WHEAT SOLDIERS:
THE WARTIME WHEAT CAMPAIGN IN KANSAS, 1917-1918

by

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The Ina Mueller Scholarship

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Acknowledgments

This work is dedicated to my parents, Keith and Janet Beeman of Manhattan, Kansas.
What a precious theme is harvest! The hopes, the well being, the life of the world is fast bound up in the magic of this single word.

- Dr. J. H. Worst, Kansas State Agricultural College (KSAC), a soldier in the wheat army.
Introduction

... the fight for bread, the most elementary question of human existence.

- Lenin

Preservation of society is dependent upon the material sustenance of the people. Maintenance of an adequate food supply is the principal objective of any legitimate state. Industrialization and urbanization have stretched the "umbilical cord" which binds country and city. Disruption of the food chain linking rural producers and urban consumers usually results in domestic chaos and eventual civil strife. Harmony and equilibrium between farmers and city dwellers is particularly threatened by the extraordinary demands upon society created by war.

World War I (1914-1918) illustrates the complex relationships of an economically interdependent world. With their agricultural economies derailed by the immensity of that conflagration, the Entente powers of Western Europe looked outward to supplement their meager rations of foodstuffs.

Farms of the fertile Mississippi Valley of North America, the plains of Canada and Argentina provided the
food needed to erase the deficit in Europe. In the United States (U.S.) a program of food control headed by young industrialist Herbert Hoover was remarkably successful in feeding the working class of Europe. American food was decisive in the eventual Allied victory and the consolidation of the U.S. as an economic superpower. Historian Witold Sworakowski writes "In a war in which hunger was used with callous deliberation as a strategic weapon, the crucial battle fought and won on the home front under Hoover's leadership . . . prevented internal collapse in the Allied countries as a result of deficient food supplies."³

Agriculturalists in the U.S. viewed the war as a battle versus German farmers and their militaristic government. In the vast grain belt of the midwestern U.S. the effort to increase food production resembled a military campaign. As a national leader in wheat production the state of Kansas responded vigorously to the nation's call to "win the war with wheat." Kansas was challenged to be the first state in the union to plant ten million acres to a single crop. The movement to grow more food in Kansas was based upon the organizational, emotional and economic themes prevalent in American society in World War I. To attain the collective goal of more wheat for the war effort the "wheat soldiers" united to overcome several obstacles. In 1917 and 1918 the
mobilization to meet emergency demands regimented every aspect of society for the cause. In Kansas the wheat campaign was a general success because of effective professional leadership and a spirit of patriotism which motivated the entire state. It was a pragmatic mobilization.

Nutritious, storable and transportable, wheat was the staple commodity on the international food market in the World War I period. Wheat was so vital to the war effort that the U.S. Congress passed the Food Control Act in 1916 and established the U.S. Food Administration in 1917 to control it and other foodstuffs. The national leadership of Herbert Hoover effectively promoted food production and control. Hoover seemed to be a genuinely popular figure among the farm population. Nonetheless, the food campaign was a centrifugal, "inside-out" mobilization. State and local initiative enabled the emergency war effort to succeed.

Patriotism and organization were two central themes in the movement to harvest more wheat in Kansas. State pride and native love of country were harnessed by the political leaders and print media of the state. At times this spirit of pro patria led to excessive measures against those citizens considered to be less than enthusiastic towards the war. The morale of Kansans was crucial to the
effort to provide more food for the nation's strategic arsenal.

Organization of the wheat campaign embraced many of the tenets of the progressive scientific outlook. Professional, industrial, financial, educational and agricultural elites comprised the leadership level of the mobilization in Kansas. The professional class intervened with committees that were established on the county, township and community level. Their role was to oversee the tactical implementation of the wheat campaign plans. Most of the workers in the organizing committees were volunteers and several members of the faculty at Kansas State Agricultural College (KSAC) were essential leaders in the program's success. Much effort was made to utilize surveys, statistical analysis and scientific farming methods to increase the yield of Kansas farms at harvest time.

Patriotism and organizations were essential to the implementation of the food production campaign, but the profit motive also weighed heavily in the drive to expand wheat acreage. For the first time in U.S. history the federal government tampered with the marketplace and fixed a two dollar per bushel price for hard red winter wheat. This move by President Woodrow Wilson persuaded growers to plant more wheat; no longer would they fear a downturn in prices if the war ended. The guaranteed price also calmed
consumer fears about continually increased bread prices and ended the rampant speculation by foreign governments and grain traders on the Chicago commodity markets.

Due to poor weather the wheat crop of 1916-1917 was the worst in several years. Wheat growers in Kansas faced an extreme shortage of quality hybrid seed wheat to plant in the fall of 1917. A statewide publicity and fund raising effort located available seed wheat and helped cash short farmers purchase their seed. Private groups and individuals who provided funds for seed wheat purchases received one-fifth of the crop when harvested. Seed was distributed to producers who had been successful in the past and those growers who prepared their seed bed early and thoroughly were favored in seed wheat allocations.

Central to the expansion of acreage was the wholesale introduction of mechanized agriculture into the state. A survey of literature from the period reveals the profound effect of tractors in replacing lost labor and breaking more sod to plant to wheat. "Power farming" allowed for the industrialization of farming, an inevitable trend which the war ushered in en masse. Tractors and combines were expensive to purchase and maintain; a cycle of credit financing which has since plagued the state has its roots in World War I and the post-war period.

A major threat to the wheat campaign was the lack of
available labor to harvest the crop in the summer of 1918. Wartime mobilization agencies moved to solve the labor shortage. State leaders called for a draft deferment for skilled farmers. Women, children, retired farmers, out of state labor, vagrants and city dwellers were mobilized to harvest the ripened wheat. National newspapers recruited harvest laborers and railroad companies offered reduced rates to harvesters seeking transport into the state. No wheat was lost for lack of labor.

Grain standards, storage and shipping were additional problems which confronted the wheat producers of Kansas. The progressive ideas of pure food and railway regulation were challenged by the demands and strains of the war emergency. Protests by farm groups lessened the tough new grain standards and a permit system alleviated the storage and transport crisis.

When the harvest was gathered in the summer of 1918 the crop was less than hoped for due to another rough winter which killed a vast portion of the crop. Nonetheless, the crop was still quite large and was crucial to the war effort. The war effort in Kansas set a standard for selfless determination and efficient organization for the benefit of the common good. The war effort would culminate in a record acreage of wheat in 1919.

War brought prosperity to Kansas and capped the
"golden age" of agriculture in the state. Inflated land values and crop prices caused overproduction and post-war deflation and depression that was to last nearly two decades after the war's end. The wheat army of Kansas held the line and helped win the war. The soldier of the wheatfield was an outstanding feature of the dynamic wartime mobilization in the U.S.
Notes for Chapter One


Wheat, Strategy and Grand Strategy

At the time of World War I wheat flour was the staple of the working class in Europe. The grain has high caloric value and can be stored for long periods. North American wheat was attractive because it was closer to Europe than the granaries of South America, India and China. On the other hand, America's great store of corn was not adaptable to the flour mills of Europe, nor were Europeans interested in consuming corn.

War however, disrupted the agricultural economy of Europe and created the demand for foodstuffs. With France's best wheat acreage occupied by the German Army and with Russia's poor transportation links, the loss could not be made up before the collapse of the Romanov regime in the spring of 1917. Agricultural labor machinery and fertilizers were also in short supply, as the munitions industry had siphoned resources from agriculture. French wheat production was down fifty percent in 1917 from the 1914 level. Further aggravating the problem were the devastating German U-Boat attacks and the emphasis on naval shipping at the expense of the merchant marine. Breadstuffs from Australia, India and Asia were effectively
cut off from Western Europe. American food had to fill the void to keep the Allies in the war.¹

Economic historian Gerd Hardach writes: "Food supply provides a particularly clear example of the extent to which civilian requirements were subordinated to armaments."² Strict regimentation of foodstuffs occurred in the belligerent nations. In Germany all state and idle lands were planted to crops and a Spartan rationing system was enforced. In Britain the normal concentration upon livestock raising was shifted to the production of cereal grains. Though the U.S. had lost a great deal of the European food market before the war, it became the lifeline to the armies and workers in the Allied camp, especially when the U.S. entered the war in April 1917.³

As it had since the Napoleonic wars, the U.S. provided sustenance to the belligerent powers of Europe. Since the Louisiana Purchase and the rail and canal connection to Chicago in the 1830s American food and cotton had fueled the industrial revolution.⁴ Britain was particularly dependent upon imported grain, by 1914 "Four out of every five slices of bread the British ate . . . were made from wheat grown abroad."⁵ U.S. farm exports to Europe were valued at 142 million dollars in 1913, by 1918 they were worth 505 million dollars per year.⁶

As the year 1918 began the Entente powers were producing 213 million fewer bushels of wheat than the
pre-war average. Early in the spring of 1917 the Allied powers had entered the Chicago futures market causing prices to soar and making tens of millions of dollars of profit for grain speculators. American consumer groups, angered at rising food prices, called for an embargo of food exports. When America entered the war the Allies needed 577 million bushels to feed their people and the U.S. surplus was only 200 million bushels. A drastic program of food conservation and production was needed to avert a crisis in food supply.

In April 1917 the U.S. faced a crisis in food supply which increased as prices continued to climb. The anticipated 900 million bushel wheat crop of 1917 only reached the 630 million bushel level. A battle ensued among exporters, consumers and farmers. Food prices rose 46 percent from July 1916 to April 1917. Chicago bakeries were nearly ransacked by angry consumers incensed over a 50 percent increase in bread prices. Under these circumstances the Wilson Administration "singled out wheat for special consideration as it attempted to mobilize agriculture for war." On 9 and 10 April 1917 Secretary of Agriculture David Houston chaired a conference of farm leaders, educators from agricultural colleges and publishers from the farm belt. Midwestern farmers were isolationists generally, and not in favor of U.S. involvement in the European war. But
the farmers had solidarity with Belgium, "that little nation which, singlehanded, defended the gateway to liberty."\textsuperscript{10} Houston charged that: "The duty of the individual farmer, at this time, is to increase his production."\textsuperscript{11}

The United States Food Administration was created under the provision of the Lever-Food Control Act, passed by Congress on 10 August 1917. Young mining engineer Herbert Hoover, who had led the campaign for food relief to Belgium after 1914, was appointed as the federal food administrator.

Hoover was given the power to buy and sell food, prevent hoarding and speculation, offer guaranteed prices, fix margin trading, suspend futures trading and to organize and control the food industry and transportation lines. In keeping with Hoover's aversion to "bureaucracies," the food administration was composed primarily of volunteers. Of the nearly eleven thousand employees, 9,000 were in the field instead of riding desks in Washington, D.C. Hoover rallied the nation's farmers by writing that they could unleash the "great potentialities of the United States as a factor in bringing this cataclysm to an end that will mean victory and future peace on earth."\textsuperscript{12}

Hoover was accepted as the "autocrat of the breakfast table" in spite of some rural resentment about being
"exhorted and preached at by men who do not understand" farming. Public support of Hoover and his programs is indicated in a passage from *Country Gentleman*, a popular farm journal:

> because of his training in large business affairs that sharpened him for battles of trading, price fluctuation and commodity economics: because of a perceptive mind that sees into the heart of a problem and dares not . . . seek a radical solution.
For Chapter Two


3. Several works have been written on European food policy in the war, see in particular L. Margaret Barnett, *British Food Policy in the First World War* (George Allen & Unwin; Boston, 1985), or Jurgen Kocka, *Facing Total War: German Society 1914-1918*, trans. by Barbara Weinberger (Berg Publishers; Warwickshire, 1973, 1984).


Wheat State at War: Patriotism and Organization

Kansans responded with vigor to the nation's charge "to win the war with wheat." Publisher turned Governor Arthur Capper guided the emotional shift in support of the war. As a pacifist Governor Capper was known as an outspoken opponent of American involvement in a European conflict. Preparedness movements had not been supported in the state and President Woodrow Wilson had been coolly received on a visit to Kansas in late 1916. Before America entered the war Kansas was truly a hotbed of isolationism.

As the bread basket of the nation Kansas was vital to Hoover and Wilson. The national leadership had to enlist the state into the mobilization. The President, the food administrator and the Secretary of Agriculture appealed to state pride and native love of country to rouse the consciousness of the citizenry. Pacifist ideology was resoundly banished from Kansas as Capper led the state into the war to end all wars and make the world safe for democracy. Capper wrote of isolationism: "That time is past, and now we must get behind all those things which will help win the war."
Kansas food would be one of "those things"; heartfelt patriotic virtue was invaluable in stimulating the mobilization of agriculture. Winning the war would mean sacrifice and hard work; it would cost men, food and money. It would take morale. In an open letter to his constituents Capper wrote "let's all be equally patriotic, each giving according to his means. . . . It will make the nation unconquerable." He also admonished Kansans to "plan simpler dressing, simpler social life, simpler living [to] preserve our health and resources." It was time to place patriotism over politics. Capper urged the federal government to "pay as we go" in order that the next generation would not be forced to foot the cost of the war.  

*Kansas Farmer* contributed to the military ethos of the ensuing wheat campaign, realizing that "without abundant food the whole great enterprise upon which we embark will break down and fall." The journal called for a "plan of attack" to confront the food problem. Cereal grain production was the pressing need, but Kansas farms would also contribute fruit, vegetables, and meat. Kansas farmers were reminded that "A Kansas soldier never sleeps at his post whether he is serving in the trenches or the furrows."  

Noted historian Robert D. Cuff has explained the Wilsonian mobilization as an attempt to "discipline the
competitive pluralism and possessive individualism of the nation." The challenges of war tended to "encourage a romantic impulse for community among the American people." Expressions of that patriotism were rampant as an outpouring of support for the war effort ignited mobilization.

Kansans enlisted in the armed forces, joined canning clubs, planted "liberty gardens," bought war bonds and volunteered for the Red Cross. KSAC president Henry J. Waters was deluged with offers from students seeking to provide county leadership in the food production drive. Students even plowed up parts of campus to plant more acres and called for a removal of "pro-German" instructors from the school. Waters received one letter, signed "Patriot," which asserted without supplying evidence, that "there is a German sympathizer on the college force, Louis H. Limper, he should be fired without any delay in my opinion . . . if he dares talk before me I will settle with him personally and promptly." In spite of these charges Professor Limper stayed on the faculty until retirement.

A film, "aptly entitled" "Winning the War with Wheat," was produced by the state to further heighten resident patriotism. Five copies of the film were rushed through the state in cars and shown on a train which traversed Kansas. Its theme advocated the special need for more
wheat and outlined methods to increase yields.

One character in the film, a teenage boy, convinces his father to plant a test plot on ground that was prepared early and thoroughly. The son's crop outyielded his father's wheat by several bushels per acre. A young lady enters the story at this point, having come to Kansas to rehabilitate her alcoholic father. The old man "plows a strait furrow" and boy meets girl, marries her and plants more wheat to beat the Kaiser. Henry Waters of KSAC suggested this visual imagery was particularly effective in promoting the wheat campaign to farmers who were tired of turgid lectures and pamphleteering. One young cadre apparently took the message to heart: "I am thirteen years old . . . I have a hoe for a gun and the weeds are my Germans." 11

Lip service to the war effort would not suffice; "Being a loyal American . . . meant not only supporting vocally important national policies, but also participation and involvement in various kinds of war work. Individuals and factions suspected of less than enthusiastic support of the war were identified, cajoled and sometimes harassed and humiliated."

German-speaking Kansans were particularly subject to persecution. German language instruction at public schools was abolished and the use of German on the telephone was forbidden. Many ethnic Germans were
compelled to burn their German language books. Governor Capper received an enormous amount of correspondence "revealing" those individuals who were "slackers" in their effort towards the war. Mennonites, Russelites (Jehovah's Witnesses), Mexican laborers, conscientious objectors, labor agitators, socialists and others with pacifist inclination were targeted by zealots intent upon keeping Kansas "pure" in the war. At times this patriotic hysteria resulted in physical intimidation, including several tar and feather incidents.¹³

One group that felt the wrath of Kansas patriots was the radical International Workers of the World (IWW). This fraternity preached "unabashed class warfare" and sought to "organize all workers, skilled and unskilled, into a single union which would eventually seize control of industry." Kansans feared the IWW would infiltrate the camps of migratory farm laborers and disrupt and sabotage the wheat harvest. There may have been some reason for this fear as by the fall of 1916 the IWW claimed 18,000 members in the grain belt.¹⁴

Popular fear of the "wobblies," as IWW members were known, is illustrated in this recollection from The Frankfort Story:

At 12:00 A.M. on a cool fall night during World War I . . . men were heard running up and down the streets of Frankfort . . . and . . . seen toting guns . . . We women folks soon learned that the International
Workers of the World (better known as the I.W.W.'s or I won't work organization) were headed north from Wamego tearing down telephone wires and burning homes. . . . Frankfort's crack Home Guard went into action . . . 8 or 10 men marched with guns on their shoulders to protect the four entrances to Frankfort. 15

IWW members did not engage the Frankfort Home Guard that night, the IWW sabotage was actually a fire started along a railway. Instead they faced a tougher enemy, U.S. Attorney General Fred Robertson, a Kansas version of J. Edgar Hoover. Robertson was noted to hold "an expansive view of the law." 16 (He even investigated Governor Capper to determine his attitude toward the war.) Robertson arrested 28 members of the IWW in 1917 and they remained incarcerated without trial for two years. IWW members succeeded in publicizing the pitiable conditions of Kansas jails. Robertson had made Kansas nationally distinguished for its excesses in war spirit. 17

Retiring executive secretary of the Kansas State Historical Society William E. Connelley said in 1918 that Kansas in the war was a "state of extremists"; the state was a "famous, if not notorious" source for ridicule from the rest of the nation. The historian was concerned by the sudden shift from pacifism to militarism. Evidently the drive to increase food production had worked beyond the parameters of wheat and pork. 18

Exuberance towards the war was sometimes manifested
in jingoistic and mob-like responses to perceived threats. Yet morale was essential to mobilizing the population to support the war effort. Overeagerness notwithstanding, Kansas in World War I was a land of consensus: an "island of calm in a sea of bigotry."\textsuperscript{19}

Morale alone is not enough to win modern battles. Organization of the wheat campaign was vital to its success. Prominent historian Ellis Hawley asserts "the war experience of 1917 and 1918 catalyzed the process of organizational change and set the pattern for future economic and social management."\textsuperscript{20}

Many historians have viewed the war as a negative reverse of progressive reform which dominated the early twentieth century. This school holds that the war mobilization was a period of oppressive bureaucratization and hinting of collectivization. Actually organization for war highlighted the social and economic trends that had developed in the decades before the war. Economic leaders such as Hoover in the U.S. and Walter Rathenau of Germany were keen that the war had ushered in an age of consolidation and interdependence.\textsuperscript{21}

In the American West the war symbolized the demise of the traditional Turnelian frontier epoch. Rugged individualism and social simplicity were traits that had to adapt to increased regulation of society and economy of scale.
America's wartime buildup crowned the professional era that had emerged from the laissez faire 19th century. Efficiency and economic expansion were trademarks of the war effort. In an emergency the professional elite of the U.S. reigned over the economy to facilitate the mobilization and effect societal change. War on the homefront was fought with statistical surveys, calculated efficiency and other vestiges of American corporatism. 22

Within the framework of the Army Appropriations Act of 1916 was the provision to create the Council of National Defense. Initially the Council enrolled 750,000 volunteers to distribute posters and leaflets which promoted the food programs and liberty bond purchases. Washington enjoyed nominal control over the various state councils but the work of the State Council, in the words, again, of William J. Breen, was an "inside-out" mobilization. Direct action was taken by the 184,000 state, county and local Councils of Defense. 23

Governors and state legislatures determined the power of the State Council; in Kansas the council was considered "partisan" and generally echoed the views of Governor Capper. As Homer Socolofsky writes: "The vast majority of Kansans accepted Capper as a sincere and willing interpreter of public feeling in the state." 24

Since his election in 1914 Capper advocated "the abolition of unnecessary boards and consolidation where
possible."\(^25\) Pragmatic leadership is evidenced by KSAC President Henry Waters' letter to Capper's assistant Marco Morrow in respect to the state (and nation's) first Food Conference in March 1917. Waters wrote that he wanted the meeting to "not prove to be merely a talk-fest . . . some definite program should evolve from it."\(^26\)

Immediately after the U.S. declaration of war on 7 April 1917 Capper called into existence the Kansas State Council of Defense. Prominent citizens, among them successful farmers, millers, industrialists, educators, railroad representatives and publishers formed the core of the State Council. Ranking members included literary great William Allen White and salt magnate Emerson Carey. The Council divided itself into eight sections corresponding with the state's Congressional districts.

Sundry committees formed to plan and oversee county organization, finance, highways, labor, public defense and so on. William Jardine, a future Secretary of Agriculture, headed the important Agricultural Production Committee. Waters served as President of the Council until he took a post with a Kansas City newspaper and later a high office in the Food Administration. Capper addressed the first meeting and charged the State Council "with a responsibility graver than any that has faced our people--the providing of the sinews of war."\(^27\)

Among the first actions of the Kansas Council were
resolutions passed calling for a federal food administrator (which they received in Hoover), increased credit for farmers, larger planting of staple crops, to increase the fight against insects and plant disease. Also there was support for national prohibition, women's suffrage, and government regulation of mill prices. A first move was to send out 5,000 questionnaires to ascertain the supply of seed wheat in the state. 28

A "general program" devised by the State Council demanded the subjugation of the state economy to the war effort. Banking, industry, labor and other sectors were mobilized along with the agricultural producers. Students and city residents were asked to go to the fields to help out. A fund of $500,000 was to be established to supply seed wheat to "needy" farmers. 29

State Council members were volunteers motivated principally by social consciousness. Through the committee system the wartime mobilization permeated throughout the fibers of society. The elite composition of the State Council evidently caused some concern among the more egalitarian citizens of Kansas. Nonetheless the council was useful in publicizing and regimenting the wheat campaign. 30

Actual planning and implementation of the State Council programs was aided by the State Board of Agriculture, the state branch of the United States
Department of Agriculture (USDA). One commentator even suggested "the chief function of the State Council was to carry out Department of Agriculture plans."\textsuperscript{31} The 1917-1918 \textit{Report of the State Board of Agriculture} was more charitable, noting: "When the Kansas Council of Defense was organized the entire machinery of the State Board was placed at its disposal."\textsuperscript{32}

In the World War I period the role of the Department of Agriculture and the State Boards were three-fold: 1). To make scientific studies of agricultural problems, 2). To distribute information on experimental farming procedures, and 3). To administer Acts of Congress in relation to agriculture.\textsuperscript{33}

On 9 and 10 April 1917 Secretary of Agriculture David Houston met in St. Louis with state agriculture commissioners, presidents of agriculture colleges, publishers and other farm groups. Out of the conference was the genesis of the wartime emergency legislation for agriculture. Price incentives and patriotism were to motivate farmers to produce more food. The program was to be handled by local farm organizations and through the support of the press.\textsuperscript{34}

Important to Department of Agriculture plans were the system of agriculture extension networks. These had been established to study and communicate scientific methods in farming by experimentation and demonstration. Fortunately
the extension network was organized and funded by Congress in the years preceding the war. Wartime emergencies "intensified and increased the amount of work done" by the extension agencies. 35

In Kansas the extension network organized demonstrations of farming techniques as well as methods designed to help farmers solve problems at the township level. Each county was allotted $1200 to hire a man and woman agent for a year. (The man received $800 of that sum.) Before the war only 17 counties in Kansas had extension agents. They worked with the county Councils of Defense to confront problems of labor, seed, machinery, insects, food preservation and other difficulties under the "Emergency Farm Bureau" program. 36

Cooperative extension services were funded by a combination of federal, state and local monies. Federal funding for the extension program for 1918 was 117,632 dollars. 37 The remainder of funds came from the state legislature, KSAC and county treasuries. 38

Among the valuable functions of the extension network was to inventory the resources available to the war effort. An edition of Farmers Mail and Breeze boasted that "Kansas is probably the only state in the Union to send a complete survey of resources to Herbert Hoover, national food director." 39

County agents in Kansas provided extensive assistance
to the wheat campaign. Extension services included giving 100,000 bushels of seed wheat to 2,080 farms which allowed 74,003 acres of wheat to be planted. Agents also visited 7,110 farms, received 17,209 calls and throughout the war they conducted 3,097 meetings which were attended by 147,046 persons.  

Extension workers explained food conservation procedures, oversaw highway construction and irrigation projects, and created correspondence courses for farmers who wanted to learn about tractors or other new implements. By late 1917 14,000 boys and girls were members of canning clubs which planted gardens and preserved food. Congress had seen the need for "emergency appropriations for extension use with specific reference to food production." Evidently these programs were so well-received by farmers that they were extended after the war.

KSAC worked with the extension service to conduct the wheat campaign. Not only did college students pledge themselves to the effort, "members of the faculty . . . were constantly occupied in speaking or writing in the interest of an increase in the production of food." A movement to make Henry Waters Secretary of Agriculture failed, but he was eventually a powerful member of the Food Administration.

Patriotic and professionally organized, the Wheat Army was activated for battle. Morale was high and the
cost of mobilization was relatively inexpensive due to its volunteer nature. "Over the top" were a myriad of obstacles in the path to victory.
Notes for Chapter Three


2. Farmers Mail and Breeze 45:51, Topeka (December 22, 1917), p. 3.


5. __________, p. 3.


7. Cuff, p. 78.

8. Henry Jackson Waters Papers, Kansas State University Archives, Manhattan, Kansas, General Correspondence Files, Box 9, File Moo-Moz.


30. See the 1918 State Board Report.
34. See Nourse, American Agriculture.
36. Teagarden, pp. 192-199.
40. USDA Cooperative Ext. Serv., p. 231.
41. Willard, pp. 222, 290.
42. Willard, pp. 307, 239.
"Two Dollar Wheat": Federal Price Support of the Wheat Campaign

Concern over grain prices was the first threat to the wartime wheat crop of 1917-1918. Due to dry and cold winters Kansas had suffered two successive poor harvests. Kansas growers hesitated; heavy planting in the fall could meet with bad weather and more disaster; a bumper crop could mean oversupply and low prices, especially if the war came to a sudden end. Economic survival was paramount to the farmers in the state in a land where "the matter of a few inches of rain [will] either buy them motor cars or wipe out their bank accounts." A Kansas farmer that summer could have said "if the government shares the risk, we're game."¹

Governor Arthur Capper expressed the concern of the state in a letter to Herbert Hoover. Capper wrote "Unfortunately for the world the growing of food cannot simply be made a matter of patriotism. It has to be a question of dollars and cents."² Henry Waters warned that farmers might not even plant a normal acreage of wheat if not insured against economic risk. A one million acre reduction was predicted if an acceptable price was
fixed before planting. Waters called for a two dollar per bushel price at primary markets.\(^3\)

President Wilson's food dilemma was to support U.S. allies, mollify farmers and constrain consumers fearful of inflated food prices. Julius Barnes, a major grain dealer and Food Administration executive noted later: "Wheat and the products of wheat became war munitions, and war munitions are bought with a ruthless disregard of all commercial factors."\(^4\)

Consumers were angered at the rapid rise of foodstuff prices in early 1917. Their disdain was heightened when the Entente powers heavily entered the speculative commodity futures market and sent wheat prices on an upward spiral. Soon urban consumer groups, including housewives and some national newspapers called for a ban on food exports to Europe.\(^5\)

Farmers were incensed over the embargo movement, which they viewed as an unfair restraint on high prices which they deserved. Kansas producers and politicians sided with the national government against calls for an embargo. Henry Waters worked with the National Foreign Trade council to avert the cutoff of food to Europe and Julius Barnes met receptive audiences when he toured the grain belt giving speeches to fight the embargo.\(^6\) The price crisis highlighted the reality with a somewhat exaggerated concern: "American wheat is the dominating
factor in the war crisis; Allied nations must buy here; neutrals must buy here; and our own people must get their daily supplies of wheat flour."\(^7\)

Producers and consumers were able to agree on how to oppose what Arthur Capper called the "illegal and corrupt manipulation" by the farmer's traditional enemy--the "middlemen"--the speculators, grain dealers, millers, bakers and railroads. In the futures frenzy in the spring of 1917 commodity brokers had profited by an estimated 50 million dollars per month.\(^8\)

Arthur Capper attacked the "several hundred firms of speculators" and "food gamblers" who were hoarding large amounts of food to inflate prices artificially. Capper felt that price manipulation was "criminal . . . a crime against the consumer and producer . . . prison is too good for such men."

It was the task of the Food Administration to rein in the food trusts. The Kansas Farmer endorsed its support for Hoover's position in this area: "It certainly looks as though the food administrator means business in . . . treatment of firms or individuals who attempt to make unlawful profits as a result of war conditions."\(^9\)

Woodrow Wilson reminded the farm population that the "fate of the war and the fate of nations" depended upon American food. Wilson promised farmers to halt profiteering and to assist them with price support.\(^10\)
Henry Waters was seated on a national committee which reported to Wilson that "a fair price should be based upon the cost of production and a reasonable profit." "Demoralize prices in either direction," warned Julius Barnes, "and the whole machinery of the world's granary will be wrecked." The *New Republic* led 5,000 national newspapers in an editorial call for a guaranteed price for wheat.

On 10 August 1918 the Food Control Act was signed by President Wilson. Hoover was given the power to fix prices and replace the "middlemen" and speculators. After initial rumors that the wheat price would be set at $1.50 per bushel (much to the dismay of farmers), the price was established at $2.00 per bushel at primary, local markets and $2.25 in Chicago.

The farmer was still disappointed at the two-dollar price, but reconciled his "financial disappointment with his patriotism." He was upset that wheat was the only crop with a fixed price. Seed, labor, and machinery costs were also rising steadily. The wheat grower was "neither a profiteer nor entirely self-sacrificing." Capper believed it was the farmer's "business, his duty, to make his farm yield the largest possible income." Farmers operated on a small percentage of profit, lack of government support at this time would have been a serious blow to the wheat campaign. Farmers likely would not
have expanded wheat acreage without financial support.¹⁵

Late and hesitant, the federal government intervened in the marketplace in an effective manner. With a price guarantee the wheat grower of Kansas promised to "rise to the emergency and act out of patriotism [to] put out ten million acres of wheat this fall."¹⁶ National support for the wheat campaign reminded the ranks of the Wheat Army that the "Soldier of the wheatfield--as important today as the soldier on the field of battle."¹⁷
Notes for Chapter Four


2. Arthur Capper to Herbert Hoover, Capper Papers, Box 36, File 9, October 1918.


5. See Hall, "Wilson and Food Crisis."


17. Charles Moreau Harger, p. 117.
Sowing: The Seed Wheat Crisis and
Seed Bed Preparation

Ten million acres sown to wheat with a 200 million bushel harvest were the stated goals for the Kansas wheat campaign in the fall of 1917. This would eclipse the record million bushel crop of 1914. If successful the fields of Kansas would produce in 1918 more grain than the entire U.S. had exported the previous year, for the first time a single state, Kansas, would plant over 10 million acres to a single crop. Three orders were directed to the wheat soldiers: 1). To secure early and thorough preparation of the seed bed, 2). To obtain a sufficient supply of quality seed, and 3). To expand wheat acreage. 1

To avert a shortage of quality seed wheat was the most important campaign objective. Patriotism, organization and price support would mean little without seed to plant in the soil. Seed wheat was in short supply due to the winter kill and subsequent poor harvest in 1917. Of the 8.5 million acres planted in the fall of 1916, over four million was lost to the hostile winter of 1916-1917. Surrounding states, such as Nebraska had faced even
worse weather, thus having no spare seed for Kansas.2

Hybrid grades of seed wheat was needed for improved yields. Quality strains were difficult to locate and high priced—up to $3.00 per bushel. Arthur Capper announced that farmers in western Kansas would need two million bushels of seed wheat. The governor believed "A fund of five million dollars might be necessary" to supply the seed deficient areas. A Farmers Mail and Breeze editorial barked: "We intend to talk about ten million acres . . . until we have every farmer in the state looking for more land to sow, and pleading for seed." Henry Waters reasoned that such an acreage was needed when "Every pound of bread we supply to our allies may mean one less of our soldiers buried in France."3

Herbert Hoover defined food administration as "the intelligent co-ordination of all the forces in the country to solve specific food difficulties and problems." A concentrated effort to locate seed wheat was orchestrated by the State Council of Defense, the State Board of Agriculture, the Governor's office, KSAC, the state Agricultural Commissioner and the Santa Fe Railroad. A "flying squadron" of 20 men in Ford cars scoured the state in search of quality hard, red winter wheat seed, particularly 570 Turkey, 762 Crimean, 392 Kharkov and the hybrid Kanred strains.4

Over 4.6 million bushels of seed was located, mainly
in the central/south-central region of Kansas. Harper County led the tally with 668,194 bushels of seed available. Lists of "reputable" suppliers were published in newspapers and periodicals and school children surveyed the sprouting capabilities of several thousand different samples of seed wheat and reported their findings to KSAC.5

Once seed was located the problem became a question of finance. Governor Capper wanted to form a coalition of land, capital and labor. Capper also telegraphed Hoover and Secretary Houston to plead for financial assistance for seed wheat purchases. U.S. Senator Charles Curtis (GOP Kansas) replied to Capper that some assistance might come from the War Finance Corporation.6

To fund seed wheat purchases a two million dollar pool was established by the Kansas Millers Associations, the American and Kansas Banker's Associations and the Farmer's Union. Waters was in charge of the fund to assist "deficient counties." A "crop gamble" scheme was also devised to finance more wheat planting. The plan was to organize financiers who would receive one-fifth of the harvested crop by supplying the capital for expansion. A grower was not allowed to pasture animals on the shared wheat without permission of his loan partner. County committees overlooked the separation of grain at harvest.7

Efficient farmers on 1,000-1,500 acre farms were targeted for financial assistance. If growers rejected
the crop sharing plan they often had the option to defer two-fifths of their seed purchase price until harvest time.  

After the seed wheat crisis was put aside in late summer of 1917 the emphasis shifted to expansion of acreage and seed bed preparation. A survey was circulated to assess the available amount of land for wheat. An estimated 8,850,000 acres were immediately available to plant—3,315,000 in corn stubble, 3,651,000 in wheat stubble and 1,075,000 in vital fallow ground. Eventually 9,480,000 acres of wheat were planted in Kansas in the fall of 1917, only 5.1 percent short of the ten million acre goal.

While the steel blade of the plow overturned thousands of acres of prairie sod, State Board and KSAC agronomists called for a maximization of production per acre. L. E. Call of KSAC encouraged early and extensive preparation of the seed bed. Farmers were asked to plow their stubble and fallow land as soon after the summer harvest as possible, preferably mid-July. Working the ground in this manner killed weeds, saved soil moisture and liberated plant food from the earth. Call suggested tilling to a depth of six to eight inches and leaving surface clods to prevent wind erosion.

"Let us use the spreader" was one of the more humorous slogans of the wheat soldier in the effort to
increase yields. Traditionally the clay loam and loam soil of Kansas had not needed fertilizer to grow hard red winter wheat. KSAC advocated increased use of manure and lime to maximize output. Unfortunately farmers were removed from commercial supplies of limestone and stone crushers. L. E. Call promoted cooperative purchases of crushing equipment among groups of farmers with access to limestone. 11

In tandem with the seed bed preparation were efforts to combat the Hessian fly, wheat smut and other plant maladies. The problem was so acute in the eastern half of the state that Waters called for an extra ten entomologists from the United States Department of Agriculture. In coordination with the Insect Committee of the Council of Defense these specialists divided the problem areas into several districts and confronted the Hessian fly. They instructed farmers to plow early and deep, to treat their seed with anti-pest chemical, to destroy volunteer wheat that was infested and to avoid planting early if the weather was unseasonably warm. 12

With the seed wheat crisis solved and the ground thoroughly prepared the soldiers of the soil planted the golden kernels which would help bring American victory. Continental weather extremities could purge the crop from the ground with brutal cold and ravenous wind. Dry weather in the fall of 1917 caused concern: late fall
rains created some relief. Farmers Mail and Breeze reported that "Many times the usual amount" of wheat was being sown. The wheat conscripts could only go into winter camp hoping that a blanket of snow would protect the crop until spring.13
Notes for Chapter Five

4. Blackmar, p. 34.
5. Blackmar, p. 23.
6. Arthur Capper tele. to Herbert Hoover, Capper Papers, Box 15, File 8a, "Agricultural Production and ID for Seed Wheat."
12. Waters Papers, General Correspondence, 1916-1917, Box 9, File Hoa-Hoz, "Outline of Hessian Fly Control Work for 1917."
Power Farming: The Rise of Mechanized Agriculture

To expand wheat acreage dynamically Kansas growers embraced mechanized agriculture. It was a move to economy of scale then known as power farming. Horse and mule numbers peaked in 1919, beasts of burden were still commonly used on most Kansas farms in World War I. Animal power was important, but the draft horse had many limitations which could be erased by the internal combustion engine. To introduce wheat onto thousands of acres of virgin prairie was only possible through the wholesale use of tractors. This account from the 1917-1918 Report of the State Board of Agriculture is indicative of the praise for this new implement:

The farmers were able to make such a showing in the last year of the war only through the more extensive employment of modern machinery, [such] as the tractor, the number of which has probably doubled in the last year.¹

Horse power became unattractive for several reasons. When war was declared the National Army immediately purchased 250,000 horses. A full complement of draft animals for each million men in the army was 325,000 horses and 100,000 mules.² The market for animals was essential and profitable. Another impetus for using the
tractor was the increased cost of feed and fodder. Horses also had to be rested frequently, a fact that mitigated the call for early planting as it would be too hot for horses to work long hours in the late July heat.

Horses and mules had to be continually groomed and deloused to prevent sickness. Draft animals were steady but slow, a man on a tractor could plow 5-10 more acres per day than a man with a four horse team (tractor 10-15 acres and team 4-5 acres). Only the tractor could dramatically expand cultivated acreage.  

A wartime boom in tractor purchases made the machine "one of the outstanding factors in the agricultural history . . . of Kansas." Journals and newspapers were choked with advertisements promoting the use of the machines. Soon farmers of the tallgrass and shortgrass prairies alike had nearly eliminated the natural habitat of many areas, making the land more susceptible to soil erosion. Trainloads of tractors were being shipped in the southwest regions of the state, despite shortages of heavy equipment created by the demands of the armed forces. On one Morton County ranch 3,000 acres of pasture on one ranch was converted to wheat land. A Rice County "wheat king" had twenty tractors operating on his land. Headlights were attached to the machines to allow for nighttime farming. Many farmers who had moved elsewhere came back to Kansas to make their fortune in
wheat. The wartime emergency had sparked the shift to mechanization: Hoover and others believed the movement towards mechanization was simply expedited by war conditions.6

Society was increasingly urbanized, industry and military conscription had begun to siphon farm labor from the state. Human and animal energy were increasingly replaced by the machine. Wartime mobilization agencies attempted to fully develop this revolutionary source of power. Kansas Farmer prodded the farmer: "If he owns a tractor, in most cases there are days when he can use it to help out a neighbor, without seriously interfering with his own work."7

J. C. Mohler, who was to become a stalwart secretary of the State Board, was in charge of the "Horse and Machine Power Committee" for the Council of Defense. His committee found there was an estimated 3,932 tractors in the state when America entered the war in April 1917. Some 92 percent of these machines were classified as being in "good or fair" condition and each tractor only operated an average 41 days per year. The State Council wanted to increase the operational use of tractors.

Tractor clubs were organized, and meetings and shows were held to demonstrate and inform the rural public about power farming. KSAC agricultural engineering students partially comprised the emergency team of
mechanics organized by the Council of Defense. Correspondence courses formed by KSAC helped train mechanics and tractor drivers. Experienced tractor operators were recruited into teams which traversed the state to assist farmers with the machines. Women such as the Jayhawk Tractor Girls of the University of Kansas were included in the contingent of tractor experts.

Information was widely distributed by the media on proper maintenance methods for the iron monsters which invaded the prairie. Farmers were informed of the benefits of storing tractors in sheds, painting their machines and operating cautiously in cold weather, as the metal would be more fragile. Tractor operators received practical advice such as not to fill the gas tank while smoking, not to run the equipment at high speeds, or to ride the clutch or race the engine. Normal repair costs were estimated at four percent of the cost of the tractor per year. Fuel and maintenance costs would equal the original price of tractors in nine years.

Tractors had come into their own; as each day passed the farmers adapted to their complexities. Kansas farmers were encouraged to tailor their tractor purchase to the size and terrain of their property. Even though military demands would lessen available numbers of tractors, their use in nighttime and with proper maintenance made up for the shortage. Farmers were advised to keep a
stock of good draft animals and to plan careful plowing patterns before working a field. 10

Power farming was a mixed blessing. Tractors and combines replaced labor lost to non-farming pursuits and allowed for the massive expansion of cultivated acreage and more efficient transportation with trucks, tractor pulled trailers, and better roads. By the end of the war in November 1918 the number of tractors in the state had increased from 3,932 to 8,689. 11 By 1920 that number had increased to 17,177. The value of machinery in the state rose from $48,310,000 in 1910 to $154,716,000 in 1920, or 320 percent. 12 By 1919 over half the farms in Kansas used tractors, along with headers, binders, threshers, discs and other modern implements. 13

Mechanization proved to be a major strategic weapon of the wheat campaign; but tractors created their own problems. For the first time "Reliance on machine power meant . . . a significant level of inputs from non agricultural industries were being applied on the farm. Farmers were no longer producing their own power by raising horses and mules." 14

Mechanization meant a new drain on bank accounts for equipment purchases, repairs and fuel. Farmers were forced into credit financing. Its consequences in the post-war deflation period when land values plunged were serious. To pay for the new machines farmers continued
to break new sod. The war directly contributed to the expansion of farm land, it increased neglect of soil conserving practices and contributed to the subsequent "dust bowl" experience of the 1930s. Power farming had arrived in Kansas, for better or worse.15
Notes for Chapter Six

8. The Industrialist 44:18 (October 31, 1917), p. 3.
10. Farmers Mail and Breeze 47:36 (July 28, 1917), p. 3.
12. U.S. Bureau of the Census, Department of Commerce, 
   Abstract of the Fourteenth Census of the United 

13. The Tiller and the Toiler, 1919 Wheat Edition, 
   Larned, Kansas; Pawnee County, 1919), p. 75.

14. Marc A. Johnson, "Financing Kansas Agriculture: 
   1861-1986," in George E. Ham and Robin Higham, eds., 
   The Rise of the Wheat State: A History of Kansas 
   Agriculture 1861-1986 (Manhattan, Kansas; Sunflower 

15. See R. Douglas Hurt, The Dust Bowl: An Agricultural 
   and Social History (Chicago; Nelson-Hall, 1981).
Mechanized farming was crucial to the expansion of wheat acreage, but labor was needed to harvest the crop in the summer of 1918. Governor Capper predicted 60 to 100 thousand workers would be needed for a ten to twenty day period in addition to labor already on the farm. The State Council of Defense made a patriotic appeal to "save every acre of wheat" through the mobilization of labor. Recruiting soldiers for the Wheat Army involved national policy, statewide emergency regulation, disputes with organized labor and a call up of women, children, city dwellers and indigent persons to help with the harvest.¹

Labor was in short supply due to several disruptions created by war. Fifty to sixty thousand transient laborers usually encamped in the state at harvest had been absorbed by wartime industry. Munitions and shipbuilding recruiters had lured many workers from the state with high wages and the appeal of city life. Also one-fourth of the American Expeditionary Force was composed of farmers, including approximately 77,000 Kansans who joined the Army, Navy or
Marines. Mexican labor left the state after rumors circulated they would be eligible for conscription.²  

Loss of skilled agricultural workers was a major concern in the state. Many political leaders including Hoover and Capper, called for a blanket deferment of skilled farmers. Capper believed conscription had unfairly impacted upon agriculture and called for a return to the soil from burgeoning urban industry. Farming was 15-20 percent low in skilled labor, particularly tractor and combine operators.³  

Capper wrote to Woodrow Wilson insisting "under present drafting methods there is no intelligent selection between the key essential, trained and experienced farmers and the unskilled, non-essential men of the farms and small towns.⁴ Many farmers were skilled because they had spent their entire lives learning how to farm. It would be difficult to replace them with untrained labor.⁵  

The Kansas Farmer had both the national and the local audience in mind when it reported that the war "is not simply the army which will fight Germany . . . the Kansas boy who stays behind the plow is performing perhaps a greater service to his country than the one who goes into training camp and finally takes his place in the trenches."⁶ State Commissioner of Labor P. J. McBride appealed to Wilson for an exemption for farmers: "We believe the saving of our wheat crop is just as
important . . . as the building of ships." Apparently the appeal to Wilson fell on deaf ears; Kansas would be forced to mobilize labor to save the crop from shattering in the field. Nonetheless many young farmers eventually would not be conscripted into the armed forces, though 2,500 Kansans died in service to the nation.

Several measures were enacted to handle the expected labor shortage by the war mobilization agencies, including the Department of Agriculture, the Agricultural Experiment Stations, the State Labor Commissioner, the Council of Defense, several newspapers and railroad companies. E. V. Wilcox of the Office of Farm Management in Washington, D.C. forwarded a national plan to cope with the labor shortage. It called for an immediate survey to ascertain the amount of labor needed and the amount of labor available to help with the harvest.

The plan advocated a return of men from the city to the country and a mobilization of retired farmers, vagrants, merchants and teachers. School children and women were also expected to be of great service in the effort to save wheat. Key to the plan was efficient utilization of time and resources. The labor drive also called upon the patriotic devotion to get the wheat from the field. A compulsory labor spirit was reinforced by a strict interpretation of labor laws; transients and unemployed were forced to sign up for the harvest crew.
(He who does not work does not eat!) The Farm Labor Board encouraged Mexicans, Puerto Ricans and blacks to come help with the harvest, but had to admonish citizens to treat non-whites with respect.  

After the fall planting in 1917 Kansas wheat producers and state officials had concentrated on the impending labor campaign. The Farmers Mail and Breeze, a Capper publication, wrote on 10 November 1917: "There is no use in one trying to delude himself into believing that there will be an abundant labor supply next year."  

A survey taken that same month of 1,000 farmers indicated 604 were "short" of help, 169 "very short," and only 165 replied that help was "plentiful." "Farmers everywhere . . . complaining about their inability to get help . . .," wrote State Farm Labor Chief E. V. Frizell, "If we wait for the government to supply the harvest hands we will no doubt lose the crop."  

Growers were asked to plan their labor needs and to cooperate with other farmers. Each county tabulated needs and listed available workers. On 10 May 1918 Governor Capper called for 60,000 boys to join the "Harvest Army." "Topeka patriots," mostly businessmen, pledged 214,000 working hours to the harvest. Among the "twilight harvesters" were the employees of Capper Publications. Churches also preached a unified theme of "harvest sermons," "exclaiming to parishioners that wheat
can't wait." On 20 May 1918 8,160 persons signed up on a state-wide campaign to enlist harvesters.¹²

Henry Waters mentioned in the official history of the State Council of Defense that "high-school boys were given the opportunity to devote their vacation time and other idle hours to the production of food."¹³ Boys between 16 and 21 who were physically fit were recruited by the United States Boy's Working Reserve to receive training and an "attractive button" promoting the wheat campaign.¹⁴

This "great army of boys" was supplemented by the female contingent of the Wheat Army. Women had always been an essential foundation in Kansas farm life. They responded to the war emergency by assuming responsibility for even a greater portion of work. One mobilization vehicle was the canning club organization and other women's groups were ready for total involvement in the wheat campaign when the war began. The Topeka Journal reported "Kansas women want in the war game. They want to shoulder the musket and go into the ranks."¹⁵ W. A. Bolinger, a western Kansas representative of the State Council of Defense, wrote to Governor Capper that in the Hays area: "The women were in the field instead of cooking and the fare served is the kind that could be expected under such conditions."¹⁶

The Industrialist headlined the claim "Cooperation by Women Will Largely Win the War." The KSAC paper noted

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"Girls will find it more enjoyable riding a binder in the wheat fields . . . than clerking in a store." It would not be an understatement to assert that women were indispensable to the mobilization of labor.\(^\text{17}\)

Hard physical labor was still the domain of men and the labor campaign concentrated on bringing workers into the state. National publications, such as the Chicago Daily News opened "Farm Labor Recruiting Stations" to direct harvest hands into the wheat producing regions of the U.S. Special trains offered reduced rates on credit terms to workers seeking transport to Kansas and other wheat states. Governor Capper appealed to the national Army to release men to help bring in the crop; several hundred men received furloughs from Camp Funston to assist with the harvest.\(^\text{18}\)

With labor in such short supply workers were able to ask a premium price for their services, much to the dismay of wheat growers. Along the railway line from Russell to Oakley 500 men were needed to supplement the harvest ranks. Farmers were incensed when often they would "feed a man for a week, only to [have him] walk away when work began."\(^\text{19}\)

In March of 1918 a farmer's conference met to set a pay scale that would give five to six dollars per day. By harvest time workers were asking for six to seven dollars per day and it was feared that that rate would
increase to seven to eight if something was not done to halt the wage spiral. Growers were bitter that the harvest hand problem was "demoralized by [a] few farmers offering high prices." One could hardly expect that a harvest hand would not ask for as much as he could receive.  

Organized labor, particularly the IWW and its consorts, were viewed as a powerful enemy by farmers and politicians alike. IWW President Wm. "Big Bill" Haywood had initiated a drive to enlist harvest labor in the union in early 1916 and as previously mentioned, the "One Big Union" claimed a membership of 18,000 in the grain belt by the fall of 1916. The IWW provoked "fear and anger" in Kansas, where the concern was IWW infiltration into the "hobo jungles" which provided much of the harvest labor pool. Governor Capper asked the people to "suppress promptly any effort . . . of the IWW or any other labor agitators to interfere with the wheat harvest." Kansans were well aware of the Chicago trial of the IWW where one witness revealed a "reign of terror" was planned for Kansas in 1918.  

Capper and U.S. Attorney Fred Robertson used vagrancy and "criminal syndicalist" laws to break IWW organization in Kansas. Less radical unions such as the American Federation of Labor were approached in a conciliatory manner to decouple them from the IWW
extremists. Aversion to the IWW and their programs created an anti-labor opinion in the state which has prevailed to this day.22

The Harvest Army Generals successfully counter-attacked the inroads of the IWW. Over 200 "Home Guard" companies protected the wheatfields of Kansas in the summer of 1918. Though a few incidents of sabotage occurred, the harvest labor force was effectively sifted of "wobblies." One indictment against the IWW charged "seditious conspiracy" to obstruct the flow of war goods, especially wheat and oil. Instead of rallying workers the IWW seemed to unite the Wheat Army.23

As a result of patriotic appeal, effective organization, and mobilization of labor the harvest was a success. According to the State Council of Defense, not a single acre of wheat was lost for want of labor. The labor campaign was a salient feature in the pragmatic mobilization of Kansas. Society had united to "Win the War with Wheat." Still, Capper found after the war: "Those in charge of the food campaign did not seem to realize that it is not easy to draft large numbers of unskilled people into farm work."24
Notes for Chapter Seven

4. Arthur Capper to Woodrow Wilson, Capper Papers, Box 15, File 3b, "Draft."
7. P. J. McBride to Woodrow Wilson, May 3, 1918. Capper Papers, Box 36, Files 9a, 9c.
12. Topeka Capital, Topeka, Kansas (June 9, 1918), p. 1, and Blackmar, p. 4.


16. W. A. Bolinger to Arthur Capper, Capper Papers, Box 10, File 14, "State Public Utilities Commission, Gas, Electricity, Telephones, etc."

17. The Industrialist 44:32 (May 8, 1918), p. 3.


20. W. F. King to Arthur Capper, Capper Papers, Box 10, File 9b, "Department of Labor and Industry, 1918."


22. Applen, p. 166.


Savings, Standards, Storage and Shipping

Due to harsh weather in the winter of 1917-1918 the 1918 wheat harvest did not meet the 200 million bushel goal. Of the 9.8 million acres planted in the fall of 1917 only 6.8 million was harvested for a final tally of 93 million bushels, still three times the amount of wheat the entire U.S. had exported in the previous year. The average yield per acre was 14.1 bushels, one less than the national average. The crop was valued at 185 million dollars, over 100 million dollars more than the crop in 1917.¹

Nearly two million bushels of grain worth 14 million dollars was saved by the reduction of waste in the harvest process. Cutting back swaths and raking shock rows provided additional staples for the nation's coffers. One man made 500 dollars cleaning wheat rows, reminding people that one bushel of wheat could provide several weeks worth of bread for a single person. Farmers harvested more straw, which contained two percent of the plant's grain after harvest; they also used canvas or solid bottom beds on their grain wagons so grain would not be lost in crevices. The Council of Defense asked
growers to sweep out machines and to make sure the thresher or combine was properly adjusted to prevent waste. These measures cut significantly into unnecessary losses estimated to total one-half million bushels in 1916.  

Governor Capper received many complaints from wheat growers "to the effect that there is a great difference in the price they are receiving from different purchasers in the same community." Elevator owners suspected of shorting their customers were reported to the Food Administration, who ordered one D. E. Bondurant of Ransom to repay fifty farmers who had been paid seven cents per bushel less than the two dollar guarantee. To farmers with several thousand bushel this could mean a great sum of money. Governor Capper often wrote letters of reprimand to purchasers paying illegally low prices.  

Strict new grain standards also caused resentment in rural Kansas in 1918. As part of the U.S. Grain Standards Act winter wheat was now graded in six classes, each of which was valued differently under new price control legislation. Grade 1# was to have a "dark, hard vitreous kernel" and was worth two dollars per bushel. Most of the wheat in Kansas was expected to be categorized as Grade 1#. Licensed inspectors with new equipment were to enforce the new grading system, and there was an appeals provision in the new rules.
Farmers tended to oppose uniform standards created to improve the quality of the nation's food supply. They viewed it as an attempt to renege on the promise of two dollar wheat. Farmers felt the rule was arbitrary because testing procedures were not well-developed on the local level. Growers organized meetings to protest the new standards, especially Chief Inspector for Kansas, George Ross.6

Ross was reviled as a "traitor" by such farm leaders as Rodney Elward of the Russell area. Ross responded by saying the protest was a failure to accept to modern demands of food quality. Kansas wheat was known to have an excess amount of dockage; debris in the grain such as dust, chaff, and weed seed. Governor Capper sided with Ross but the protest continued to build. A meeting was held among farmers, millers and inspectors to discuss differences in the grain grading crisis. Eventually all sides involved reached agreement and the essence of the new rules was left intact, with some modifications to meet war conditions. The number of subclasses were reduced, thereby raising the rating of ordinary grades so that Kansas farmers would have about thirty percent more wheat in the two dollar Grade 1# category.7

Grain storage was also undergoing innovation in the war period. New metal and concrete granaries were being built across the state to increase storage capacity on
the farm. In ordinary conditions farmers would store their crop and wait for a post-harvest rise in prices before dumping their grain on the market. With the price guarantee farmers were overloading railheads and elevators. The government which had sent federal agents to confiscate grain the previous year was now forced to encourage farmers to hold a portion of their crop on the farm. 8

A final barrier to the wheat campaign was the actual transportation of the crop to market centers. Arthur Capper wrote to the U.S. Railroad Administration complaining "elevators lacked cars" and in some places grain was piling up on the ground. 9 William C. Mullendore of the Food Administration wrote after the war:

In the early part of September 1918 it became apparent that on account of the phenomenal movement of wheat caused by a guaranteed price and large crop . . . the storage capacity at all markets was rapidly decreasing and within the space of a week or ten days the terminals would be blocked with grain. 10

The railways were under military control during the war. A permit system was arranged to ease the flow of wheat onto major rail lines. Also an active drive to increase the load per car helped eliminate the stress on the nation's railways. A major rebuilding effort also helped solve the transport emergency as did 200 locomotives that had been destined for Russia which
weren't sent because of the revolutions producing the Soviet Union after October 1917.11

Another railway problem which was condemned by wheat growers was the emergency allowance of a 25 percent rate increase. Capper feared the steep rise in rates would be continued after the war and "wipe out the jobbing centers" of the state. The rail companies claimed they needed the extra capital to construct 100,000 new cars that would revitalize the American rail system. Railroad freight traffic in Kansas in 1918 totaled 62.8 million tons at a rate cost of 81.7 million dollars. Railway revenues for the year in Kansas exceeded expenses by nearly 26 million dollars.12

Highway transport, the new alternative to the railway, was still underdeveloped in Kansas though funding for roads increased from 5 million in 1917 to 10 million dollars in 1918.13 Motor trucks and tractors were used extensively to haul grain into the local elevators. The Council of Defense organized a "motor truck service" to establish rate guidelines and to locate drivers and mechanics. In the future motor transport was to become very important to the agricultural economy of Kansas.14

With their product entering the nation's lifeline the Wheat Soldiers could be satisfied with the work they had accomplished. They had fought hard to provide America and the allies with the fundamental sinews of
war. Organization, patriotism, government price support and power farming had allowed for a massive expansion of acreage and defeated several crises; including the seed wheat problem, the labor crisis and difficulties with storage, grain standards and transportation. The "friction" of war had been overcome in a state whose motto befits its performance in the wheat campaign "Ad Astra Per Aspra"—"To the Stars through Difficulty."
Notes for Chapter Eight


2. Annals, p. 218, and Farmers Mail and Breeze 47:40 (October 6, 1918), p. 3.

3. Arthur Capper to Walter Innes, Capper Papers, Box 21, File 7, "Ness County."

4. Rodney Elward to Arthur Capper, Capper Papers, Box 19, File 21, "Dickinson."

5. 1918 State Board Report, p. 169.


J. C. Mohler, a state leader in the wheat campaign, summed the emotions of the state at war's end by quoting a "noted economist" at the 1918 meeting of the State Board of Agriculture:

Wheat, the source of the staff of life; the cheapest and best of all our American foods; the deciding factor in the war; the greatest single element in the conclusion of peace, and to-day the strongest bar against Bolshevism.¹

In the war years 1914-1918 Kansas producers grew 43 percent more food than in the four years which preceded the conflict, "well above the national average," in spite of some of the worst growing conditions since the 1880s. Kansas farmers were the vanguard in the nation's effort to increase food need to sustain the war mobilization. In the fall of 1918 Kansans planted a record 11.6 million bushels of winter wheat.

Kansas was zealous for the cause, which panned out in a significant contribution to the 33.9 million metric tons of food stocks which the U.S. provided for Europe in the war.² This immense supply of caloric sustenance was among the greatest examples of America's grand strategic
power. American food ranked in importance beside the money, munitions, and men the U.S. provided for the Allies. British tommies, French poilus and American doughboys were kept alive in the trenches by war bread and bully beef from the great agricultural heartland of North America. Industrial workers in Europe and the U.S. did not riot in the streets, such as those in St. Petersburg in the fall of 1917. As the old Russian proverb has it, "well fed horses don't rampage."

Food mobilization was accomplished only through "revolutionary" control over the free market. It reflected the rise of the bureaucratic state, railways, industry and food production came under strict government supervision. Herbert Hoover proved to be an effective and well-liked national leader. Under his guidance the sprawling railways, shipyards, flour mills and farms of America meshed into a food production machine that became a significant strategic weapon.

Particularly important to the wheat campaign of 1917-1918 was the guarantee of two dollar per bushel wheat by the U.S. Congress and its agent, the U.S. Grain Corporation. Prices were a continual worry to farmers; the first direct intervention of the federal government in the market was highly effective in raising more wheat, though price control did not occur without problems. Farmers thought that the enemy was the "middleman" who
profited excessively by speculation and inflating food prices. Price control helped ease the strain between countryside and the expansive metropolis. Government intervention was based on the progressive legislative action which grew out of the Theodore Roosevelt presidency. A guarantee of two dollar wheat insured that wheat growers would sufficiently expand their wheat acreage, despite problems regarding grain standards in the months preceding the 1918 harvest.

Effective government intervention also helped solve the transportation and labor problems which threatened the crop of 1918. Governor Capper failed to convince President Wilson to defer many skilled farmers, but rebounded and fought the battle without much help from Washington.

Organizational leadership on the state-wide level was also of exceptional importance to the wheat campaign. Mobilization was carried out through the executive and legislative branches of the Kansas government, the State Board of Agriculture, the USDA, KSAC and its extension networks and experiment stations. Private individuals, industries, publishing firms and businesses contributed their resources and talents in the drive to increase food production. Women, children, city dwellers, retired farmers, teachers, blacks, Mexicans, and other groups all provided labor for the Wheat Army. Council of Defense
members were volunteers who controlled the mobilization at a minimal cost and without creating a self-perpetuating bureaucracy. Nonetheless the war provided a forecast of the modern activist government.

The American war effort was truly a centrifugal mobilization rooted at the township and county level. Hundreds of committees were created to survey and oversee various and sundry problems and programs associated with the wheat campaign.

The pre-war institutions devoted to the development of agriculture, KSAC and the State Board, provided specific ideas and solid leadership in the wheat production movement. Agents of the State Board and scientists and educators from KSAC gave instruction on how to increase yield per acre, fight insects, use fertilizer and repair tractors. Science was mixed with frontier common sense to maximize production and profit for Kansas farmers. KSAC certainly lived up to its motto, "Rule by Obeying Nature's Laws."

Surveys, statistics and the modern professional ethic was one of the legacies of the war period. Efficient organization helped tackle the seed wheat and labor problem and advanced the mechanization of farming. KSAC leadership included nationally recognized Henry J. Waters, William Jardine, "J.C." Mohler and L. E. Call. KSAC established an Agricultural Economics Department after the
war to further serve Kansas farmers under the provisions of the 1862 Hatch Act which established land grant colleges in the U.S. The organizational history of the wheat campaign suggests the need for emergency plans on the local, state and federal level for expansion of agricultural output in war or in periods of potential famine.

Patriotism, combat elán, was as essential to the success of the wheat campaign as any government program. Governor Capper roused constituents with continual appeals to the state to sacrifice and work harder for the nation, especially for the "boys at the front." Popular slogans were circulated by the state and national propaganda organs, including the journalistic empire of Arthur Capper. Among some favored slogans: "Win the War with Wheat!," "Food--Grow It to Help Whip the Huns!," and "Slap Kaiser Bill with a Pork Chop!" Farmers Mail and Breeze provided an airy justification for war: "The farmer everywhere is a warrior when war is the only thing that will make him free."³

Cooperation and consecration in the wheat campaign achieved some outstanding results. A spirit of community would make the war memory vivid in the state; countless memorials were built to commemorate the "Great War"; aging veterans sold red paper poppies near the time of every Memorial Day.
Kansas farms produced 507 million dollars worth of food products in World War I. Kansas produced wheat, corn, pork, beef, fruit and honey. Kansas also supplied munitions, coal, petroleum and soldiers. Citizens of Kansas had the highest bank deposits per capita in the U.S., and participation in conservation, gardening, war bond purchases and other "volunteer" activities.

Unanimity was molded through public schools and speeches by Governor Capper and other leaders. Even the motion picture industry, then at birth, had a role to play in morale building among the wheat soldiers.

Thousands of acres of sod which had lain undisturbed through the centuries, beaten down by rains and the hooves of thousands of buffaloes, stubborn and unyielding to other implements, is giving way to the new steel power. Without the tractor this miracle would not be possible.4

The war had "both revealed and exploited a tremendous reserve power for agricultural production."5 After the war the expansion continued. Pasture land worth ten dollars an acre before the war was valued at $100.00 per acre. Tractors and combines meant industrialized farming, an uncontrollable move to economy of scale—since known as the agricultural style of the American midwest.

Tractors had built-in costs such as purchase price, maintenance, and fuel. Farmers were forced to embrace credit financing; from 1915-1917 capital expansion on
Kansas farms was accomplished largely with 72 percent borrowed money. When grain prices dropped after the war farmers had continually to expand acreage to pay for equipment that had been purchased with credit secured by acquiring overvalued land. A similar cycle would occur in the 1970s and early 1980s.

Post-war deflation and continuous expansion of wheat land led to a severe exploitation and neglect of the land. As early as the fall of 1917 the dust clouds of the 1930s were on the horizon.

World War I capped the "golden age" of agriculture. The number of farms in the state decreased from 110,108 in 1910 to 97,040 in 1920. Capital investment increased 51.4 percent in the same period. The value of land and crops also made significant gains. Labor, machinery and fertilizer costs also increased substantially. Farm debt in the U.S. increased from 4.7 to 8.5 billion dollars and Kansas debt rose at about the same rate. Kansas bank deposits rose 50 percent from 1915 to 1917 when over 225 million dollars were deposited in Kansas banks.

World War I created many wheat "kings" with thousands of acres of the grain planted on giant acreages. Farmers unable to pay loans the previous two years suddenly had the cash to pay in full and still buy a new Ford. Wheat indexed at 100 in 1914 reached 249 in 1917, but dropped
to 234 in 1918 and continued to decline to a low of 74 in 1939.12

Agricultural efficiency meant fewer farmers and more grain. After a return to normalcy Kansas wheat was in less demand. As is often the case the producers of primary agricultural products were the first to suffer from depression. The economic cycle of overproduction has "afflicted American agriculture ever since."13

Henry Waters had foreseen the post-war economic problems in 1916. In a letter to the National Foreign Trade Council he said, "It seems very likely . . . that we shall be placed in a very awkward position after the war assuming normal crops in Canada, Australia, New Zealand, India and China, as well as in this country. A radical decline in the price of farm products will seriously disturb our whole social and industrial balance."14

Kansas truly became part of the world economy. The State Board and Governor Capper called for diversification from wheat into livestock and industry. Capper was concerned with returning soldiers to civilian life, construction of more roads, prohibition of alcoholic beverages and providing credit and education to family farmers.

Kansas provided nearly one-fifth of the nation's wheat in World War I. The wheat crop acreage of 1918 could have covered several small states in the northeastern
U.S. A pragmatic mobilization had occurred in the state. Patriotism provided emphasis and the organization of the wheat campaign reached into every home in the state. Leaders of government, agriculture, finance, education, industry and women's groups ran the mobilization with professional efficiency. War spirit and organization overcame the seed, labor and transportation difficulties magnified by the course of war. Kansans sacrificed and worked to attain the national goal—victory—by "Winning the War with Wheat."

Journalist Charles Moreau Harger provided an eloquent epitaph to the mighty Wheat Army of 1917-1918:

Of all the discussion and of the imperative considerations of our strength and safety this fundamental truth stands: The farmer has the nation's weal at heart and to the extent of his ability will be a good soldier, the soldier of the wheatfield—as important today as the soldier on the field of battle.15
Notes for Chapter Nine

1. 1918 State Board, p. ix.


3. Herbert Quick, "The War, the Farm and Kansas Farmers," Farmers Mail and Breeze 48:11 (March 16, 1918), p. 3.


Charles Moreau Harger, in Trask, p. 117.
Select Annotated Bibliography

Archival Sources:

Arthur Capper, Governor of Kansas, Personal Papers,
Kansas State Historical Research Center, Topeka,
Kansas.

Henry Jackson Waters, President of KSAC 1909-1917,
Personal Papers, Kansas State University Archives,
Manhattan, Kansas.

Journal Sources:

The Farmers Mail and Breeze, Topeka, 1917-1918.
The Industrialist, Manhattan, Kansas, 1917-1918.
The Kansas City Weekly Star, 1917-1918.
The Kansas Farmer, Topeka, 1917-1918.
The Topeka Capital, Topeka, 1917-1918.
Other Sources:


A compilation of readings with some useful material on agricultural technology.


See Chapter Seven, "Organizing the Harvest Stiffs, 1914-1917."


Contains some excellent statistical analysis.


An essential study of food policy in wartime.


Beaver has done much work on the period, this monograph is useful but not indispensable.

Though somewhat dated this work provides an insight in trends of American agriculture.


An invaluable contribution to this study, though biased as are most official histories.


Breen effectively defends the "inside-out mobilization" thesis.


Bright's compilation is a standard for any student of Kansas history.


Governor Capper was one of the influential leaders in the post-war coalition from which this book takes its title.

A lengthy volume of Capper's speeches which contain insight into Capper's political philosophy.


Part 13 of the *Preliminary Economic Study of the War*, ed. by David Kinley.


Contains an excellent bibliography and some material on food production.


Includes statistics on every cereal grain trade on the Chicago Market.


Has some important information about the war's effect upon agriculture.

A seminal study on the military economy in World War I with several articles on food supply.


Connelley's article blasts Kansas for its tendency towards emotional extremity.


Court is one of the pioneers of economic and social history, this work has some relative information on agriculture.

Coville, Fred V. "War, Patriotism and the Food Supply." *National Geographic* 31:37 (October 1918).

Coville appeals to the farmer's patriotism in this magazine that was widely read by the rural population.


Contains Robert D. Cuff's "American Mobilization
for War 1917-1945: Political Culture and Bureaucratic Administration."


An outstanding work by a prominent American historian, see especially Chapter Six, "Money and Food."


Fite has written extensively on American agriculture; this essay contains an exceptional overview and bibliography on government farm policy.


Galambos is a pioneer of economic history, in this essay he surveys various farm journals to ascertain farm attitudes towards large companies.


A regional analysis of how war impacted upon agriculture from 1861-1865.

Contains several important essays on the wartime mobilization of food.


A brief interpretation of the agricultural depression with a chapter on the World War I antecedent.


Gudgell provides some raw numerical data which was useful to this study.


An excellent account of the problems facing the Wilson Administration.

Contains several useful essays on agriculture in the state.


Hardach's work is an economic history of the war, see in particular Chapter Five, "Food Supply in Wartime," pp. 108-138.


Is a scholarly pro-government volume on price control in the U.S. Food Administration, 1917-1919.


Hawley is a noted historian from the University of Iowa, this work is among the finest texts of the war and post-war period.


Is not of great value but does serve as a
document of the war's dynamic effect on society.


Part of the invaluable Economic and Social History of the World War, ed. by James T. Shotwell for the Carnegie Endowment for International Peace. Hines was Director General of Railroads 1919 to 1920.

Houston, David F. "Soldiers of the Soil." National Geographic 31:37 (October 1918).

Houston, then Secretary of Agriculture, sets the tone of mobilization in this popular journal's "war edition" in the fall of 1917.


Is the finest history of the events leading to the fabled "dust bowl" in the 1930s.


Provides some worthwhile statistics on the cereals trade.


A review of agricultural techniques.
Kansas State Agricultural College, Experiment Station.  
*Inspection Circular 4-10*. Manhattan: KSAC, 1918.

Contains material on experimental farming methods and canning club organizations.


Includes information on the State Board before U.S. entry into the war.


Kaufman is a former faculty member at Kansas State University, this book provides international context for the period under study.


Kocka's analysis is essentially a Marxist survey of the economy, society and political developments.
Invites a comparative study with the American mobilization effort.


La Forte sets the stage for the war mobilization in his discussion of the pre-war "reform" era.


An invaluable guide for students of the war period.


A dated work, though some relevant insight into food policy is detailed.


March, who was the U.S. Army Chief of Staff in
World War I, includes some thought on the conscription issue as it related to farmers.


The role of women in agricultural labor is illuminated in Martalet's concise essay.


Contains the Food Control Act of 1917 and other related documents.


A highly useful chronology of news events from 1911-1925.


Includes graphics to show the trends of wheat production throughout the area under study.

Contains information on the railway crisis which threatened proper handling of the grain supply in the fall of 1918.


Though a member of the Food Administration Mullendore yet succeeds in presenting the efforts of the USFA in an objective light.


Norris was an important government official who helped plan the wheat campaign on a national level.


Nourse traces the agricultural ties between Europe and America which reached a culmination in World War I.

An account which details the reliance on American food in Europe during wartime.


A brief essay by a noted historian, includes section on technology.


These are two enlightening essays by one of the great figures of American historiography. Paxon describes the many shortcomings and achievements of the mobilization in the First World War.

One of the more valuable general texts on Kansas history.


A compilation of outstanding essays which set historical themes for the First World War.


Rubenstein is an accomplished philosopher, the central tenet of this monograph is the importance of food supply for the modern urban state.


The figure of Baruch looms over the World War I mobilization, this is the latest work on the noted economist.


Capper was a fascinating individual, he is memorialized in this work by the foremost scholar of Kansas history.

Anyone doubting the value of food as a strategic weapon must read this account of the Russian Civil War. (Sorokin was a Ukrainian doctor in the war.)


Includes material on the seed wheat campaign.


Contains legislation pertaining to the war mobilization.

________. *Sixth Biennial Report of the Tax Commission of the State of Kansas for the Period Ending October 15, 1918.*

Includes statistics on farm revenue.


Surface and Bland are among the most valuable scholars on the home front in World War I.

A useful official history of the Extension Service.


Trask includes readings on food policy during the war.


For information on Kansas see p. 230.


A useful tool for statistical analysis of categories of economic and social life.

A dramatic depiction of food as a weapon in the war.


Another vital study which provides international context for the food problem.


A seminal outline of the tenets of progressivism.


See in particular Chapter Ten, "The College and the World War."

Wilson, John E. *Russell County in the War*. Russell, Kansas: Russell County, 1921.

A brief look at one county's role in the mobilization.

Essential studies for any student of military economy.


See especially Chester Wright's "Economic Lessons from the Previous Wars."


A recent study tracing the attitudes and institutions of the period.
WHEAT SOLDIERS:
THE WARTIME WHEAT CAMPAIGN IN KANSAS, 1917-1918

by

RANDAL SCOTT BEEMAN

B.S., Kansas State University, 1987

AN ABSTRACT OF A THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF ARTS

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KANSAS STATE UNIVERSITY
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"Wheat Soldiers: The Wartime Wheat Campaign in Kansas, 1917-1918" is the story of the efforts to increase grain production in Kansas during World War I. Wheat was a valuable strategic commodity in the "Great War," as one of the leading states in winter wheat production Kansas led the drive to harvest record amounts of this vital staple. Every aspect of society was subjugated to the wartime mobilization.

The wheat campaign in Kansas was a successful effort though the food drive had faced many challenges. Wheat growers were concerned about prices, seed supply, grain standards, transportation and lack of labor. These problems were handled by several factors which made the wheat campaign a success: effective organization from the national to community level was combined with patriotism to increase the production and conservation of food. To lessen concern over equitable prices the federal government guaranteed wheat producers two dollars per bushel. Tough new grain grading standards were relaxed to account for the war emergency. Seed wheat supplies were located by the war mobilization agencies and purchases were financed by both private and government loans.

Growers were encouraged to increase production per acre and to expand acreage where possible. Kansas State Agricultural College (KSAC) agronomists urged farmers to
prepare their seed beds early and thoroughly and to use fertilizers to grow more per acre. The primary emphasis was the expansion of acreage. The goal was for Kansas to plant ten million acres in the fall of 1917. To plant such vast acreages to wheat mechanized farming, particularly tractors, were employed on a large scale.

The war heightened the move towards "power farming."

The "wheat soldiers" of Kansas faced a harsh winter in 1917-1918 as well as a major labor shortage to harvest the crop in the early summer of 1918. A labor campaign mobilized out of state labor, city dwellers, school children, women and vagrants to help harvest the crop. Another crisis ensued when the railway system could not absorb the bumper crop. This problem was solved by a system of permits which lessened the flow of grain from the countryside to rail terminals.

Though poor weather damaged the crop and kept Kansas from reaching its 200 million bushel goal for 1918, the wartime wheat campaign was an overall success. The wheat army of Kansas united to achieve the common goal of more food for America and its allies. It was a pragmatic mobilization which emphasized the volunteer progressive spirit and effective professional leadership of the period.