outermost coating on most of the barracks walls and roofs. Because of the tar paper coatings, most of the centers were dreary affairs, adding little color to an already gray-brown landscape. Amache was an exception to this in its concrete foundations, brick floors, and beige or blue exterior asbestos shingle or fiber-board siding. Gila River barracks were sheathed in white siding to help reflect sunlight thus keep the buildings cooler. Gila River and Poston barracks had double roofs to help deal with the extreme heat at these sites.

Evacuee barracks at each of the centers were typically divided into four to six “apartments” that each housed four to eight individuals. Each apartment had a single light bulb and power outlet,
army cots and mattresses, and a coal stove. A mess hall, latrine/shower facility, and recreation building was also typically present in each residential block.

Domestic water for most of the relocation centers came from deep wells at the sites. While groundwater quality was good overall, Topaz’ water was nearly undrinkable because of its salinity. Manzanar gathered its drinking water from streams flowing from the Sierra Nevada Range. Irrigation water came from the rivers and streams of the area. Each of the centers had one or more sewage treatment plants that provided treatment before the water was again released into the area’s rivers and streams.

Origins of Evacuees

Evacuation and subsequent incarceration of Japanese Americans beginning in 1942 concerned only those Japanese Americans living in the portions of the West Coast Exclusion Zone in California, southern Arizona, and western Washington and Oregon. Most evacuees were held in regional assembly centers before being shipped to the larger relocation centers.

Most (approximately 93,000) of the evacuees came from California and initially ended up in each of the western centers. The nearly 13,000 Washington and 4,000 Oregon evacuees primarily went to Minidoka, Tule Lake, and Heart Mountain. Most of Arizona’s evacuees were sent to Poston.

Approximately, 60-65% of the evacuees in each of the centers were U.S. citizens. Urban/rural breakdowns differed from center to center. Most evacuees were urban at Heart Mountain, Minidoka, Topaz, and Manzanar while Amache, and Poston were mostly rural. Tule Lake’s and Gila River’s urban and rural populations were nearly equal.

Those evacuated to relocation centers included Japanese American orphans who were living in the restricted zone at the time of mandatory evacuation. This included even those orphans who were one-half Japanese living in Caucasian homes or those who were as little as 1/32nd Japanese. Japanese American orphans came primarily from three orphanages—Shonien (also known as the Japanese Children’s Home of Southern California) in the Los Angeles area, the Catholic Maryknoll Home in the Los Angeles area, and the Salvation Army Japanese Children’s Home in San Francisco. Some of the orphans who came to live at the Manzanar Children’s Village were orphaned by FBI arrests of their widowed fathers.

For the most part, the WRA did not keep county populations intact within the centers. However, Japanese American neighborhoods from prior to the bombing of Pearl Harbor were moved nearly intact to Minidoka with Seattle evacuees occupying one part of the center and Portland evacuees occupying another part.
Interactions with the Environment

*Physical Environment.* The first experience most evacuees had with the relocation centers was at an aesthetic level. Descriptors such as “bleak”, “black”, “desolate”, “barren”, “stark”, and “lonely” were commonly used.

The continental interior sites of the relocation centers did not bode well for the West Coast evacuees. Winter temperatures dropped to -28°F at Heart Mountain while summer temperatures soared over 120°F at Gila River and Poston. The average high temperature for June, July, August, and September 1943 exceeded 100°F with July at 111°F at Poston. Temperatures could vary as much as 50°F in a day and over 100°F during a year at Topaz.

The extreme temperatures of the areas combined with the initially uninsulated nature of the barracks to make difficult living conditions. Evacuees adjusted to the cold of the centers by huddling around coal stoves in their initially uninsulated barracks. They were issued World War I, army surplus clothing to help fend off the cold when outside. It is still difficult to imagine the hardships endured, especially by the very young and very old when they had to make a 150 feet walk to the latrine in the midst of frigid weather. On the plus side, cold weather permitted ice skating and sledding at Amache, Heart Mountain, Minidoka, and Tule Lake.

Evacuees dealt with high temperatures by pouring water on the floors of the barracks, planting trees for shade, filling garden ponds, and excavating cellars beneath the barracks. Temperatures were so high for such long periods at Poston and Gila River that many evacuees purchased evaporative coolers for their apartments. Swimming was a popular way to cool off in many of the centers as well.

Winds were frequent at the centers. Winds, combined with the common dry conditions and disturbed surfaces associated with the construction of the centers, led to frequent blowing dust. Because of the “green” lumber used in the barracks and the poor, overall construction of the barracks, it was nearly impossible to keep dust out of the structures. This was a real issue for people accustomed to keeping very tidy homes. Evacuees attempted to hold down the dust by planting grass, and flooding, roughening, or covering bare soil with gravel. High winds damaged buildings at most of the centers at one time or another. The double-roofed barracks at Poston were especially susceptible to wind damage.

Despite infrequent precipitation at each of the centers, rain, hail, and snow each caused problems. Hail associated with thunderstorms damaged crops at Heart Mountain. Thunderstorm rains caused flooding at Poston and Gila River. Adobe bricks at Poston were particularly prone to damage by excess moisture. Muddy conditions were common in the basin settings of Minidoka and Tule Lake as snow melted in the cool season.

*Agriculture.* Each relocation center had an agricultural program as agricultural potential was a primary consideration in the siting of each of the centers. Additionally, 45% of employed
Japanese Americans living in California, Oregon, and Washington were involved in agriculture in 1940 (U.S. Army–Western Defense Command, 1943). However, only Amache, Topaz, Manzanar, and Gila River lands had been farmed before. Evacuees first had to create irrigation canals and ditches, and clear and level the lands prior to farming. Mostly operating in 1943 and 1944, each program included produce for human consumption, feed crops, and livestock. Each center raised at least 20 different vegetables, many of which were traditional Japanese foods, and often, several different fruits (Table 11.2). Crops were consumed fresh in the camp dining halls or preserved in root cellars, pickled, canned, or dried. Livestock included chickens, turkeys, hogs, beef cattle, and dairy cattle, and were typically butchered and consumed on site. Seasonal surpluses were shipped to other camps or in a few cases, sold on the open market. Center agriculture was generally hampered by poor soils, short growing seasons, initially undeveloped lands, and farm equipment and labor shortages. However, evacuee farmers proved that diverse agricultural programs could be successful in the harsh center settings primarily because of labor-intensive farming methods and the large markets provided by each of the center populations. Further, evacuee labor used to prepare the virgin lands made it possible for subsequent Caucasian settlers to successfully farm after the war, especially on the U.S. Bureau of Reclamation project lands at Heart Mountain, Minidoka, and Tule Lake.

Business and Industry. Each of the centers had a consumers cooperative that operated a variety of businesses. These included general stores, shoe and clothing stores, optical shops, laundries, dry cleaners, beauty and barber shops, shoe repair shops, and electrical repair shops. Each of these businesses were typically situated in the main portions of the centers.

Each center had one or more forms of industry that supported operations within the center, assisted other centers, or helped with the war effort (Table 11.3). All centers had pickling and canning operations to address excess produce, and all except Amache had tofu production facilities. Amache and Heart Mountain created silk screen posters for the U.S. Navy, and Gila River had a model ship factory for the U.S. Navy. Manzanar, Poston, and Gila River created camouflage nets for the U.S. military. All centers had a newspaper that was published at least weekly, and in some cases, daily.

Landscaping and Gardening. Landscaping and gardening was evident in each of the eight western centers, despite or perhaps, because of the arid environments there. Barracks and mess hall gardens (often including garden ponds), parks, and victory gardens were common in the centers. Manzanar may have had the most gardens, parks, and landscaping because of the abundance of landscape professionals incarcerated there. Landscaping and gardens added beauty to the harsh environments, prevented dust, provided shade, aided the war effort, and occupied evacuees with meaningful and enjoyable activities. Gardening, and the act of growing things, allowed evacuees to have some control over their surroundings. The aesthetically pleasing gardens offered evacuees respite from harsh environments. Center victory gardens were also signs of their patriotism and provided evacuees with the foods that they had traditionally eaten. The very Japanese nature of the more ornamental gardens also allowed evacuees to express their ethnic identity. Gardening and landscaping could also be viewed as an act of defiance by
Table 11.2. Crops and livestock raised at the eight western Japanese American relocation centers, 1942-1945.

<table>
<thead>
<tr>
<th>Produce</th>
<th>Produce (continued)</th>
<th>Feed Crops</th>
<th>Livestock</th>
</tr>
</thead>
<tbody>
<tr>
<td>beans (mung)</td>
<td>mustard green</td>
<td>alfalfa</td>
<td>cattle (beef)</td>
</tr>
<tr>
<td>beans (string)</td>
<td>nappa</td>
<td>barley</td>
<td>cattle (dairy)</td>
</tr>
<tr>
<td>beans (tapery)</td>
<td>onions (dry)</td>
<td>field corn</td>
<td>chickens</td>
</tr>
<tr>
<td>beets</td>
<td>onions (green)</td>
<td>Sudan grass</td>
<td>hogs</td>
</tr>
<tr>
<td>broccoli</td>
<td>parsley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cabbage</td>
<td>peanuts</td>
<td>Seed Crops</td>
<td>Seed Crops (cont)</td>
</tr>
<tr>
<td>cantaloupe</td>
<td>peas</td>
<td>azuki</td>
<td>melons</td>
</tr>
<tr>
<td>carrots</td>
<td>peppers (chili)</td>
<td>beans (lima)</td>
<td>nappa</td>
</tr>
<tr>
<td>casaba</td>
<td>peppers (bell)</td>
<td>beans (soy)</td>
<td>onions</td>
</tr>
<tr>
<td>cauliflower</td>
<td>potato (Irish)</td>
<td>beans (tapery)</td>
<td>peas</td>
</tr>
<tr>
<td>celery</td>
<td>potato (sweet)</td>
<td>beets (table)</td>
<td>radishes</td>
</tr>
<tr>
<td>chard (Swiss)</td>
<td>pumpkin (Japanese)</td>
<td>broccoli</td>
<td>sesame</td>
</tr>
<tr>
<td>corn (sweet)</td>
<td>radishes (red)</td>
<td>cabbage</td>
<td>shingiku</td>
</tr>
<tr>
<td>cucumber</td>
<td>radishes (white)</td>
<td>cantaloupe</td>
<td>spinach</td>
</tr>
<tr>
<td>cucumber (Armen.)</td>
<td>shingiku</td>
<td>carrots</td>
<td>squash</td>
</tr>
<tr>
<td>daikon</td>
<td>shiru uri</td>
<td>cauliflower</td>
<td>sunflower</td>
</tr>
<tr>
<td>eggplants</td>
<td>spinach</td>
<td>celery</td>
<td>tomato</td>
</tr>
<tr>
<td>endive</td>
<td>squash (banana)</td>
<td>corn</td>
<td>turnip</td>
</tr>
<tr>
<td>garlic</td>
<td>squash (hubbard)</td>
<td>cucumber</td>
<td></td>
</tr>
<tr>
<td>gobo</td>
<td>squash (Ital. summer)</td>
<td>cucumber (Armen)</td>
<td>War Crops</td>
</tr>
<tr>
<td>lettuce</td>
<td>strawberries</td>
<td>daikon</td>
<td>castor beans</td>
</tr>
<tr>
<td>melons (honey dew)</td>
<td>tea</td>
<td>garlic</td>
<td>cotton</td>
</tr>
<tr>
<td>melons (Persian)</td>
<td>tomato</td>
<td>goma</td>
<td>flax</td>
</tr>
<tr>
<td>melons (water)</td>
<td>turnips</td>
<td>lettuce</td>
<td></td>
</tr>
</tbody>
</table>
Table 11.3. Industry at the western Japanese American relocation centers, 1942-1945.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Amache</th>
<th>Heart Mtn</th>
<th>Minidoka</th>
<th>Tule Lake</th>
<th>Topaz</th>
<th>Manzanar</th>
<th>Poston</th>
<th>Gila River</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adobe Brick</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bakery</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bean Sprouts</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camouflage Net</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Charcoal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Chow Mein</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Garment</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice Cream</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mattress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Model Ship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Pickling &amp; Canning</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Roof Jack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Sawmill</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shoyu</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Silk Screen</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tofu</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
evacuees who constructed these private gardens on WRA lands, stole WRA materials for the
gardens, and walked outside of center to obtain raw materials from the surrounding landscape.

Plants for landscaping and gardening were obtained from nearby environments, area residents,
various government entities, or from seed catalogs. Other raw materials such as stone and wood
were obtained from nearby environments. Irrigation in most of the centers was limited to the
domestic water supply. Only Minidoka, Tule Lake, Poston, and Gila River had readily available
irrigation water for gardening and landscaping.

Education. Each of the centers had a K-12 education program as well as an adult education
program. Elementary schools and high schools were initially located in converted barracks.
Amache, Heart Mountain, Tule Lake, Poston, and Gila River subsequently constructed high
schools. Poston’s schools were built of adobe bricks because of a desire to use the buildings
after the center closure as schools for Native American children on the Colorado River Indian
Reservation. In addition to initially inadequate and cramped educational facilities, a number of
other issues plagued education in the centers including: 1) disparity in pay between Caucasian
teachers and evacuee teachers; 2) friction between Caucasian teachers and evacuee teachers and
teaching assistants because of racial prejudice; 3) high student to teacher ratios; 4) inadequate
equipment, and supplies; 5) limited selection of courses, especially in science and foreign
language; and 6) a high teacher and teaching assistant turnover rate because of the above-
mentioned problems. Japanese language schools sprung up at Tule Lake in the turmoil following
the “Loyalty Questionnaire”. By late 1944, these schools enrolled more students than did the
public schools at Tule Lake.

In addition to K-12 students, the general populace of the center used school facilities for adult
education courses. Adult also used library facilities, and in all but Minidoka,
gymnasiums/auditoriums. Adult education courses helped prepare evacuees for the work world
outside the center with courses like typing, welding, and farm mechanics. However, personal
growth courses in such topics as flower arranging, piano, and art were also offered.

Recreation. Recreation offered evacuees an escape from boredom and the reality of their
evacuation and incarceration. Recreation opportunities were available for young to old evacuees.
Evacuees participated in a variety of recreation including dances, movies, concerts, talent shows,
variety shows, sports contests, board games, fishing, and reading. Sports were very popular
typically including at least a page in each center newspaper issue. Sports included football,
basketball, baseball, track and field, softball, boxing, weightlifting, volleyball, golf, and
badminton. Facilities were constructed by the evacuees. The epitome of these was Zenimura
Field, a 6,000 seat baseball field at Gila River. Evacuees could explore outside areas in search of
raw materials for gardens, or just to hike, especially in those centers located outside the Military
Exclusion Zone.

Culture and Art. The culture of the eight western Japanese American relocation centers was
purposely American. This was seen in language, dress, housing, meals, and business
interactions. The Caucasian administrators of each of the centers discouraged Japanese cultural activities. Despite this, Japanese cultural influences could be seen in celebrations, sports, gaming, art, and music. Traditional Buddhist celebrations such as Bon Odori and Hana Matsuri were celebrated as was Boys Day. Mochi was made to celebrate the new year. The traditional sports of judo, sumo, and kendo were practiced at the centers as were board games such as go, shogi, and karuta. Traditional arts such as bon-kei, calligraphy, wood working, flower arrangement, silk screening, and haiku were common as were traditional Japanese music and theater. Japanese customs prevailed at Tule Lake more than at any other center because segregation concentrated evacuees more oriented toward Japan.

Faith and Spirituality. A modified form of religious freedom was practiced in the western relocation centers. While the Shinto faith was banned, Buddhists, Catholics, Seventh Day Adventists, Mormons, and various Protestant churches formed in the centers. The variety of faiths practiced at the centers can be readily seen in the weekend editions of the center newspapers. Services were typically held in converted recreation halls in the residential blocks of the centers, and were sometimes led by church leaders who had moved with their congregations to the centers. Most services were in English but to better serve the Issei, some services were in Japanese.

Buddhism was likely the dominant faith in most of the centers because of a resurgence of interest following the harsh blow of evacuation, and because those most likely to relocate were more pro-American in their stances. In fact, the Buddhist Church of America headquarters relocated to Topaz for the duration of the evacuation to better serve the evacuees. Catholics and Seventh Day Adventists typically had their own congregations in the centers. However, the various Protestant faiths typically banded together to form non-denominational churches.

Health. Health was a major concern in each of the centers, especially given the crowded living conditions, stress of evacuation and relocation, foreign climates, and different diets. Each center had a modern hospital composed of multiple wings and capable of housing 100-250 patients at any one time. Facilities included general medicine, surgery, obstetrics, X-ray, children’s wards, isolation wards, pharmacies, and dental and optometry clinics. Hospitals were typically headed by a Caucasian doctor and sometimes, a Caucasian nurse. Japanese American doctors and nurses worked beneath these. It was this arrangement, combined with pay—a maximum of $19/month for evacuee doctors and nurses as compared to competitive salaries for Caucasians—that caused much conflict in the hospitals and health care programs of the centers. Problems also arose because of slow and shoddy construction of health care facilities, inadequate equipment and supplies, and an overall shortage of qualified staff.

Medical personnel at the centers faced a variety of ailments ranging from dehydration to heatstroke to silicosis associated with persistent dust to various intestinal disorders associated with sanitation, stress, diet, and domestic water quality. More serious maladies included tuberculosis (e.g., seven deaths at Topaz) and infantile paralysis (e.g., four deaths and seven
debilitations at Amache). Further epidemics were often prevented with aggressive vaccination, block nurse, public education, sanitation, and mosquito control programs.

Government. The WRA expected the evacuees to establish a form of self-government in each of the centers. This government was to be guided by a Charter, centered on the residential blocks, and typically had Community Councils and Block Managers. The Community Council was an elected body that typically dealt with over-arching policies and laws within the center while the Block Managers were either elected or appointed and dealt with day-to-day issues. In reality, Community Council and Block Manager members only served in advisory capacities to the Project Directors who had the final say on all matters related to the centers. Because of the farce of self-governance, many evacuees were apathetic regarding center government leaving elected seats unfilled. Other problems arose in center governance because of internal problems related to registration and the loyalty questionnaire. Further, Issei and Kibei were often initially prevented from serving in center government. This changed over time as the number of capable Nisei dwindled with relocation and with the recognition that the respected Issei were the natural leaders of the communities.

Community. Community is a concept that requires time, common values, and level-headedness to achieve. These characteristics were not always present in each of the centers, especially in the months immediately following evacuation. The location of the centers played a role in the sense of community and the level of unrest. Those centers closer to the West Coast hotbeds of anti-Japanese sentiment generally had more unrest than those inland. The centers of unrest were epitomized by Manzanar, Poston, and Tule Lake. The severe injustice of evacuation to a bleak, harsh, and foreign environment was a key reason why many evacuees never developed a sense of community. The rushed opening of the centers prior to their completion was also a negative because of the especially harsh initial living conditions. The mixing of evacuees from a variety of different locations (i.e., urban vs. rural), ethnic (i.e., Issei vs. Nisei vs. Kibei), and socioeconomic backgrounds (e.g., successful businessmen vs. farm laborers) detracted from community. Minidoka did a good job with this issue by moving Seattle and Portland neighborhoods nearly intact into separate parts of the center. Once in the centers, jealousies arose because the early arriving evacuees took the best housing and best jobs. Misplaced administration priorities (e.g., spending money on building a perimeter fence rather than purchasing winter clothing for evacuees) heightened problems within. Other jealousies arose with pay inequities (especially related to the Government contracted camouflage net factories). The absence of a perimeter fence and the ability to leave the center for hikes, fossil hunting, or shopping in a nearby town helped conditions within. The diminished stature of Issei and the subsequent breakdown of family structure associated with communal mess hall dining led to further community problems including juvenile delinquency. Seasonal and indefinite leaves increased the fluidity of the center populations thus preventing community. Draft registration and the loyalty questionnaire triggered large-scale unrest. Segregation resulting from the loyalty questionnaire further upset the balances achieved in the centers through transfer of evacuees to and from Tule Lake. While only Tule Lake, Manzanar, and Poston exhibited outright violence toward the respective center administrations, other centers had strikes, work stoppages, protests,
and engaged in other forms of civil disobedience including smuggling, possession of contraband, and practice of Japanese customs in response to issues raised above.

**Interaction with Surrounding Areas**

*The Outside World.* Evacuees interacted with the outside world by leaving the confines of the centers, or interacting with the general public when its members entered the centers. The degree of interaction evacuees had with the outside depended largely on the locations of each center in relation to the Military Exclusion Zone. Residents of the four centers—Amache, Heart Mountain, Minidoka, and Topaz—lying outside the Military Exclusion Zone shopped, attended events, and recreated outside the confines of the centers. For example, it was common in each of these centers for evacuee sports teams or bands to play in surrounding communities. Such was not the case at Gila River or Poston early on, or for most of the time at Tule Lake and Manzanar.

Evacuees in all of the centers could leave 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. Indefinite leaves were designed for evacuees who were to permanently depart the centers for relocation to the “outside world,” join the armed forces, be interned in a Department of Justice Internment Center, be committed to an institution, or be repatriated to Japan (U.S. War Relocation Authority, 1946).

Seasonal leaves were essential to the farmers of the West. For example, Japanese Americans (evacuees as well as “free” Japanese Americans living in the non-evacuated areas) harvested approximately 20% of the Intermountain West’s sugar beets in 1942-1944 (Fiset, 1999). Among the outside groups with which the Japanese American evacuees interacted were German and Italian Prisoners of War, and Native Americans on the Colorado River and Gila River Indian reservations.

Japanese Americans relocated to 47 of the 48 states, the District of Columbia, and the territories of Alaska and Hawaii (Figure 11.1). The result was the initial dispersion of Japanese Americans to points east, away from California. While nearly 44,000 evacuees returned to California as of 1946, over 52,000 relocated to non-West Coast states. Illinois (12,776) was the second leading destination of relocatees followed by Colorado (6,108), Utah (5,641), Washington (5,323), and Ohio (4,422) (U.S. War Relocation Authority, 1946). Arizona, California, Oregon, and Washington each lost significant percentages of their Japanese American populations. The key city destinations were Chicago (11,309), Los Angeles (10,129), Denver (3,124), Cleveland (3,089), San Francisco (2,845), Sacramento (2,769), Seattle (2,760), New York (2,036), and Salt Lake City (2,002). Relocation settings were driven by the availability of jobs, perception of safety, and the presence of other Japanese Americans. Relocations were aided by private individuals, churches, and universities. They often followed a seasonal pattern peaking in late Spring and Summer, while dropping to lows in winter months.
The relocation centers also sent 3,600 individuals to the armed forces. Many were members of the famous 442nd Regimental Combat Team that won acclaim for its fierce fighting in the European Theater of Operations.

**Other Relocation Centers.** Interactions with other relocation centers were limited to the transfers of evacuees and goods, and to athletic contests. Seven western relocation centers transferred 12,173 “disloyal” evacuees to Tule Lake following the administration of the loyalty questionnaire. In return, Tule Lake sent over 6,500 “loyal” evacuees to various centers (U.S. War Relocation Authority, 1946). Other evacuees were transferred from the Jerome, Arkansas relocation center to other centers when it closed in June 1944. Poston and Heart Mountain evacuees also went to Tule Lake to help harvest Tule Lake crops during the center-wide strike in October 1943.

Various goods were shipped from center to center. Gila River, the leading agricultural center, had shipped agricultural products to all of the other centers by January 1943. Some of the centers received surplus farm equipment when the Jerome center closed in June 1944. Tule Lake also sent furniture from its furniture shop to Topaz.

Four of the relocation centers interacted through sports. Gila River traveled to Heart Mountain, Poston went to Gila River, and Amache made it to Poston and Gila River for baseball games. It is surprising that neither Topaz nor Minidoka, both of which lay outside the Military Exclusion Zone, played each other or relatively nearby Heart Mountain.

**Closing the Centers 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.

Relocations from the centers were slow during the first half of 1945 because of the cost of relocation, fears of safety, and apprehension about housing and jobs. The pace of relocation increased following 1 June, and especially after VJ Day in mid-August. By early fall 1945, the centers were primarily populated by the very young and the very old. The centers closed in October 1945 (Amache, Minidoka, and Topaz), November 1945 (Heart Mountain, Manzanar, Poston, and Gila River), and March 1946 (Tule Lake).

**Impacts of Centers on Today’s Environments**

**Evacuee Dispersion.** Few Japanese Americans lived in the counties that subsequently housed the evacuees prior to 1942. This pattern changed very little after the closure of the centers. However, the Japanese American populations of four of the relocation center counties actually increased following their closure—Prowers County, Colorado (Amache), Jerome County, Idaho (Minidoka), Modoc County, California (Tule Lake), and Pinal County, Arizona (Gila River).
The Japanese American populations of the counties including and adjacent to three of the four centers–Minidoka, Tule Lake, and Gila River–also increased from 1940 to 1950.

Land Dispersion. Relocation center lands were sold or returned to their previous owners following the closure of the centers. Among the direct buyers at Amache and Topaz were private parties and cities (e.g., City of Granada, Colorado). The Bureau of Reclamation took back its lands at Heart Mountain, Minidoka, and Tule Lake to later allot them to homesteaders beginning in 1946. Manzanar lands were returned to the City of Los Angeles. The City of Los Angeles then leased some of the land to the U.S. Government for a war veterans housing project and to the City of Independence Veterans of Foreign Wars. Poston and Gila River lands were returned to Colorado River Indian Tribes (CRIT) and Gila River Indian Reservation ownership, respectively. Some of the lands returned to CRIT were soon colonized by various southwestern U.S. Indian tribes.

Infrastructure Dispersion. Each of the centers had more than 500 buildings on site. More than 1000 buildings were constructed at Tule Lake. Most of these buildings were removed from each of the sites between 1945 and 1947. Buildings were sold to Government agencies, businesses, educational institutions, non-profit organizations, and various private entities. These structures left the relocation centers en masse, cut into halves or thirds, or as stacks of boards. In addition, barracks were essentially given to homesteaders on the three U.S. Bureau of Reclamation projects and at the Colorado Indian Reservation. They were also given to war veterans and various tribal members at the Gila River Indian Reservation. One can readily see these buildings in the areas surrounding the former relocation centers today where they serve as houses, barns, machine sheds, fairgrounds buildings, and various club houses. Surviving barracks are least common around Amache where the lack of floor joists in these structures prevented their intact removal. Numerous motels in the vicinities of the centers were also constructed from relocation center barracks. Buildings traveled at least as far as 200 miles from the relocation center lands. Only at Tule Lake and Manzanar did significant buildings remain on site. Of particular note, over 40 buildings remained in the military police area at Tule Lake. At Manzanar, 25 staff houses remained for at least five years after the closure of the center where they were used as a war veterans housing project. Additionally, the Manzanar auditorium remained on site where it was used as a Veterans of Foreign Wars post and later, as a California Department of Transportation maintenance building.

In addition to the buildings, various other items were dispersed from the centers. Literally millions of bricks that were the floors of the Amache barracks are found throughout southeastern Colorado where they were used to construct new buildings. Adobe bricks from Poston were incorporated into building projects in nearby Parker, Arizona. Landscaping plants can be found at houses in the areas surrounding many of the centers. Equipment and supplies remaining in the centers was also dispersed to area individuals and government agencies.

Remains of the Centers. As of 2002-2003, much variability exists in what remains at the former relocation center sites. The arid to semi-arid nature of each of the sites bodes well for
preservation. However, agricultural potential appears to be the primary factor in the degree of preservation at the sites. The sites with the best preserved main areas—Amache, Topaz, Manzanar, and Gila River—all had poor quality farmland beneath those areas. The same is true of the small portions of moderately well-preserved sites at Heart Mountain, Minidoka, and Tule Lake. Because of the siting of the entire Poston relocation center on potentially farmed lands, essentially little of the former center remains.

Buildings are present on former relocation center lands at Heart Mountain, Minidoka, Tule Lake, Manzanar, and Poston. This is especially true at Tule Lake where over 40 buildings remain in the former military police, administration, warehouse, and industrial sections of the center. The adobe elementary school and auditorium remains at Poston. A tall, distinctive brick hospital boiler chimney, along with several other buildings, persists at Heart Mountain, and a basalt guard house is present at Minidoka. The remains of the centers include roads, walkways, power poles, fire hydrants, manholes, perimeter fences, sewage treatment plant settling tanks, concrete slabs, concrete foundations, and concrete piers. Root cellars and swimming hole depressions remain at Heart Mountain and Minidoka. Barracks cellars depressions are present at Gila River. Baseball backstops remain at Topaz and Gila River. Evidence of former barracks and mess hall landscaping in the forms of rock gardens and garden ponds persist at Amache, Manzanar, and Gila River. Relocation center-era trees are common at Amache, Topaz, and Poston.

Less typically remains in the former agricultural areas surrounding the main portions of the centers because of subsequent farming. However, one can often see the irrigation infrastructure including canals, ditches, and drops remaining from the relocation centers.

_The Former Relocation Center Areas Today._ Each of the eight western areas that had relocation centers remain rural and agricultural today. Each depends on irrigation water that increasingly faces competing demands in the arid West. This situation is epitomized by the Klamath Basin and the former lands of the Tule Lake Relocation Center where water is in a tug-of-war between agriculture and endangered species. The generally rising human populations in the West are also putting increasing demands on the already scarce water. The population of all but three of the counties—Modoc County, California (Tule Lake), Millard County, Utah (Topaz), and Inyo County, California (Manzanar) that formerly held relocation centers increased from 1990 to 2000.

The majority of the former relocation center lands are used for irrigated agriculture. A variety of crops are grown on these lands including alfalfa, alfalfa seed, barley, beans, canola, cantaloupes, corn, cotton, grapefruit, lemons, lettuce, olives, onions, oranges, potatoes, sugar beets, tangerines, tangelos, watermelons, and wheat. Additionally, the lands of the former relocation centers are used for municipal water supplies, landfills, migrant labor camps, a rodeo arena, and as historical interpretation sites.

Historical interpretation interest in the sites has increased dramatically over time with the widespread recognition that Japanese American relocation was a terrible event in our nation’s
history. All western relocation center sites except Poston and Gila River are on the National Register of Historic Places. As of April 2007, those six were all also designated as National Historic Landmarks (U.S. Department of the Interior, 2007). A portion of Minidoka is preserved as a National Monument, and Manzanar is now a National Historic Site. Because of a bill introduced in the U.S. House of Representatives in January 2007, it seems likely that Minidoka will soon become a National Historic Site (U.S. House of Representatives, 2007).

References


