
“I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, and my health to better living, for my club, my community, and my country.”

The 4-H pledge was officially adopted at the first National 4-H Camp in Washington, DC in 1927. The author of the pledge was Otis Hall, the Kansas state leader from the Kansas State College of Agriculture. The only change to the pledge occurred in 1973 when “and my world” was added to the end.¹ Ever since then, 4-H’ers have committed their hearts to the pledge. The 1990 National 4-H Alumni winner and Secretary of Agriculture from 1989 to 1991, Clayton Yeutter, noted that “4-H really gave me my start in life. The heart of 4-H is values - especially people values,” he continued, “Until I started showing beef cattle, I had no exposure outside an area of 10 or 12 miles. County and statewide 4-H competition made me realize the broader world.”² For many alumni like Yeutter, 4-H is forever branded upon them because it is a call for them to do better, to step up to the plate, and take a stand.

The pledge calls for 4-H’ers to think clearly and devote their health to better living. The pledge also asks that they use their hearts and hands in larger service for not only their clubs and communities but for their country as well. World War II was a way for 4-H’ers to make a difference in their country. When asked to deliver, 4-H met and exceeded the call. All around the country, levels of production raised significantly, and the national 4-H program ran several successful campaigns including Feed a Fighter and Food in ’44. Guided by the Extension Service of the United State Department of Agriculture, the national 4-H program produced a significant

¹ “4-H Quotes.” National 4-H History Preservation Program. 2018. (accessed November 27, 2018). https://4-hhistorypreservation.com/History/4-H_Quotes/.

² Ibid.

number of crops and animal products to feed soldiers during World War II. This paper will examine how 4-H was an intellectual and cultural tradition that helped the allies win the war and how wartime changes to the organization solidified the groundwork for the 4-H program of the future.

On 8 May 1914, President Woodrow Wilson established the Cooperative Extension Service by signing the Smith-Lever Act. The Extension Service was designed, with some exceptions, to have at least one Extension professional stationed in each county of every state, in each of the territories, the District of Columbia, and at each of the land-grant universities. The laws that created the Extension Service were broad, legally allowing the states to incorporate their counties, creating an interdependent partnership between the counties, the states, and the federal government. Designed as a partnership between land-grant universities and the United States Department of Agriculture (USDA), the Extension Service was established to make the knowledge produced within the land-grant universities available to the broader public. The goal of Extension was to bring the university to the people through educational programs.³

Extension programming provided people with research-based knowledge and resources to respond to local problems. It was out of the Extension Service that 4-H started to expand. The National 4-H program attributes the beginning of 4-H to youth programs in Clark County, Ohio founded by A.B. Graham in 1902. In 1907 a three-leaf clover pin with an H on each leaf was created by O.B. Martin and Jessie Field Shambaugh and at the 1911 meeting of club leaders in Washington, DC the four-leaf clover with an H on each leaf was approved. Originally the groups were called the “Corn Growing Club” or “The Tomato Club” but by 1912, the programs were called 4-H clubs. The 1914 Smith-Lever Act not only created the Extension Service, but it also

³ Wayne D. Rasmussen. 1989. *Taking the University to the People: Seventy-five Years of Cooperative Extension*. 1st edition. Ames: Iowa State University Press, 3-5.

nationalized 4-H.⁴ 4-H became a community of volunteers, mentors, 4-H professionals, 4-H alumni, and youths aged seven to eighteen. The 4-H program provides youths hands-on experience in areas such as health, science, agriculture, and leadership with flexible programming to meet the individual interests of 4-H'ers. 4-H seeks to give youths the experience and knowledge to become leaders.⁵ 4-H and the Extension Service rapidly expanded through World War I and the 1920s. Despite the growing depression, by the early 1930s, "the Extension Service had become firmly established as a cooperative educational force" that interdependently worked at the county, state, and federal levels.⁶

The role of the Extension Service was cemented during the Great Depression years. With both prices and production suffering in the 1930s, the Extension Service helped solve problems. Throughout the Great Depression, agents surveyed feed situations, helping to anticipate needs. Pamphlets with educational information were distributed by the thousands and Extension agents spent time interpreting new rules and regulations. State and home economics professionals "acted as subject matter specialists in youth work" and 4-H'ers aided at home by trimming budgets and working with local leaders.⁷ The depression years grew friends of the Extension Service due to the tremendous service Extension provided for farmers and people living in rural areas. During the 1930s, people "grew accustomed to seeking information and getting government papers and documents handled" at Extension Service offices.⁸ The decade grew friendships and partnerships that provided the Extension Service and the 4-H program essential

⁴ "4-H Emblem." *National 4-H History Preservation Program*. 2018. (accessed December 10, 2018). <https://4-hhistorypreservation.com/History/Clover/>; National 4-H Program. "4-H History." *4-H*. 2018. (accessed December 10, 2018). <https://4-h.org/about/history/>.

⁵ National 4-H Program. "What is 4-H?" *About 4-H*. 2018. (accessed November 6, 2018). <https://4-h.org/about/what-is-4-h/>.

⁶ Rasmussen, 94.

⁷ McIntyre, E. R..1962. *Fifty Years of Cooperative Extension in Wisconsin, 1912-1962*. Madison, WI: University of Wisconsin Extension Service. College of Agriculture, 122-123.

⁸ McIntyre, 134.

support during World War II.

Like most other organizations and businesses, the World War II draft took a significant amount of people from the 4-H program. Across the nation, 4-H lost 17,000 Extension agents, community leaders, and older 4-H'ers.⁹ This vacated space opened new opportunities for younger members to step up and have a larger role within their 4-H programs. This gap also presented the Extension Service with a new problem: the lack of agents. Though much of 4-H's support system was taken due to the draft, they were not without allies. There were nearly 1.5 million current members, 10 million former 4-H members, and 150,000 local leaders that the national program called upon.¹⁰ The draft led to a new era of 4-H, one where the players were different with new roles and responsibilities.

Extension agents from the USDA played a key role in 4-H's contribution to the war. In early 1943 the Extension Service became a part of the newly established War Food Administration within the Department of Agriculture.¹¹ To fill the gap the draft created within the agency, the Extension Service temporarily lowered their educational requirements due to the lack of candidates with the required educational standards. The war saw an emergence of females into the Extension Services. In some counties, the females were not only home economics agents but also agricultural ones. Though these changes were mostly temporary, they opened the door for future changes with what females were able to do in the Extension Service program.¹²

4-H community leaders and members made up the majority of people working towards

⁹ Warren Prawl. 1976. *Kansans' Right to Know: 108 Years of Extension Service*. Kansas State University. Cooperative Extension Service. Manhattan, Kan.: Kansas Cooperative Extension Service, 13.

¹⁰ Franklin M. Reck. 1951. *The 4-H Story: A History of 4-H Club Work*. Chicago, National Committee on Boys and Girls Club Work, 268-269.

¹¹ Rasmussen, 109.

¹² Prawl, 13; Earl H. Teagarden. 1964. *History of the Kansas Extension Service from 1868 to 1964*, Kansas State University vol 1. Manhattan, KS: Kansas State University, 195.

the goals of 4-H in their war efforts. 4-H'ers who lived in rural areas continued to have a large role in the war effort, and the emerging class of city 4-H'ers became an invaluable part of the program. The end of 1942 brought with it over 650,000 new 4-H members, pushing the program into having over 1.5 million members.¹³ Regular club community leaders existed, but for more efficient communication a new branch of community leaders was developed and called the Neighborhood Leaders. Leaders were chosen through the division of the townships and their main role was to get information from the Extension Service to their neighbors.¹⁴ Previous 4-H members were also important to the war effort. The process of being a 4-H'er helped to foster life skills that made for better-informed farmers, workers, and homemakers. The past two decades of 4-H farmers being taught valuable skills and techniques allowed greater quantities of food and fiber to be produced during the war years.¹⁵

People and organizations who were not a part of the Extension Service or 4-H also provided aid. Non-4-H farmers that the 4-H program worked with were large supporters. Lists of farmers with specialties was compiled by Extension agents and they provided "...those producers...with special assistance designed to secure increased production."¹⁶ This allowed farmers to better aim their efforts and get the most out of the equipment, supplies, and cropland that they already owned. Due to 4-H's national reach of resources and with personal reasons to see food production rise, war-oriented programs found an eager ally in the 4-H program. Through 4-H'ers idealism and hope, "...club members were a potent force in unifying farm effort

¹³ Rasmussen, 114. Like other groups during the era, 4-H was segregated. However, there were African American 4-H clubs and I speculate that they were engaged in the war effort alongside their white counterparts. None of the sources I encountered while writing this paper ever specified the contribution that African American 4-H'ers had on the program's war efforts. Instead, all the sources refer to the youths simply as '4-H'ers,' perhaps implying that all 4-H work, despite race, was lumped together when national totals were presented.

¹⁴ Teagarden, vol. 1, 196.

¹⁵ Thomas R. Wessel. 1982. *4-H, An American Idea, 1900-1980: A History of 4-H*, ed. Chevy Chase, Md. Chevy Chase: National 4-H Council, 59.

¹⁶ Teagarden, vol.1, 195.

in support of the war.”¹⁷ Since they wanted to bring home their Extension agents, family, and friends, they were eager to help the nation any way that they were able. The broad reach of 4-H allowed war-oriented programs to have larger spans of influence, reaching schools and other places where they might not normally have been able to.

The national 4-H program was also supported by several congressmen. Early efforts to gain the Extension Service, specifically the national 4-H program, more resources and funds were futile. Hampton P. Fulmer, a politician from South Carolina in the House of Representatives, was an eager advocate of the House Joint Resolution 75 in 1943. The House passed a bill authorizing Congress to give 4-H \$2,500,000 for clubs to create a pool of labor to replace those lost to military service. When the bill went to the Senate it was failed because, at that time, congressmen did not think that the extra funding was warranted. The Bureau of Budget, an ally essential to the bill’s passage, refused to endorse the bill. When Fulmer tried again in 1944, the bill did not get out of committee.¹⁸ However, as a part of the War Food Administration, the Extension Services received a sum of \$2,035,000 for emergency war funds in 1944.¹⁹ These funds were used to better educate and reach out to the rural people in the Extension’s war efforts campaigns. The same year Congress gave \$4,070,000 to Extension for the same efforts.²⁰ After the war, the Bankhead-Flannagan Act of 1945 increased funding for 4-H from the national government.²¹

The lack of extra funding specifically set aside for 4-H did not stop members from eagerly jumping into producing food as efficiently as possible. Their efforts were done not with

¹⁷ Reck, 268.

¹⁸ Wessel, 61.

¹⁹ War Food Administration Extension Service. *National Report of County Agriculture Agent Work: July 1, 1943-June 30, 1944*. Extension Service Circular; 418. Washington, D.C.: Extension Service, Dept. of Agriculture, July 1944, 2-3.

²⁰ Ibid.

²¹ Wessel, 62.

traditional weapons, but with their hands, hearts, heads, and health, the founding principles that 4-H stood upon. Pamphlets sent out by the Extension Service gave 4-H'ers a way to commit to their projects and show what they were working towards that year. The pamphlets contained notices urging 4-H'ers to choose their projects wisely and to conserve as much food as possible.²² The National Mobilization Week for Farm Youth 1942 urged 4-H'ers to only take on projects they were able to complete. Though it changed in its form over the following decades, the mobilization week became a staple of the 4-H program. Today's 4-H'ers still practice a national 4-H week every year where they show off their projects and advertise their clubs to the local community. In 1944 during the Mobilization Week, Franklin Delano Roosevelt wrote a letter addressed to the 4-H program: "For this year more than ever, members of the 4-H Clubs will be among the shock troops on the food production front to give that extra impetus to the war effort so essential to ultimate victory."²³ It was a call to increase the amount of food that was being produced. Roosevelt asked the 4-H program to put in a significant amount of effort to keep the soldiers fed through the war. One of the ways 4-H increased their productivity was through nutrition programs.

During the war years, new information about nutrition from doctors became available. In 1942, doctors knew that soldiers were not able to survive on hardtack and salted meat alone. Soldiers need vitamins from fruits and vegetables to stay in top form. Because of this, the field rations system was developed with four different kinds: A Rations, B Rations, C Rations, and D Rations. A Rations were fresh food that was served in the mess halls. B Rations were like that of

²² W. Aiton and United States Extension Service. Men and Women of Tomorrow: Progress and Achievements of the 4-H Clubs of America. Extension Service Circular; 433. Washington, D.C.: Extension Service, Dept. of Agriculture, September 1945, 2; North Carolina Agricultural Extension Service, "Join the 4H Club in the Food for Freedom Fight", 1944. Special Collections Research Center, North Carolina State University Libraries.

²³ Reck, 270.

A's but instead of fresh food it was canned. C Rations was for combat- the meals were packaged with a day's worth of food for a single soldier. D Rations were provided to the soldiers as emergency bars that ate when there was no other available food source. K Rations were later developed to give soldiers 3,726 calories but with the added benefit of only weighing 33 ounces.²⁴ Due to the new knowledge from doctors, the Extension Service created the new position of nutrition agents. A strong nutrition program was emphasized not only for the men in the armed services, but for civilians as well. These agents were meant to create and spread the idea of nutritional plans for people at home. They were concerned with making sure that people were still getting all the vitamins that they needed even on the reduced rations that individuals were allowed during the war.²⁵ The Extension Service played the role of providing 4-H'ers and their families with information from food nutrition to better farming practices. Home economic and nutrition specialists used the Neighborhood Leaders to spread their information out to a broader audience. The emphasis was placed on home gardens, canning, and preserving. These agents were also concerned with making sure that homemakers and schools were thinking about smart and efficient war-meals.²⁶

Though nutrition programs were very important, the Extension Service was also extremely committed to creating and encouraging farm efficiency and good farming practices. They put most all their resources into getting farmers and 4-H'ers the needed information on how to be more resourceful in their farming. Setting 4-H'ers as examples, they sent out informational pamphlets and ensured that community 4-H leaders passed this information onto

²⁴ David Walbert. "Food for Fighters." North Carolina Digital History in UNC School of Education. (accessed October 12, 2016). <http://www.learnnc.org/lp/editions/nchist-worldwar/5900>.

²⁵ Earl H. Teagarden. 1964. History of the Kansas Extension Service from 1868 to 1964, Kansas State University vol 2. Manhattan, KS: Kansas State University, 421.

²⁶ Ibid.

families within their communities. The agents were also especially concerned with the preservation and safe use of machinery on farms. Extension agents made sure that people knew how to properly take care of their existing equipment and how to get the most use out of them.²⁷ The efforts of national 4-H were also concerned with raising membership levels. Food in '43 and Food in '44 were two of their membership drive slogans. These campaigns were held to gain new membership to the program while emphasizing what the main goal of 4-H was. Typically, the membership drives during the war usually were devoted to increasing the number of members so that the program was able to provide more food instead of driving membership up for the sake of having more members.²⁸

The Extension Service recognized the value of allowing state and county 4-H programs to individualize the war efforts to best suit them. J.E. Carrigan, an Extension agent, in his report wrote that "...the programs may be adjusted locally and the practices carried out through it be as sound as possible. This is good Extension."²⁹ He continued to talk about the importance of the Extension Service, recognizing that their role in the war was to act as an informational service concerning good agricultural practices. This is sentiment that the Extension Service embodied throughout the war in their efforts to get information out to the people in rural areas, so they can best use their resources.³⁰ In 1943, Neighborhood Leaders reported having reached 88,269 families and having held over 5,000 meetings where they discussed food production and preservation.³¹ Extension agents gave valuable information to the leaders through a monthly

²⁷ Teagarden, vol.1, 196.

²⁸ Martha Welch, Pat Schrader, and Anna Lucas. "The Fourth Decade." *Kentucky Cooperative Extension, University of Kentucky, College of Agriculture and the Kentucky State University*. 2009 (accessed October 10, 2016). <http://www2.ca.uky.edu/agcollege/4h/history/1940home.php>.

²⁹ J.E. Carrigan, and United States Extension Service. Extension's Job in the War. Extension Service Circular; 381. Washington, D.C.: Extension Service, Dept. of Agriculture, March 1942, 3.

³⁰ Ibid.

³¹ Teagarden, vol. 2, 422.

newsletter called ‘The Neighborhood Leader.’ Along with holding community meetings, they made personal visits to families who were too far out to make it to a community meeting and they utilized phone lines to save gasoline. Leaders oversaw responsibilities concerning Victory Gardens, transporting farm product to market, producing war crops, securing labor and custom equipment for harvesting crops, and fire prevention to help make sure crops are not lost due to fire.³²

4-H created new projects and programs to counteract the changes that the war and new technology brought. 4-H also integrated existing programs into the large war mobilization. One such program that was integrated was the citizenship program. The citizenship program was well established by the time World War II came around and once the United States entered the war, the goal of the program was changed to fit new wartime needs. The federal government effectively utilized club work that had had a decade to develop to more efficiently mobilize 4-H’s efforts.³³ Further, 4-H created guideposts that programs should follow to better utilize themselves to the war effort. The guideposts were developed by a committee of state and federal leaders appointed by M.L. Wilson. Their list was comprehensive and two of their goals directly related towards the food effort. Number five stated that 4-H would work towards “Producing food and fiber for home and market” and number seven committed 4-H to “Conserving Nature’s resources for security and happiness.”³⁴

New information was given to 4-H’ers and farmers on the mechanical changes that occurred during the war. The tractor program brought resources to increase the amount of power used on farms. The program was also made to inform 4-H’ers on safety procedures when using

³² Teagarden, vol. 2, 422; Teagarden vol.1, 196.

³³ Rosenberg, Gabriel N. 2016. *The 4-H Harvest: Sexuality and the State in Rural America*. Philadelphia, University of Pennsylvania Press, 165.

³⁴ Reck, 275.

mechanical farm equipment. In South Carolina, 4-H programs included health, home safety, accident prevention, and rural electrification into their already existing home-management and home-furnishing projects.³⁵ Farmers were encouraged to recondition their machines as much as possible rather than replacing with new parts to save steel. Engineers such as John M. Ferguson, an extension engineer at Kansas State University, emphasized the usefulness of technology such as welding to give new life to old frames, making them “as strong and rigid as new” without the bother and cost of obtaining new steel.³⁶

State and county 4-H programs each took on their own individualized special program to contribute to the war effort, alongside the national 4-H program’s campaigns. 4-H’ers participated in local county campaigns that were best suited to them, which made the most out of their war-efforts. Counties across the nation, such as Allen County in Kansas and DuPage County in Illinois gathered milkweed fluff for lifejackets. Multiple other counties participated in collecting scrap metal and some counties participated in the Name a Ship Campaign.³⁷ In Texas, 4-H’ers worked to increase awareness on how better to prevent livestock death with their work focused on death from improper care and disease.³⁸ 4-H boys in the Cerro Gordo County, Iowa livestock program were concerned with keeping livestock as healthy as possible through the elimination of cattle grubs. Not only did the boys work to eliminate grubs from their own livestock, they hosted demonstrations alongside local Extension Service agents on how to control grubs. Demonstrations were held in various parts of the county to reach a larger farming

³⁵ “National 4-H Service Committee: Services of the Forties.” National 4-H History Preservation Program. 2016 (accessed September 26, 2016). http://4hhistorypreservation.com/History/Service_Committee/; Turner, R.A., and United States Extension Service. The 4-H Clubs Line Up for Uncle Sam: National 4-H Club Report for 1943. Extension Service Circular; 420. Washington, D.C.: Extension Service, Dept. of Agriculture, October 1944, 12.

³⁶ “Modern Welding Torch Helps Out On the Farm,” The Manhattan Mercury (Manhattan, Kansas), Feb. 18, 1942.

³⁷ Rasmussen, 114; Denton, Betty Lou Denton and Merle L. Eyestone. 1993. *Kansas 4-H: The History of Head, Heart, Hands and Health, 1906-1993*, ed. Manhattan, Kans.: Kansas 4-H Foundation, 35; Reck, 272.

³⁸ Reck, 272.

audience and circulars were available at the local county extension office. Their county extension director noted that this was one of their major projects for the year.³⁹

In addition to those programs, the war saw the emergence of nutrition programs through 4-H. 4-H worked to teach members not only to conserve and preserve food and household goods, but also how to maintain strong nutrition. An article from the *Manhattan Mercury* informed the public that there was a need for food that was high in energy and nutrition for soldiers and civilians alike.⁴⁰ Girls in Oklahoma strived to live up to the slogan ‘Produce and Conserve.’⁴¹ Rhetoric like “Live Healthfully” and “Live Frugally” prevailed in both 4-H programming and in newspapers (see figure 1). Similarly, an article from an Iowan newspaper cited six ways 4-H girls were able to help the war effort. Girls were encouraged to garden, preserve and conserve food and household items, and be conscious of preventing fires. They were also tasked with morale building by being happy as well as buying war bonds and stamps.⁴²

Food production and preservation staff became highly valuable, and states such as Vermont saw expansions to their Extension Service staff to assist the regular agents.⁴³ In 1945, Marvin Jones, the War Food Administrator, noted that “Food is just as necessary as guns, tanks and planes” to win the war.⁴⁴ The National 4-H Program sponsored the Feed a Fighter and Food for Freedom or Food for Victory campaigns. The goal was for each individual 4-H’er to be able to feed a man in the armed service for a year with one of their projects. The 4-H’ers worked

³⁹ “Plan Efforts to Fight Grubs,” *Globe-Gazette* (Mason City, Iowa), Feb. 2, 1943.

⁴⁰ They Pledge to Grow More During 1942,” *The Manhattan Mercury* (Manhattan, Kansas), Feb. 18, 1942.

⁴¹ Extension Circular 420, 12.

⁴² “4-H Girls Have Important Role in All-Out War Effort,” *Globe-Gazette* (Mason City, Iowa), Feb. 11, 1943. While girls were allowed in the 4-H program, they mainly stuck to home economic and home building projects. However, gardening was a project that both sexes were encouraged to take a part in. For the most part, literature focused on projects and the impact that 4-H boys had on the war effort with girls as a footnote. Today 4-H encourages girls to take part in the same projects that boys do.

⁴³ “Extension Service Expands Emergency Food Production, Preservation Staff,” *The Burlington Free Press* (Burlington, VT), Feb. 22, 1944.

⁴⁴ “Essential Food Will Come From Home Gardens,” *The Frankfort Index* (Frankfort, KS), Mar. 1, 1945.

directly towards creating meat and field crops that were most needed in the war. In Arkansas, 85% of their 4-H members were involved in the Feed a Fighter program.⁴⁵ The need for food products was large. In a 1942 Extension circular, they reported on the percentage of time that county Extension agents gave towards reaching the war goals based on a total percentage of days spent on that work. The report found that 69.6% of their work was devoted to securing food supplies and other critical war materials while the other 30.4% was spent on solving other problems, working on civilian defense, and other war work activities.⁴⁶

Due to the need for food, gardening projects had special emphasis placed on them. Victory Gardens were another way that 4-H'ers become involved and provided towards the war effort. Victory Gardens were not restricted to rural areas, they also appealed to the emerging division of intercity 4-H'ers who did not have much room to participate in large-scale crop growing. Rooftop Victory Gardens allowed city 4-H'ers to still be a part of the war effort, even amongst city living.⁴⁷ A newspaper article from the *Frankfort Index* in Kansas noted several benefits of having a Victory Garden. The reasons were practical in nature. Victory Gardens provided families with more vegetables when the family wanted them, their food value was better, and home gardening saved money. A newspaper out of Vermont noted that Victory Gardens reduced the amount of labor farmers had to do and reduced the cost of transportation and food containers.⁴⁸ Newspapers all around the country similarly stressed the importance of individuals cultivating Victory Gardens.

⁴⁵ Wessel, 60.

⁴⁶ H.W. Porter, and United States Extension Service. *Extension Activities and Accomplishments: Cooperative Extension Work in Agriculture and Home Economics*. Extension Service Circular; 410. Washington, D.C.: Extension Service, U.S. Dept. of Agriculture, August 1943, 1.

⁴⁷ "Victory Gardens at a Glance." The National WWII Museum New Orleans. [cited 11/15/2016]. <http://www.nationalww2museum.org/learn/education/for-students/ww2-history/at-a-glance/victory-gardens.html?referrer=https://www.google.com/?referrer=http://www.nationalww2museum.org/learn/education/for-students/ww2-history/at-a-glance/victory-gardens.html>.

⁴⁸ Frankfort Index. "The Green Mountain Gardener," The Burlington Free Press (Burlington, VT), Mar. 30, 1944.

However, not any garden made a proper Victory Garden. According to L.C. Williams, the assistant dean and director of the Kansas Extension Service, “Planned, planted, and tended gardens spell Victory Gardens.”⁴⁹ Important to the success of Victory Gardens was planting the correct vegetables. A Nevada newspaper stressed the importance of planting vegetables that had high adaptability to growing in Nevada and a high nutritional value.⁵⁰ Pamphlets, circulars, and newspaper articles detailed ways to maintain a more productive garden. Due to the potential shortage of insecticide during the next growing period, the importance of clearing away litter after harvest was stressed. Any untended litter, weeds, crop residue, ditches, or storage spaces was a potential home for insects. Entomologists encouraged people to plow over, burn, or destroy plant residue immediately after harvest instead of waiting to clear it away at the start of the next growing period.⁵¹ Guides, like the one found in *The Austin American Sun*, were distributed to give gardeners pertinent information on insect control (see figure 2).

4-H worked to raise both animal and grain products, along with fruits and vegetables from Victory Gardens. The North Carolina Agricultural Extension Service sent out a pamphlet to 4-H’ers and farmers stating that they needed to work towards raising the goods for fresh vegetables, canned food, potatoes, poultry, bread, meat, milk, and eggs.⁵² Likewise, newspapers articles and ads across the country emphasized the need for production. In 1942, an ad from the Manhattan Production Credit Association in Kansas declared that “Food will win the war...And Dictate the Peace” (see figure 3). In 1943 another Extension circular cited that one man in the armed forces for one year needed to have 274 pounds of cereals, 447 pounds of dairy products,

⁴⁹ “Plan Victory Garden Program,” *The Journal for Progressive Stockmen, Farming and Businessmen* (St. Joseph, Missouri), Feb. 5, 1942.

⁵⁰ “Victory Garden Held Important,” *Reno Gazette-Journal*, (Reno, NV), Mar. 3, 1944.

⁵¹ “A Pre-Season Victory Garden Clean-Up Helps,” *The Manhattan Mercury* (Manhattan, KS), Feb. 18, 1942.

⁵² North Carolina, *Food for Freedom*.

422 pounds of meat, 30 dozen eggs, 521 pounds of vegetables, 213 pounds of fruits, and 90 pounds of sugars.⁵³ Charles H. Blasberg, an Extension Service agent at the University of Vermont and State Agricultural College, wrote an article emphasizing the importance of maintaining food reserves for the armed forces. Blasberg noted that it was important to have a 270-day reserve for every man fighting overseas and a 90-day reserve for every man on the home front.⁵⁴ 4-H'ers were ultimately working towards raising food and crops to provide the soldiers with as much fresh food as possible so that their diet did not solely consist of hardtack and salted meats.

Production was important, but John R. Fleming, from the Bureau of Agricultural Economics, U.S. Department of Agriculture, noted in February 1942 that “We began this war with many farm surpluses, rather than shortages... We have begun to learn, the record shows, how to use them, and how to keep prices from collapse while we use them.”⁵⁵ In 1942, an article from the *Manhattan Mercury* informed farmers that commodity crops such as wheat, corn, cotton, and tobacco were in ready supply so there was no need to expand production. Farmers were encouraged to focus on growing other essential crops instead. They were asked to raise production goals for eggs, hogs, soybeans, flax, corn, and other essential crops and produce.⁵⁶ 4-H went a long way towards providing food for the war. Animal and grain products were produced in great quantities across the nation. Through their determination, 4-H contributed a great amount to the war effort, while also learning valuable life skills such as controlling weeds and insects in their crops, preventative measures against drought, reducing soil erosion, saving

⁵³ Z.L. Galloway, and United States Extension Service. Feed a Fighter in 1943: Amount of Food Production Required to Supply a Man in the Armed Forces for One Year. Extension Service Circular; 401. Washington, D.C.: Extension Service, U.S. Dept. of Agriculture, January 1943, 3.

⁵⁴ “The Green Mountain Gardener,” *The Burlington Free Press* (Burlington, VT), Mar. 30, 1944.

⁵⁵ “Plan Victory Garden Program,” *The Journal for Progressive Stockmen, Farming and Businessmen* (St. Joseph, Missouri), Feb. 5, 1942.

⁵⁶ “They Pledge to Grow More During 1942,” *The Manhattan Mercury* (Manhattan, Kansas), Feb. 18, 1942.

soil fertility, and increasing yields of crops using rotation. These are the same skills that for the previous decades before, former 4-H'ers learned and then used during the war.⁵⁷

When challenged, hundreds of 4-H'ers across the nation met and surpassed the goal for feeding a soldier for a year. Thomas E. Wilson, the chairman of the National 4-H Committee from 1924 to 1958, noted in March of 1945 that "Our fighting men know, as do the workers who made our weapons of war, that without the food you 4-H farm boys and girls helped produce, we would not be as far along in the war as we are today."⁵⁸ In 1943 the contributions of one North Carolinian 4-H'er was enough to feed thirty-four soldiers for a year.⁵⁹ While most 4-H'ers did not produce product to that extent individually, many counties raised a significant amount of product. In 1943, *The Daily Herald* announced Paul Diamond (aged 13) and Irene Warnick (aged 15) as winners of Utah's county 4-H club Victory Garden contest. Diamond won the production division while Warnick took the award for most preserved. The article noted that the teenagers earned a combined total of \$208 in profits from their gardens.⁶⁰ In California, the *Lodi News-Sentinel* newspaper reported on July 31, 1943, that through the state's effort, each 4-H'er, roughly numbering 13,000, was almost able to feed one soldier for one year.⁶¹ In Kansas, information gathered from twenty-three southwestern counties showed that their efforts fed a total of 2,700 soldiers.⁶² Highlights from Haywood, Camden, and Durham Counties in North Carolina in 1943 include 31 acres of Victory Gardens, 10,000 pounds of beef, 13,680 eggs

⁵⁷ Extension Circular 433, 3.

⁵⁸ "National Director Praises 4-H Clubs," *The San Juan Record* (Monticello, Utah), Mar. 15, 1945; National 4-H News. "Folks who Helped Make 4-H Great: Thomas E. Wilson." *National 4-H History Preservation Program*. 23 January 2017. (accessed December 14, 2018). <http://news.4-hhistorypreservation.com/tag/thomas-e-wilson/>.

⁵⁹ Amy Manor. "4-H and Home Demonstration Work during World War II." *North Carolina Digital History in UNC School of Education*. (accessed October 10, 2016). <http://www.learnnc.org/lp/editions/nchist-worldwar/5881>.

⁶⁰ "Paul Diamond, Irene Warnick Declared Victors in 4-H Victory Garden Contest," *The Daily Herald* (Provo, Utah), Nov. 7, 1942.

⁶¹ "Many Soldiers Are Fed by 4-H Club Projects," *Lodi News-Sentinel* (Lodi, CA), July 31, 1943.

⁶² Denton, 35.

collected, 6,769 poultry birds raised, and over 20,024 quarts of food canned.⁶³ Similar results were shown throughout the nation.

In 1942, national 4-H'ers were responsible for over 77,000 head of dairy cattle, 246,000 swine, 210,000 other head of livestock, 40,000 tons of forage crops, and 109,000 bushels of root crops.⁶⁴ In Lodi, California their local newspaper reported that the 1943 food production estimates include 20,000,000 pounds of meat, milk, eggs, and vegetables produced. An additional 20,000 pound of wool and 8,000 rabbit skins were collected.⁶⁵ The *Frankfort Index* in Kansas reported that 40% of vegetables in 1944 were produced by an estimated 19 million Victory Gardens. The 40% equaled to roughly 8 million tons of vegetable produce.⁶⁶ An Extension circular from 1944 cited the 4-H program raised 141,261 acres of gardens and vegetables.⁶⁷ The same circular estimated that since Pearl Harbor 4-H'ers contributed products from 800,000 acres to the "world's nutritional security."⁶⁸ 4-H, never one to back down from a challenge, produced food in great quantities because of their own determination, loyalty, and eagerness to serve their country.

Not only was producing these crops enough, but they also had to be brought in on time. If the crops were not harvested on time, they were not as bountiful. Kansas Extension statistics showed that a three-week delay in harvest resulted in a 20% loss, meaning 26,000,000 bushels were not gathered. It was estimated that the lost bushels were enough to feed the entirety of the United States Army for a year.⁶⁹ Further delays would be even more detrimental to the harvest

⁶³ North Carolina Agricultural Extension Service, "4-H Contributions to the War Effort", 1945. Special Collections Research Center, North Carolina State University Libraries.

⁶⁴ Rasmussen, 114.

⁶⁵ Lodi News-Sentinel.

⁶⁶ "Essential Food Will Come From Home Gardens," *The Frankfort Index* (Frankfort, KS), Mar. 1, 1945.

⁶⁷ Extension Circular 433, 3.

⁶⁸ *Ibid.*

⁶⁹ Earl H. Teagarden. 1964. *History of the Kansas Extension Service from 1868 to 1964*, Kansas State University vol. 3. Manhattan, KS: Kansas State University, 815.

yields. In Kentucky, they saw between 1941-43 an increase of around 65,056 members. Even though they had a large increase in membership, they still saw in 1943 an 83.4% project completion rate.⁷⁰ Many other counties and states found the same phenomenon happening. Through this determination, 4-H'ers saw the first and foremost war goal, "To help produce and conserve for the food arsenal" of the 4-H program exemplified.⁷¹

The increased interest in food and nutrition programming also extended to practicing proper hygiene. In addition to eating well, 4-H emphasized the importance of taking care of one's own body. The 4-H'ers were meant to provide an example for the rest of their community to follow. By building the health of their bodies, they were aiding the war effort by being able to work more efficiently and in turn, by yielding more out of their harvests. This ideology held a long-lasting impact on how 4-H'ers viewed their own health. In his book, Gabriel Rosenberg noted that "failure to maintain a healthy body implied serious failure of duty and patriotism" in a 4-H'er.⁷² Increased interest in the health of one's body was far from the only change experienced by 4-H'ers over the course of the war. This new attitude was one of the many changes that had occurred while the during the war.

Like all other fighting men coming back from the war, the 4-H'ers and extension agents came back to a different America and a different 4-H program. Extension agents returned to their posts, displacing those that had temporarily taken their jobs. The war had brought people from farms into cities and the Extension Service followed. Due to this change, the scope of the extension and 4-H influence increased.⁷³ The impact that the war had on the Extension Service and the 4-H program was one that forced a change to occur at all levels of the program. The

⁷⁰ Welch.

⁷¹ Extension Circular 433, 2.

⁷² Rosenberg, 170.

⁷³ Prawl, 18.

aftermath of the war forced 4-H councils and committees to think about their future and the programs they wanted to pursue. A special national committee met after the war to “chart the course for future 4-H programs.”⁷⁴ The purpose of this committee was to analyze the large problems facing American 4-H’ers and to investigate what the 4-H’ers were able to do to tackle these problems. The committee was also set to develop a set of guidelines that illustrated how 4-H’ers strove to keep the peace that they helped to create.⁷⁵

New funds provided 4-H with more opportunities to grow. After the death of Fulmer in 1944, Virginian Congressman John W. Flannagan, chairman of the House Committee on Agriculture took up advocating to gain funds for the 4-H program. Through his work, the Bankhead-Flannagan Act of 1945 passed. The bill did not exclusively provide funding to the 4-H program, unlike how the failed House Joint Resolution 75 bill in 1943 did.⁷⁶ The new bill contained “...language that for the first time identified 4-H work as a principal responsibility of the Extension Service.”⁷⁷ Though funds were not directly identified as going to 4-H, the program saw an increase in funding and resources through the Act.⁷⁸ Moving forward, 4-H continued to see an increase in support and funding through the Extension Service.

Foods projects remained an important part of the 4-H program and nutrition was continued to be especially emphasized. The nutrition and food programs continued to grow with changes in technology and the increasing availability of electricity in rural areas. Through rural electrification, new ways of preserving food through freezing meats and vegetables became available to those out on farms. Programs such as the tractor program saw farms becoming more

⁷⁴ Extension Circular 433, 17.

⁷⁵ Ibid.

⁷⁶ Wessel, 62.

⁷⁷ Ibid.

⁷⁸ Prawl, 18.

mechanized. Former 4-H members and leaders returned to the war to find that their family farms were not only larger, but they were flourishing from the effects of the new mechanized programs.⁷⁹ Practices learned during the war stuck with the 4-H'ers just like how the new programs that were created became a part of the 4-H program. However, changes were not limited to just the United States.

After the war, the United States held interests in the “global countryside” and the USDA held interest in promoting youth programs abroad based on the 4-H model. Based on the successful changes that occurred in rural America, the USDA set its sights on informing workers who took agriculture extension and 4-H programming abroad. Claiming that it helped with postwar reconstruction, several countries founded 4-H organizations. 4-H followed where the United States military went and by the 1960s, international 4-H was growing strong.⁸⁰ Today 4-H reaches more than 7 million youths in fifty countries around the globe. 4-H continues its plans to grow 4-H and double the number of youths it reaches.⁸¹ Overall, the program left World War II stronger than it was before the war and the impacts the war had on 4-H were long-lasting in both traditional and practical matters at home and abroad.

The 4-H program and the Extension Service strove to teach good practices and to make the best better. The war brought reasons for change and progress and it forced them to think innovatively to meet new needs. Not one to back down from a challenge, 4-H members met and exceeded the production goals expected of them. Not only did the intellectual and cultural tradition 4-H created help the allies win World War II, these changes solidified program modifications and provided a groundwork from which the program in the following decades

⁷⁹ Prawl, 18.

⁸⁰ Rosenberg, 185.

⁸¹ National 4-H Program. “4-H Global Network.” *4-H*. 2018. (accessed 19 August 2019). <https://4-h.org/about/global-network/>.

followed and still follows today. The wartime efforts cemented in the idea of learning by doing and setting a positive example for their community. During the war, they chose to fight for their country, not through guns and bombs, but through hard work and determination. Then and now, Extension agents and 4-H youths work towards the betterment and preservation of their country and their world through the work of their heads, hearts, hands, and health.



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