

Iowa State University

From the Selected Works of Jeff Bremer

2021

chp-12-world-war-two-brief-history-iowa-jeff-bremer.docx

Jeff Bremer



Available at: https://works.bepress.com/jeff_bremer/6/

Iowa in World War Two

Chapter 12

Note: This is a draft “work-in-progress” chapter for a book, A Brief History of Iowa, that I am working on. This may be used for lecture notes to assist teachers, but do not quote from this without permission. Contact me at: jrbremer@iastate.edu

The Second World War was the greatest event of the twentieth century. It killed fifty million people and brought untold horror and carnage to much of the world. In the United States the war brought an end to the Great Depression and created an economic boom driven by extraordinary government spending during the conflict. Iowa and the rest of the country were spared the devastation that afflicted Europe and Asia, but more than 8,000 Iowans died during the war. Men and women from Iowa served around the world and civilians labored long hours in factories and on farms. Like Americans everywhere, families in the state grew victory gardens, collected scrap metal, bought war bonds, and lived with the rationing of staple goods. The state hosted thousands of prisoners of war while Iowa State College (now ISU) produced uranium for atomic weapons. By 1945 the state had been transformed by the war, as cities grew, people departed rural areas, and full employment and high farm prices led to widespread prosperity.

The end of the First World War had left Europe with a fragile peace. The victors, England and France, had been scarred by the terrible bloodshed. They feared another war. The Germans were humiliated in their defeat and burdened with a weak democracy that collapsed in the early Depression years. Adolf Hitler consolidated his power after his election as Chancellor in 1933, using fear and emergency decrees to eliminate any opposition. He then sought vengeance against Germany’s enemies. Italy and Japan believed that they had been cheated by the Allies, who denied them territorial gains after the war. In 1937, Japan invaded China. In 1938, Germany annexed Austria. The next year, Hitler invaded Czechoslovakia. He then made territorial demands on Poland. France and England promised to aid the country if it was attacked. Hitler invaded anyway and France and England declared war.¹

The United States avoided the conflict and remained strongly isolationist until 1941. A Gallup poll in the spring of 1939 showed that seventy percent of Americans thought that involvement in the First World War had been a mistake. But the new war went badly for the Allied powers and Germany conquered France in a swift invasion in the spring of 1940. Nazi Germany then dominated Western Europe and England alone faced Hitler. The United States was still officially neutral, but President Roosevelt signaled support for Britain by providing fifty destroyers in exchange for Caribbean bases. He then pushed for a “Lend-Lease” bill, where America provided military equipment to the beleaguered, nearly bankrupt British. In Europe, Germany conquered Yugoslavia and Greece and sent troops to North Africa. Hitler’s armies invaded Russia in June 1941 and advanced toward Moscow. The Nazi juggernaut seemed unstoppable.²

When the Japanese attacked Pearl Harbor on December 7, 1941, a sailor from Iowa, Vincent DeCook, was stationed on the cruiser *Minneapolis* about twenty miles offshore. DeCook had been born in Long Grove, a small town just north of Davenport, and served as a

¹ David Kennedy, Freedom From Fear: The American People in Depression and War, 1929-1945 (New York: Oxford University Press, 1999), 381-385, 401, 408, 421-425.

² David Kennedy, Freedom From Fear: The American People in Depression and War, 1929-1945, 438-440, 460-461, 467-470, 476, 482, 495; April 30, 1939, New York Times.

yeoman second class. About eight in the morning anti-aircraft bursts filled the sky over Pearl Harbor and DeCook saw many planes over the island. The *Minneapolis* went to general quarters. At 2:40 p.m. word arrived that Japan had declared war. The attack interrupted another Iowan, Robert Boland, who was on the way to Mass. He saw the battleship *Arizona* hit by the bomb that destroyed the ship. Three days later, aboard the undamaged *Minneapolis* as it entered Pearl Harbor, DeCook wrote that he witnessed “a sight of death and destruction.” Ships, planes and buildings had been wrecked. Boats were still hauling dead men to shore. Eighteen ships, including eight battleships, had been sunk or capsized and 2,400 Americans killed. The attack on Hawaii brought the United States into World War Two.³

Radio announcements of the attack on Hawaii shocked, and then enraged, a population that had hoped to avoid another war. Men rushed to volunteer for the military. On December 8, more than one hundred navy volunteers kept the Davenport recruiting office open until long past midnight. Jerry Twedt, an elementary-age boy living in Roland during the early 1940s, wrote that the outbreak of war brought “abrupt and wrenching changes to central Iowa.” Couples either quickly married or postponed it. Families lay awake at night worrying about their husbands or sons. Across the Midwest men joined long lines in front of court houses or recruiting stations. Six months after Pearl Harbor, on June 7, 1942, 325 men across the state took their military oath, swearing to seek vengeance for the Japanese attack. Across the country, the nation mobilized to fight a global war. The attack on Pearl Harbor left some Iowans angry and intolerant of outsiders. In April 1942, Japanese men, who were recent Iowa State College graduates, had been assaulted by a mob and chased out of Shenandoah. On the west coast 120,000 people of Japanese origin, most of them American citizens, were sent by presidential order to internment camps, deprived of their liberty for years and losing most of their hard-earned wealth.⁴

Iowa would play its part by sending its men and women to war and by marshaling its agricultural and industrial resources for victory. World War Two required an incredible effort at production that mobilized all sectors of American society. Defense spending had increased before the war began, with almost \$900 million spent each month in the middle of 1941. By the end of 1942, government expenditures equaled the size of the entire economy of 1933. In 1943 the United States alone produced more material than all of its enemies combined. New cities were created during the war, such as Los Alamos, where scientists lived to work on the atomic bomb. More than fifteen million people entered the armed forces or the civilian labor force, with millions leaving the countryside for work in urban areas. In Iowa, people went to work in

³ Kenneth W. Huck, *A Log of World War II: A Pacific Naval Diary, As Recorded by Vincent Evo DeCook, Yeoman Second Class U.S.S. Minneapolis* (Xlibirs Corporation, 2010), 9, 13-20; John Patrick Diggins, *The Proud Decades: America in War and in Peace, 1941-1960* (New York: W. W. Norton, 1988), 4-5; George A. Freund, *Hometown Heroes: Dubuque Remembers World War Two* (Telegraph Herald, 2001), 198-200.

⁴ Lisa Ossian, *The Home Fronts of Iowa, 1939-1945* (Columbia: University of Missouri Press, 2009), 19-20; Ronald Takaki, *Double Victory: A Multicultural History of America in World War Two* (New York: Little, Brown and Company, 2000), 137, 152-153; Chad W. Timm, “Working with the Enemy: Axis Prisoners of War in Iowa During World War Two,” *The Annals of Iowa* 70 (Summer, 2001), 247; Jerry L. Twedt, *Growing Up in the '40s: Rural Reminiscence* (Tampa, Florida: Mancorp Publishing, Inc., 1994), 42.

industrial jobs in towns and cities, such as Des Moines, Davenport, and Burlington. Away from factories and battlefields, civilians in Iowa rushed to support the war effort in a variety of ways.⁵

The government wanted to channel civilian energies to help with war production. Families collected tin cans and other materials, with salvage committees established across the state. In Sioux City women were encouraged to work as “kitchen salvage sergeants” and collect metal, tin cans, and rubber. One less can per week for each family saved enough steel to build 5,000 tanks. Old shovels could be used to make hand grenades. Children participated by combing through junk piles and ditches looking for scrap metal and rubber. Jerry Twedt recalled that the kids at his elementary school accumulated so much discarded metal that “the entire school was bulging with scrap metal.” Children in Winterset gathered 21 tons of scrap iron in two days, while Boy Scouts in Burlington collected nineteen tons of tin cans. The fire station in the town of Red Oak donated its 2,550-pound bell for recycling. Women across the state gave up aluminum cookware or utensils. The government also rationed rubber, as the Japanese had conquered a vital source of it in Southeast Asia. Americans collected old rubber for wartime use, ranging from floor mats in cars to old tires.⁶

Rationing of many foodstuffs was introduced in the summer of 1942, disrupting daily life for the next three years. As most people wanted to contribute to the war effort, they accepted this system’s necessity. Wartime demands led to a shortage of important commodities, to which the federal government limited civilian access. Sugar, coffee, butter, meat and canned vegetables were rationed, as well as shoes. Everyone in the country received a book of ration stamps that could be used to purchase scarce items. Each individual had a book worth 48 points, which could be spent on a variety of things. To make up for missing ingredients cooks used corn syrup to replace sugar in cookies or added yellow dye to white margarine so it looked like butter. The burden of conservation fell on women and children, who grew food, collected scrap, canned and preserved garden produce and saved, sorted, and recycled everything from paper to household grease.⁷

Tires and gasoline were also rationed, leading to many changes in daily life. The sale of new tires had halted after Japan invaded rubber-rich Southeast Asia in December 1941, while gasoline rationing began five months later in May. Fuel was not in short supply, but it was rationed to reduce the consumption of rubber. Most families received an allotment of five gallons of gasoline a week. Some, such as doctors or war workers, received more. To conserve fuel, the speed limit was reduced to 35 miles per hour. Americans took the right to travel—and the independence it gave—for granted. But they learned to take public transportation to work or to walk more. Those in rural areas found ways around government regulations. Vernon

⁵ John Morton Blum, V Was For Victory: Politics and American Culture During World War Two (New York: Harcourt, Brace and Company, 1976), 91; Geoffrey Perrett, Days of Sadness, Years of Triumph: The American People, 1939-1945 (New York: Coward, McCann and Geoghegan, Inc., 1973), 257, Alan M. Winkler, Home Front, U.S.A.: America During World War Two (Wheeling, Illinois: Harlan-Davidson, 1986), 1, 9, 14, 21.

⁶ Alan Winkler, Home Front, U.S.A.: America During World War Two, 31-32; Geoffrey Perrett, Days of Sadness, Years of Triumph: The American People, 1939-1945, 233; Lisa Ossian, The Home Fronts of Iowa, 1939-1945, 101-103, 147-148; January 3, 1943, Sioux City Sunday Journal; Jerry L. Twedt, Growing Up in the '40s: Rural Reminiscence, 45.

⁷ Doris Kearns Goodwin, No Ordinary Time: Franklin and Eleanor Roosevelt: The Home Front in World War Two (New York: Simon and Schuster, 1994), 355; Winkler, Home Front, U.S.A., 37-39; William L. O’Neill, A Democracy at War: America’s Fight at Home and Abroad in World War Two (Cambridge: Harvard University Press, 1993), 137.

Sietmann, of Marshall County, recalled that farmers removed tires from their tractors or combines and illegally used them on their cars. Auto fatalities plummeted nationwide, as Americans drove less. Entertainment became simpler during the war, as people read books or completed crossword puzzles. Publishers marketed cheap paperback books that sold for twenty-five cents. Social lives improved, as Americans got to know their neighbors better. Families found a new interest in cooking or sewing. Tens of millions still went to movies though.⁸

Families also turned to growing their own gardens to help feed themselves and to free up foodstuffs for the war effort. This saved money, as well as rationing points. Americans grew twenty million victory gardens, raising vegetables everywhere—from big rural fields to small backyard plots. Ten million gardens appeared in urban areas. Des Moines had 2,000 such plots. Amateur gardeners grew a variety of vegetables, with the most popular being corn, tomatoes, squash, beans, peas, carrots, and lettuce. In Council Bluffs, more than 2,000 children grew gardens, harvesting more than 11,500 bushels of food. By the end of 1943, Iowans had planted 455,000 victory gardens, totaling 70,000 acres. About two-thirds of Iowa families took part in 1944. Professors at Iowa State College had a common garden, with more than 200 academics working in it. Factory workers in Des Moines tended crops after their shifts ended. Schools and prisons also grew gardens. Victory gardens grew about one-third of all vegetables consumed during the war.⁹

People across the country also bought war bonds, providing billions for the war effort, while saving money for the future. Bonds could be sold in modest amounts, such as \$25. This encouraged ordinary people to invest in the war effort. The \$25 bonds were purchased at a cost of \$18.75 and would be paid out in ten years, averaging about three percent interest each year. The federal government conducted a series of war bond drives to help pay the cost of the conflict and keep the national debt down. Investing in bonds also kept wartime inflation in check, as it reduced the demand for scarce goods. Young Jerry Twedt saved a dime a week to buy ten-cent war stamps, which could buy larger bond amounts. “We all had relatives who were soldiers, and spending the money on ourselves was like stealing from them,” he wrote.¹⁰

Bonds were sold by appealing to the patriotism of Americans, as well as their fears of fascism. In July 1942, Des Moines hosted a two-mile long parade, with 10,000 marchers that included World War One veterans and the Drake University band. Civilian air patrol planes flew overhead, dropping leaflets encouraging Iowans to buy war bonds. Army jeeps visited towns and cities, offering rides to those who invested in a war bond. Buying a \$25 bond could earn a movie ticket. Merchants in Des Moines contributed proceeds from one day’s sales—\$760,403—to invest in bonds. Their money helped finance two B-17 bombers through the “Buy Bombers

⁸ Doris Kearns Goodwin, No Ordinary Time: Franklin and Eleanor Roosevelt: The Home Front in World War Two, 355-359; John Morton Blum, V Was For Victory: Politics and American Culture During World War Two, 96; Geoffrey Perrett, Days of Sadness, Years of Triumph: The American People, 1939-1945, 238-239; Mark Jonathan Harris, Franklin D. Mitchell and Steven J. Schechter, The Homefront: America During World War Two (New York: G. P. Putnam’s Sons, 1984), 76-77.

⁹ Winkler, Home Front, U.S.A., 32, Ossian, The Home Fronts of Iowa, 1939-1945, 134-137; William L. O’Neill, A Democracy at War: America’s Fight at Home and Abroad in World War Two, 137.

¹⁰ Ossian, The Home Fronts of Iowa, 92-100; Jerry L. Twedt, Growing Up in the ‘40s: Rural Reminiscence, 44-45.

With Bonds” project. By the time the war had ended, Iowans had purchased \$2.4 billion in war bonds.¹¹

The small northern Iowa town of Estherville, and the surrounding Emmet County, sacrificed much for the war effort. Two of its citizens were at Hickam Field in Hawaii when the Japanese air raid started the war. More than 1,400 men from Emmet County joined the military during the conflict. Fifty-five men from the county lost their lives, a rate about double that of the state overall. Deemer Lee, editor of the local paper, proudly noted that county citizens bought more war bonds than their quota in each of the eight bond drives during the war. “Sales resulted largely because of a deep sense of responsibility to support the war and particularly the local men engaged in military action,” he wrote. Residents gathered scrap iron and tin cans and gave many thousands of dollars to the Red Cross. “Businessmen helped farmers harvest their crops,” he recalled fondly, and people gathered surplus clothing for their Russian allies. The town surgeon volunteered and was sent to Europe. Throughout the war, manpower shortages plagued the area. Lee employed Dorothy Story to work in his newsroom. She impressed him so much that she continued as an employee after the war.¹²

Iowans volunteered for the armed forces or were drafted, with 286,600 men serving during the war. The Defosse family from Mediapolis sent six sons to join the military. Fortunately, all of them returned, but many families were not so fortunate. Of the total enlistment from the state, 8,398 died during the conflict. Iowans served across the globe, in all theaters of war. Both men and women served, with females in non-combat duties. The first Iowan to die was nineteen-year old Melvin Laskowski from Sheffield, who was killed while on duty at Pearl Harbor. Ted Allenby, from Dubuque, was a gay man who volunteered for the Marines and fought at Iwo Jima. Frank Sanache, a Meskwaki from Tama, served as a code talker in the army in North Africa. Luther Smith served with the army air force as one of the famed Tuskegee airmen. Harold Hayes, an Iowa army medic, survived a plane crash and a two-month ordeal in Albania, while Darlene Diebler Rose endured years in a Japanese prisoner of war camp.¹³

Frank Sanache, along with twenty-six other Meskwaki, volunteered to join the Iowa National Guard in January 1941—eleven months before the attack on Pearl Harbor. These twenty-seven men were 16% of Iowa’s Meskwaki population and eight of them became army code talkers. The American military used native languages to encode sensitive battlefield information during the war. These soldiers became known as code talkers. The Navajo, who provided more than 400 such soldiers, are the most well known. The Meskwaki soldiers served in the 34th Infantry division in North Africa and Italy. Sanache helped direct artillery fire against German positions, often deploying far ahead of his unit with a walkie-talkie, sometimes for 24 hours at a time. He was captured by Nazi troops in Tunisia and sent to a prisoner-of-war camp in Poland, where his daily ration included two potatoes, a slice of bread, and a cup of soup. He survived the war and returned to Iowa to work for nearly four decades in a paper mill. But the contributions of native code talkers went without recognition for decades, as the code and their

¹¹ April 20, 1943, Mason City Globe Gazette; September 23, 1943, November 19, 1943, Des Moines Morning Register.

¹² Deemer Lee, Esther’s Town (Ames, Iowa: Iowa State University Press, 1980), 198-201.

¹³ Lisa Ossian, 160; July 4, 2002, USA Today; Studs Terkel, “The Good War:” An Oral History of World War Two (New York: Pantheon Books, 1984), 178-179; Jim Davis, Lest We Forget: World War Two Veterans of North Des Moines County (n.d., n.p., 2002), 49-50.

work was classified until 1968. Sanache died in 2004, the last survivor of the Meskwaki code talkers.¹⁴

Ted Allenby was seventeen when he heard of the attack at Pearl Harbor. Born in Dubuque, he enlisted in the marines because they were “the toughest outfit.” Allenby was as patriotic as his fellow marines, but he was a gay man who could not reveal his sexual identity. He recalled that he thought being gay was a “dirty little secret” that could be compared to a disease. Of course it was not, but American society did not then tolerate or understand homosexuality. He was not the only gay man in the marines. But they were all “frightened and furtive,” and he drank and got in fights to deflect any suspicion. “I had a lot of hostility and fear,” he told historian Studs Terkel. Allenby and his fellow marines of the Fourth Division landed on the beaches of Iwo Jima—a place that looked like a piece of the moon dropped on the earth, he remembered—on February 19, 1945. His unit took enormous casualties, but he survived. He wept as the bodies of his fellow marines were buried in huge pits on the island. After the war he went to college and worked as a journalist before returning to the marines as a chaplain. In 1963, his identity was discovered and he was dishonorably discharged. Seventeen years later a legal case restored his benefits and an honorable discharge. Sometime in the early 1980s he told Terkel, “I’m out of the closet and I don’t care who knows... I’m not hiding any more.”¹⁵

An African-American man from Des Moines, Luther Smith, fought with one of the most storied units from the Second World War. Smith was a graduate of Roosevelt High School and a student at the University of Iowa when the war began. He graduated from flight school in Tuskegee, Alabama, in May 1943, and joined the segregated army air force as part of the 332nd Fighter Group. This unit and the 99th Pursuit Squadron are generally known today as the “Tuskegee Airmen.” Smith was one of twelve Iowans who served in these units, fighting discrimination in the military while battling the Axis overseas. He flew 133 combat missions over France, Austria, Hungary and other countries before his P-51 Mustang was damaged in an attack on an ammunition dump in October 1944. Smith broke his hip after ejecting from his aircraft and spent six months as a prisoner-of-war, mostly in hospitals. He won a Distinguished Flying Cross for his service during the war. He was an aerospace engineer with General Electric after the war.¹⁶

Harold Hayes and Darlene Diebler Rose survived harrowing trials. Hayes graduated from Indianola High School before he was drafted. He was one of thirty noncombatants—mostly nurses and medics—who survived a plane crash in Albania in November 1943. Emerging from the wreckage of their aircraft, Hayes and the other survivors found themselves in a country occupied by Nazi troops. Helped by anti-German partisans, they trekked through bitterly cold weather, dodging Nazi patrols and feuding guerilla bands. Sick and near starving they stumbled, often lost, across rugged terrain. Dysentery, parasites, and blizzards tormented them. A rescue attempt using transport planes failed. After two months of peril, they reached the Albanian coast and the British Royal Navy evacuated them to Italy. Hayes became an

¹⁴ November 20, 2013, Cedar Rapids Gazette; July 4, 2002, USA Today.

¹⁵ Studs Terkel, “The Good War:” An Oral History of World War Two, 178-185.

¹⁶ Edward C. Kramer, We Salute You: World War Two Veterans From Central Iowa Share Their Experiences (Xlibris Corporation, 2010), 78, 86-88; Joseph Caver, Jerome Ennels and Daniel Haulman, The Tuskegee Airmen: An Illustrated History, 1939-1949 (Louisville: New South Books, 2011), 175, 182-183; Bill Silag, Susan Koch-Bridgford and Hal Chase, editors, Outside In: African-American History in Iowa, 1838-2000 (Des Moines: State Historical Society of Iowa, 2001), 119-121.

aeronautical engineer and lived until 2017. Iowan Darlene Deibler Rose and her husband Russell were missionaries in New Guinea. Once Japan conquered the island they were imprisoned in horrific conditions. Darlene survived starvation and abuse, in large part due to her faith, narrowly avoiding execution. Her husband died in the war. She returned to the United States emaciated and weighing only eighty pounds after years of forced labor. Darlene remarried in 1948 and returned to continue her missionary work in New Guinea for almost thirty years.¹⁷

Wartime casualties dealt the towns of Waterloo and Red Oak heavy blows. One family in Waterloo lost five sons when the cruiser *Juneau* was sunk in the fighting around Guadalcanal in November 1942. After Pearl Harbor, all five sons of Thomas and Alleta Sullivan volunteered for the navy—Frank, Joseph, Matt and Albert died when the ship sank or soon afterwards. George lived for three or four days in the ocean, searching for his brothers amidst the wreckage of their ship, before dying. Only ten men from the *Juneau* survived their injuries or shark attacks. The five Sullivan brothers became national heroes. Their parents paid a price greater than any other American family during the war. A patriotic 1944 film called “The Fighting Sullivans” told the tragic story of their death.¹⁸

Three months after the death of the Sullivan brothers, an attack in North Africa routed inexperienced American GIs in one of the first major land battles fought by the United States in the European theater. Veteran German soldiers took thousands of prisoners. On March 6, 1943, telegrams from the Secretary of War began to arrive in the Western Union office in Red Oak. A total of 45 men were killed, captured, or wounded from the town of 5,600. Other Iowa towns suffered high losses. Clarinda lost 41 men; Atlantic had 46 casualties. The 34th Infantry Division, filled with troops from National Guard units from Iowa, had been decimated. “Red Oak suffered a disproportionate loss, greater than any other town in the United States,” wrote historian Doris Kearns Goodwin.¹⁹

While men fought overseas, women also provided crucial support to the war effort as workers. Before millions of men left for military service, there was resistance to female workers. However, as the male labor force fell drastically, such resistance crumbled. Employers needed workers regardless of their gender or race. Almost five million women joined the labor force during the war. At the peak of their employment, women made up 36% of the work force. Married women, who had normally stayed home to raise children, joined the labor market in large numbers, eventually surpassing the number of working single women for the first time. Women had almost one-third of manufacturing jobs and they found employment as steelworkers, welders, riveters, and miners. But they were usually left with the lowest-paying jobs that had the least opportunity for advancement. Men could make three to five times the salary of women in

¹⁷ August 25, 2004, January 24, 2017, New York Times; Darlene Diebler Rose, Evidence Not Seen: A Woman’s Miraculous Faith in the Jungles of World War Two (New York: Harper Collins, 2001), ix-x, 14-21, 153-160, 223-224. For more on Hayes’ extraordinary story see Cate Lineberry, The Secret Rescue: An Untold Story of American Nurses and Medics Behind Nazi Lines (New York: Little, Brown and Company, 2013).

¹⁸ Bruce Kuklick, The Fighting Sullivans: How Hollywood and the Military Make Heroes (Lawrence, Kansas: University of Kansas Press, 2016), 7-9, 36, 65-70.

¹⁹ Doris Kearns Goodwin, No Ordinary Time, 436; Rick Atkinson, An Army At Dawn: The War in North Africa, 1942-1943 (New York: Henry Holt, 2002), 395-397.

shipyards. Most women made less than five dollars a day, where men could earn a maximum of \$22 a day in these jobs.²⁰

In Iowa the Des Moines Ordnance Plant produced billions of rounds of .30 and .50 caliber ammunition for the war effort. It was a huge factory, with more than 16,000 workers at one point. Many of its workers were female and women made up half of the staff at plants making bullets nationwide. Such factories were usually located in rural areas because of the threat of accidental explosions. The work was tedious and difficult, with the same tasks repeated hundreds or thousands of times a day. Women workers helped assemble bullets and cartridges for small arms, weighing and pouring powder. Lillie Cordes Landolt, the mother of five children, labored at the plant in Des Moines. She recalled, “making bullets was interesting. I had a huge machine. The ammunition is made in many parts, and the part we worked on was the bullet, which started out as brass.” The bullet was shaped like a tiny cup about one-half inch across.²¹

Fern McCarthy also worked at an Iowa ordnance plant—at the factory in Burlington. It opened in the summer of 1941 and employed more than 12,000 people making artillery and mortar shells, as well as bombs. Employees went through two security checks to enter and had to change into khaki overalls and shoes without metal parts that were safe for use. McCarthy found constant danger and the threat of injuries at her job. An explosion in December 1941 killed thirteen men, for example. Another explosion in March 1942 killed or wounded more than sixty. McCarthy was not hurt, but she had much difficulty finding housing in Burlington. New residents had overwhelmed the town. At one point she was offered a chicken coop to live in. She worked a different shift from her mother, so she could help care for her younger sister.²²

One example of an Iowa woman employed outside the war industry was Ethel Jarred. She worked at a meatpacking plant in Ottumwa on the killing and cutting line. Her husband served in the military and she wanted to work to help pay off their house. She earned fifty-nine cents an hour, loading meat into boxes with a pitchfork. She recalled “I don't think I weighed much over 118 pounds then. By the end of the day I don't think I could even lift a fork to feed myself.” When she got home that first night, she was covered in blood. “I'd never been that dirty before.” Women encountered formidable resistance to their employment. As Jarred remembered, “It was up to we women to prove to the men we could be just as respectable as the wives that was at home.” She did.²³

Women served important non-combat duties for the military during the war. They could volunteer to serve in the army, navy, marines, and army air force. The American military realized that women could complete many tasks that supported frontline units; female personnel would free up men for other duties. Opposition in Congress and elsewhere led to criticism that seems ridiculous from the twenty-first century. But, wartime necessities helped to break down resistance. The bill that allowed the creation of the Women's Army Auxiliary Corps passed in May 1942. (WAAC was later shortened to WAC, or Women's Army Corps, in 1943.) In the

²⁰ Alan M. Winkler, Home Front U.S.A., 49-55; Geoffrey Perrett, Days of Sadness, Years of Triumph, 344.

²¹ Emily Yellin, Our Mother's War: American Women At Home and At the Front During World War Two (New York: Free Press, 2004), 62-63; Ossian, 70-71.

²² Shelton Stromquist, Solidarity and Survival: An Oral History of Iowa Labor in the Twentieth Century (Iowa City: University of Iowa Press, 1993), 130-131; Ossian, 56-61.

²³ Shelton Stromquist, Solidarity and Survival: An Oral History of Iowa Labor in the Twentieth Century 127-128.

army air force, women worked as radio operators, air traffic controllers and mechanics. In the army, they were weather forecasters, photographers, lab technicians, and also served in clerical roles. They worked as cryptologists, too. Female military personnel set an extraordinary example during the war that defied stereotypes and prejudice.²⁴

One of the major training bases for WAACs was at Fort Des Moines, where women of all races—a vast majority of them white—received training. It was located ten miles north of the city it was named for. Over the course of the Second World War, more than 65,000 women received training there. In July 1942 the first group of WAACs arrived. Only 440 women were admitted from a pool of 30,000 who applied to serve. Almost all of those in the first class were professionals, such as teachers and lawyers, and 99% of them had college degrees. The Des Moines Evening Tribune wrote that the WAAC base would be a “West Point for Women.” Rachel Prager demonstrated the unusual abilities of many female volunteers who served during the conflict. She was born in Poland before World War One and fled to Russia before emigrating to the United States in 1918. She served as a translator, as she was fluent in five languages, including Russian, German and French.²⁵

One of those who trained at the base was Mary Elizabeth Osen, born in 1913 near Cumberland, Iowa. Osen taught elementary school for eleven years before she joined the WACs. She began her training at Fort Des Moines in March 1943, learning military regulations, army history, and administration, and enjoying drill, kitchen duty, and physical training. After being stationed in Texas and more training in Georgia she was assigned to New Guinea, then to the Philippines, completing signal office and clerical duties. Occasional air raids and snipers posed threats, while rain and mud made life challenging. WAC facilities were primitive and the women slept in tents. Osen encountered little sustained danger, but did write to her family about a plane crash that killed ten WACs. One of those lost had been a friend. After her return home, she was a librarian for thirty years in Illinois.²⁶

The Fort Des Moines facility allowed black women to make up ten percent of trainees at the base, a number equal to that of the overall population in the nation. Widespread and persistent racism kept most females of color from positions with serious responsibility however. African-American women with college degrees ended up cleaning floors and doing laundry. Black women served in segregated units, just as African-American men did in the army. Fort Des Moines had separate facilities for black women, with two theaters and two service clubs, for example. Marjorie Randolph, an African-American WAC from New Jersey noted, “So you were fighting these two wars at the same time”—one against racism and one against fascism. Such women regularly protested their treatment in Des Moines. Black WACs were not allowed to roller skate in January 1943 and denied admittance to Riverview Park four months later. Local

²⁴ Emily Yellin, Our Mother's War: American Women At Home and At the Front During World War, 114-117.

²⁵ Yellin, Our Mother's War, 116-117; May 15, 1942, April 21, 1943, Des Moines Evening Tribune; Bill Silag, Susan Koch-Bridgford and Hal Chase, editors, Outside In: African-American History in Iowa, 1838-2000, 123.

²⁶ Lynn Ethan Nielsen and Mary Taylor Nielsen, I'll Be Seeing You: World War II Diary and Correspondence, Cpl. Mary Elizabeth Osen, February 1943-September 1945 (Parkersburg, Iowa: Mid-Prairie Books, 1994), 5-7, 15, 20-21, 55-56, 109, 136.

and national institutions, such as the NAACP and black newspapers, fought against such discrimination, as did the servicewomen themselves.²⁷

African Americans in Iowa fought for the right to be accepted as equals, appealing their inability to work in war jobs or their treatment off base. The Des Moines Ordnance Plant initially refused to hire black workers. Pressure from the Negro Chamber of Commerce in Des Moines, the black newspaper the Iowa Bystander, as well as the employment of black workers in other ordnance factories, forced the plant eventually to employ African-Americans. In April 1942, Elizabeth Shackelford sued the factory because it refused to hire black workers. Her lawsuit was based on the plant's violation of Executive Order 8802, issued by Roosevelt the year before. The order required all defense plants to employ laborers regardless of race, color, or national origin. The ordnance factory eventually hired black workers in a percentage equal to that of Des Moines—four percent.²⁸

Iowa farmers prospered during the war, as wartime demands for foodstuffs drove prices high. For the first time in almost twenty years, Iowa farms did not face a continued economic crisis that threatened their survival. They paid off debts, improved their homes, and bought new machinery. Home appliances proliferated and farm families enjoyed electric stoves, running water, and maybe even a vacuum cleaner. The gap in living standards between rural and urban life, which had been increasing for decades, narrowed. While farmers benefitted from increased prices, they faced a scarcity of laborers that threatened their ability to meet wartime production demands. Iowa lost 70,000 farm workers during the war to military service or to better-paying jobs in urban areas. Farmers as old as 83 turned out to assist their neighbors harvest crops in 1943.²⁹

An unusual labor force helped solve the increasingly dire labor shortage during the war. The towns of Algona and Clarinda had prisoner-of-war camps that housed captured Axis soldiers. The first POW camps had been in the Southeast, but large numbers of prisoners had overwhelmed them, leading to the construction of additional camps in the Midwest. POWs had been brought into the state in 1943 from Nebraska and Missouri to help harvest crops. An abundance of prisoners and a shortage of farm workers led to the building of POW camps in Iowa. Each could house 3,000 prisoners and 500 American guards. The first German and Italian prisoners arrived in early 1944. Japanese POWs came in 1945. Their captors, who did not trust the Japanese as they did the European prisoners, closely supervised them. American POWs captured by Japan had been brutally treated, with almost one-half of them dying because of mistreatment during the war. Barbed wire fences surrounded both camps and guard towers with machine gunners kept watch. Construction of the camps set off an economic boom in the area around Algona, as workers flooded in and bid up local rents.³⁰

Prisoners were not idle. They grew their own gardens, cultivating peas, carrots, corn, potatoes and cabbage. POWs enjoyed decent food, libraries, church facilities, and athletic competitions. Some studied the English language, while several guards took German lessons. Prisoners could earn ten cents an hour by working outside the camp, paid in scrip that could be

²⁷ Emily Yellin, 210-211; May 27, 1943, Des Moines Iowa Bystander; January 11, 1943, Des Moines Evening Tribune.

²⁸ Ossian, 68-69.

²⁹ Chad W. Timm, "Working with the Enemy: Axis Prisoners of War in Iowa During World War Two," 228; David Kennedy, Freedom From Fear, 645-647.

³⁰ Chad W. Timm, "Working with the Enemy," 230-231, 246-251; October 15, 1943, Des Moines Morning Register.

used at the prison canteen. Farmers employed prisoners when workers could not be found, paying their full wage to the U.S. Treasury. Some Iowa farms were desperate for workers, with only one-quarter of the necessary laborers available. Prisoners completed fieldwork, such as harvesting crops, building fences, and detasseling corn. Demand for such labor was high and smaller branch camps were established across the state to provide workers. POWs from camps across the central United States worked as lumberjacks in Minnesota or labored on farms in Kansas and Nebraska. Italian POWs helped build a levee with sandbags to control a Mississippi flood in April 1944, while Germans worked in plant nurseries in Shenandoah. Japanese POWs also worked on farms and in nurseries. Other prisoners assisted in digging holes for telephone poles for the REA.³¹

Iowa farmers also brought in Mexican workers during the war to meet the demand for agricultural laborers. Iowa's Latino population numbered about 2,500 in the 1920s and 1930s. Some had fled the bloodshed of the Mexican Revolution. They mostly lived in eastern Iowa towns, with many working on the railroads. During the Great Depression, the federal government had forcibly deported 400,000 Mexicans, many of them American citizens. But in World War Two, agriculture was a war industry and labor shortages led to the recruitment of workers from Mexico. This guest worker system was known as the "bracero" program, from the Spanish word "brazos," or arms. Braceros worked in more than twenty American states, including Iowa, and harvested \$432 million in crops nationwide in 1944. Most lived in western states, with about half living in California. Their pay was low and living conditions could be appalling. More than one thousand braceros worked in Iowa each year from 1944 to 1946. There were more than 60,000 Mexican farm workers in the country in the last two years of World War Two.³²

Researchers at Iowa State College played an important role in the Manhattan Project, the push to build an atomic bomb during the war. Atomic weapons needed high-quality uranium, a rare substance. Two ISC scientists decided to try and produce it. They improvised a process using a spark plug to heat magnesium oxide, calcium, and uranium tetrafluoride in an iron pipe. They produced two ounces of the needed uranium. Soon, they were producing larger amounts in the basement of the women's gym on campus. About 1,000 tons of uranium was produced during the war. This important effort led to the establishment of the Ames Laboratory at ISU, still an important federal center for energy research in the twenty-first century.³³

World War Two had a profound impact upon Iowa. The war ended the agonies of the Great Depression and brought economic prosperity back to the state, even as it exacted a high cost, with 8,398 Iowans sacrificing their lives for their nation. The war accelerated the migration of people from farms to towns and cities, while also narrowing the living standards between the

³¹ Chad W. Timm, "Working with the Enemy," 236-239; February 21, 1944, Clarinda Herald Journal; July 21, 1943, April 15, 1944, Des Moines Evening Tribune; April 20 and 23, 1944, October 11, 1944, June 17, 1945, Des Moines Morning Register; June 15, 1944, Council Bluffs Nonpareil; November 18, 1944, Fort Dodge Messenger.

³² Ronald Takaki, Double Victory: A Multicultural History of World War Two, 90-97; Daniel Martinez, "The Impact of the Bracero Programs on A Southern California Mexican-American Community," History Department, Claremont Graduate School, 1958, 18; Andrea Kay Tucker, "Together: They Lived, Worked and Learned, The History of Latinos in Valley Junction, Iowa," History Department, Iowa State University, 2008, 12-14. Iowa farmers employed 1,178 braceros in 1944, 1,467 in 1945 and 1,378 in 1946. This number fell to 188 in 1947.

³³ Dorothy Schwieder, Iowa: The Middle Land (Ames: Iowa State University Press, 1996), 285.

two. The conflict left Americans with healthy savings and high hopes for the future. It brought women and minority groups into well-paying industrial jobs, if only for a few years. The war also raised expectations for African Americans and helped lay the foundation for the postwar civil rights movement. World War Two helped set the path for Iowa for the remainder of the century.