

THE CIVILIAN CONSERVATION CORPS as a TOOL
of the NATIONAL PARK SERVICE:
THE DEVELOPMENT OF GLACIER AND YELLOWSTONE
NATIONAL PARKS, 1933-1942

By

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B.A., University of Montana, 1986

Presented in partial fulfillment of the requirements
for the degree of

Master of Arts

UNIVERSITY OF MONTANA

1988

CHAPTER 1

Franklin D. Roosevelt: Realizing the Dream

The Civilian Conservation Corps of the 1930s was but one step in the development of the idea of putting the unemployed to work for the nation. In 1850, Thomas Carlyle said that the unemployed should form "industrial regiments--regiments not to fight the French or other, ...but to fight the bogs and wilderness at home and abroad."¹¹ In 1920, Harvard philosopher William James proposed:

...instead of military conscription a conscription of the whole youthful population to form for a certain number of years a part of the army enlisted against *Nature*...[Employed thus] would our gilded youth be drafted off...to get the childishness knocked out of them, and to come back into society with healthier sympathies and soberer ideas. They would have...done their own part in the immemorial human warfare against nature; they would tread the earth more proudly, they would be better fathers and teachers of the following generation.¹²

Five years after James first published his thesis, George H. Maxwell developed the idea in a much more concrete form. He proposed a National Construction Corps "organized primarily to fight Nature's forces instead of to fight the people of another nation." He developed the plan further to include the cooperative efforts of the War Department, the Interior and Agriculture Departments, and

the Commerce Department.¹³

While James and Maxwell were theorizing about putting the unemployed to work, many Europeans implemented similar plans. World War I had left Bulgaria's roads in particularly poor shape. The need for inexpensive road repairs led to the establishment of compulsory work camps for the nation's youth. In 1924, Switzerland established the *Freiwilliger Arbeitsdienst*, or Voluntary Labor Service to occupy Swiss unemployed youth. The following year, Germany began its own system of youth labor camps.¹⁴

The 1929 Stock Market crash sparked the Great Depression, which brought the idea of using the unemployed to work on public projects back to the United States. As early as 1930, several states had already formed public work programs. California, with the largest of these programs, established thirty camps throughout the state in which transients and the unemployed worked in the state's forests and on its highways. Other states, including Washington, Virginia, Wisconsin, Pennsylvania, Michigan, and Indiana had similar, yet smaller programs.¹⁵

Franklin Delano Roosevelt (FDR), in his home state of New York, had previously helped the growing forestry movement. Appointed as chairman of New York State's Senate Committee on Forests, Fish and Game in 1911, Roosevelt introduced and helped pass legislation authorizing

state-supervised forestry. FDR knew through experience that forestry could rehabilitate poor land. Hyde Park, the Roosevelt family estate on the banks of the Hudson River, had produced award-winning corn as late as 1840, but by the turn of the century, its soil was worn out and nearly useless. In 1915, FDR began reforesting the estate, and eventually, over five hundred of the estate's twelve hundred acres contained new forests. In 1932, his last year as governor of New York, Roosevelt sent 10,000 of the state's unemployed to work on reforestation projects.¹⁶

We can see that there was precedence for Roosevelt's CCC. This background makes FDR's program no less innovative. Roosevelt implemented a nation-wide program which involved 300,000 young men in some 1,400 camps in the Corps' first summer alone. These 300,000 men, guided in the forests by nearly 26,000 older leaders, provided a strong, well-funded work force for those governmental agencies involved in the program.

The nation, on March 3, 1933, was in a doldrum. Faced with Hitler's Germany and Mussolini's Italy in Europe, a rapidly arming and increasingly hostile Japan in the Pacific, and no end in sight to the economic woes of the nation, Americans had little to hope for. The American economy foundered as did Americans' physical health. A huge grain surplus bulged storage bins and warehouses in

full view of millions of undernourished Americans. The same farmers who produced the corn surplus found themselves burning their grain to heat their homes--corn was far less expensive fuel than coal. "Hoovervilles" sprang up in nearly every city, where those who chose to sit the Depression out bided their time. Others chose to take to the rails, streets, and highways. Those weary travelers, who seemed to neither know nor care where they were headed, exhibited a "restlessness of undirected, unpatterned energy."¹⁷ Still worse than the dire condition of the economy was the dearth of hope for a better life. The Depression showed no signs of lifting. America's economy appeared paralyzed.

March 4, the day of Franklin D. Roosevelt's inauguration, dawned cold and gray, "as dreary as the national mood had been...." Roosevelt recited his oath of office at 1:00 in the afternoon, and followed with a fiery address in which he vowed "action, and action now!" He promised to wage a war against the emergency that faced the nation, and to "return the courage and devotion" to a disheartened nation.¹⁸

The mood of the nation dramatically changed after FDR's first thirty-six hours in office. The doom and despair of Saturday, March 4 found no place in the new confidence and determination of Monday, March 6. Such was the effect of the tone of FDR's inaugural address and the

image of the new president. Roosevelt had so invigorated America's spirit that, in the President's own words, "all men and women who love their country" were willing to offer the same "sacrifice and devotion" as they would in a time of war.¹⁹

While the rigors of the depression weighed heavily upon the shoulders of adults, it fell even heavier on those of youth. Some estimates place unemployment among the nation's young people (those 15-24 years of age) at twenty-five percent; this varied from twice as great to a third greater than the estimated national unemployment average for all ages.²⁰

The public called on the federal government to stem the physical and psychological erosion of the nation's youth. Harry Hopkins, Roosevelt's Federal Relief Administrator, meant to avoid direct relief, which promised to bring morale-corroding idleness. He favored work relief, which gave men a chance to feel useful. He knew that it was more expensive than direct doles, but he believed that the proponents of direct aid ignored the inestimable cost of denying citizens of "their sense of independence and strength, and their sense of individual destiny."²¹

Not only were America's youth hit especially hard by the Depression but the national parks also sustained an almost crippling blow. Promotional campaigns for Glacier

and Yellowstone Parks, sponsored by the National Park Service in cooperation with railroads, oil companies, chambers of commerce, concessioners, and automobile associations, failed to prevent the closing down of major facilities in these parks. In 1933, the Cut Bank and St. Marys chalets in Glacier, and the Mammoth and Lake hotels in Yellowstone closed their doors.²² Unemployment kept people away from the parks. One of the first salvos that Roosevelt fired in his war against unemployment was the Civilian Conservation Corps.

Roosevelt began espousing his idea for a national agency to deal with the growing unemployment problem in 1932. On July 2, 1932, during his nomination acceptance speech before the Democratic National Convention, FDR hinted at the CCC. By the beginning of 1933, the unemployment situation had clearly worsened, and nearly 13,700,000 Americans were out of work. That represented over ten percent of the nation's population. This unemployment indirectly affected over 40,000,000 people, or nearly thirty-three percent of the population.²³

To deal with this growing mass of jobless people, United States Senator James Couzens of Michigan proposed in January, 1933, that the Army administer "Citizens' Military Training Camps." Under Couzens' bill, the Army would house, clothe, and feed 300,000 unemployed youth. The Army insisted, however, that it could accommodate only 68,000.

This bill failed to pass twice, but it succeeded in one thing: it linked the Army with relief work.²⁴

Even before Roosevelt's inauguration, he began to assemble a group of key people he knew he would need to realize his CCC plan. On March 14, 1933, the President-elect sent notes to the secretaries of War, Agriculture, Interior, and Labor, asking them to develop plans for his Emergency Conservation Work (ECW).²⁵ The secretaries responded the following day with proposals for the program. Armed with this support, FDR sent Congress his proposal on March 21. He recommended creating:

...a civilian conservation corps to be used in simple work, not interfering with normal employment, and confining itself to forestry, the prevention of soil erosion, flood control and similar projects.... This type of work is of definite, practical value, not only through the prevention of great present financial loss, but also as a means of creating future national wealth.

More important, however, than the material gains will be the moral and spiritual value of such work.... We can take a vast army of unemployed out into healthful surroundings.... It is not a panacea for all the unemployment, but it is an essential step in this emergency.²⁶

From the beginning of the ECW, Roosevelt had two main goals for the new agency: to help the young men of the nation to rebuild their health and confidence through gainful employment, and to stem the tide of destruction of the nation's natural resources. Although Roosevelt "felt the scars and exhaustion of the earth almost as personal

injuries," his immediate objective in the establishment of the CCC was the relief of unemployment.²⁷

While the original intent of the CCC was unemployment relief, the central goals for the Corps shifted slightly away from relief for the jobless as the CCC progressed. The ECW Act of April 5, 1937 stated that the CCC was established to provide "employment, as well as vocational training, for youthful citizens...who are unemployed...." The emphasis changed again in 1939. As a part of his Reorganization Plan Number One of July 1, 1939, Roosevelt shifted the administration of the CCC to the Federal Security Agency along with the Social Security Board, the U.S. Office of Education, the Public Health Service, and the National Youth Administration. FDR chose the Federal Security Agency instead of the Federal Works Agency because he saw that the CCC's "major purpose is to promote the welfare and further the training of the individuals who make up the corps, important as may be the construction work which they have carried on so successfully."²⁸

Under the Federal Security Agency in 1940 and 1941, the emphasis of the CCC changed a third time. In the heat of mobilization for war, the CCC became less of a training program and more of a "defense" agency. More attention focused on how much the CCC accomplished for the war effort, especially in *American Forests* magazine articles such as "The Forest Goes to War" and "Wood Goes Down to the

Sea in Fighting Ships" in 1942. Also, nearly three million men had learned group living, how to follow and give orders, proper sanitation, first-aid, and personal hygiene practices. Many others learned skills valuable to the war effort such as driving trucks and heavy equipment, vehicle maintenance, radio operation, cooking, and typing.²⁹

Shortly after the enabling legislation reached Congress, the program's critics began to speak out. The most vocal opponent of the bill was the president of the American Federation of Labor, William Green. His primary criticism of the program dealt with the enrollees' pay and regimentation. Green feared that the proposed rate of pay, \$1.00 per day, could become recognized as standard pay, thereby depressing the economy by lowering regular labor wages. His second major criticism was that the regimentation caused by Army administration of the CCC "smacks... of fascism, of Hitlerism, and of a form of sovietism."³⁰

Southern congressmen also railed against the bill. The CCC, according to them, promised to sap away all of the funds from their pet river and harbor projects. Section four of the bill stipulated that the CCC had access to previously appropriated, but unobliged public works funds. Southern senators voted to remove this section, but the House subsequently reinserted it.³¹

Other critics claimed that the bill was unrealistic,

or even dangerous to the American family. Herbert Hoover's Secretary of Agriculture, Arthur M. Hyde, thought FDR's reforestation plan was of an "utterly visionary and chimerical character." He also claimed that 1,000,000 men could totally deplete the nation's stock of trees in nurseries in only three hours. Another critic denounced the bill by claiming that the program would "take men away from their families, take the husband away from the wife, the father away from the children."³²

These critics effected many changes in the bill's structure. Of all the sections, only the enactment clause remained unchanged. Critics, particularly Illinois Representative Oscar DePriest, who claimed that FDR discriminated against blacks, fought to insert the clause in the bill which stated that "no discrimination shall be made on account of race, color, or creed."³³

The bill's final form was a greatly reduced version of its first draft. The bill was so abbreviated that it left extraordinary powers in Roosevelt's hands. The final form of the bill mandated the President "to provide for employing citizens of the United States." It avoided placing limits on his power by using such terminology as "as he may prescribe..." or "as the President may determine to be desirable...."³⁴ FDR, however, used his discretionary powers to enact the kind of CCC he intended in the first draft of the bill. This angered many of the

congressmen who fought for changes in the bill. One reason Congress left the enabling legislation so open-ended was to allay criticism of Congress by the public. This tactic provided for nearly unanimous public approval of the program.³⁵

When the news of the act's passage reached the public, nearly everyone supported it. Not only did the vast majority of Democrats back the program, but most of the Republican party favored the CCC as well. Even such a recalcitrant "FDR hater" as Robert R. McCormick, the publisher of the *Chicago Tribune* praised it in his numerous editorials.³⁶ Two groups opposed the program. A few freshly discharged soldiers claimed that it was absurd for the government to discharge 15,000 soldiers as a cost-saving measure, and then hire hundreds of thousands of men at nearly twice the army wage. The other main group who opposed the CCC was organized labor. They feared a loss of jobs among higher-paid union members.³⁷

Roosevelt stemmed most of organized labor's criticisms by appointing Robert Fechner, a vice-president of the American Federation of Labor, as Director of the new CCC. Fechner had risen through the membership of the International Association of Machinists. Roosevelt knew of Fechner's skills as a negotiator and mediator because of Fechner's mediation of the 1917 Boston & Maine Railroad strike. Fechner chose his close friend of twenty years,

James J. McEntee, to be his assistant. The Director took his oath of office on April 5. Fechner predicted the direction in which he would take the corps: just as in 1917, when the nation "mobilized" to fight another nation, in 1933, the nation would mobilize "to fight a war against waste." Executive Order 6101, which appointed Fechner as director, also established the CCC Advisory Council.³⁸

To accomplish his goal of having 250,000 young men in the forests by mid-summer, FDR needed the cooperation of four departments of his cabinet. Representatives from the Departments of War, Labor, Agriculture, and the Interior formed the CCC Advisory Council. Roosevelt determined each department's role in a pencil sketch he made on April 3, 1933, and he wanted "personally to check on the location and scope of the camps, assign work done, etc."³⁹ This highly centralized program operated with suprising smoothness.

The complex web of administrative authority between the four departments involved contributed to the Corps' smooth operation. The dedication shown by the representatives on the Advisory Council also helped the CCC get off to a good start. The members of the first Advisory Council were Colonel Duncan Major, of the War Department's General Staff Operations and Training Division, W. Frank Persons, Director of the United States Employment Service, Major Robert Y. Stuart, Chief Forester of the United States

Forest Service, under the Department of Agriculture, and Horace M. Albright, Director of the National Park Service, under the Department of the Interior.⁴⁰ Each of the departments had a specific role in the CCC.

Roosevelt logically directed the Department of Labor to administer the selection of the enrollees for the CCC. The Department did not actually select the men. Rather, it established a set of guidelines and standards by which state and local unemployment agencies and boards of public welfare accepted men for service in the CCC.⁴² Roosevelt originally instructed the selecting agencies to choose young men that could benefit their communities the most when he made it clear that the CCC was not established to clear the riffraff out of the cities.⁴² The state and local unemployment agencies, however, showed little regard for FDR's wishes. The CCC's high desertion rate made it clear that many of the young men originally enrolled into the CCC either were not willing to work or they joined just for the free clothes, a cross-country ride, and some meals. Also, some enrollees were the sons of wealthy men, who saw the CCC as a good way to straighten the boys out.⁴³

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Men (LEMs), older locals hired as foremen and supervisors, and based those quotas on population and the availability of men near the work site.⁴⁴

The President took full advantage of his powers under the CCC's enabling legislation to provide work to another group of men. On May 9, 1933, nearly 3,000 veterans marched as the Bonus Expeditionary Force and descended upon Washington. These veterans demanded advance payment of war bonds that were to mature in 1940. FDR responded to this crisis much more coolly than had President Hoover, who had used the United States Army under General Douglas MacArthur to disperse the first veteran marchers and burn their shanty town. FDR saw to it that the men were housed and fed. Later, he firmly but gently urged their dispersal. In Executive Order #6129, he suspended the CCC age limitations for veterans and allowed them to join the corps. Many of the marchers took advantage of Roosevelt's offer, and the rest returned home unsatisfied. Later, veterans entered the CCC through the Veteran's Administration.⁴⁵

The ECW Act afforded Roosevelt the power to include still other groups into the CCC fold. The legislation made no provision for the employment of Native Americans, but Roosevelt decided that three percent of the CCC's total strength should be Indians (10,000 in a corps strength of 300,000) and that 5,000 territorials from the Virgin

Islands and Hawaii should be eligible for enrollment.⁴⁶

While the act stipulated that no one was to be discriminated against because of his race, color, or creed, blacks in the CCC did not receive equal treatment. Roosevelt and his assistants were victims of their time, and were bound by unfavorable public attitudes toward Negroes. FDR decided that Negroes should be enrolled in proportion to their number in the nation's general population. Since the 1930 federal census showed that blacks made up approximately ten percent of the general population, they would have similar representation in the CCC.⁴⁷ The CCC was extremely attractive to many blacks because, for the first time for most of them, they worked for the same wages as did whites. Paying the blacks similar wages did not make the CCC's treatment of them equal to that of the white enrollees.

Blacks were discriminated against in their camps as well as in nearby towns. Discriminatory attitudes among the enrollees themselves seemed to be the rule rather than the exception. When a number of white companies protested the presence of a Negro company nearby, the blacks almost always moved out. While most blacks lived and worked in segregated companies, the only mention of them in either Glacier or Yellowstone was that an integrated New York company occupied GNP-8, Anaconda Creek for part of 1933 and 1934. There was rampant discrimination on the part of the

whites in this company. The GNP-8 camp commander and the camp's project superintendent sent six white local Montanan enrollees to extended service at GNP-1, presumably to avoid interracial problems. Partly as a result of discrimination, desertion and dishonorable discharge rates among the blacks and the remaining white enrollees were extremely high. By October, 1934, desertions left the company strength at sixty-one blacks and fifteen whites. Outside of camp, blacks fared no better. Belton merchants were extremely prejudiced against the camp's black enrollees. Many shopkeepers posted signs reading "We cater to white trade only."⁴⁸

In the rush to get the enrollees into the parks and forests by July, 1933, the government began a massive mobilization of men and supplies. In fact, the government mobilized more men in the three months after Congress passed the CCC act than it did during the entire Spanish-American War. In the first three months of World War I, the Army processed 181,000 men, but in the same length of time in 1933, the Army processed 275,000 men. An average of 8,700 young men entered the CCC per day between May 12 and June 7. The single highest daily enrollment was 13,843 men on June 1. Originally, CCC companies received replacements every six months. As desertions exacted a greater and greater toll on corps strengths, Fechner authorized alternate acceptance periods. Some of the

renewal drives held on the first day of each quarter (January 1, April 1, July 1, and October 1) to rebuild the corps' strength totalled over 162,000.⁴⁹ Roosevelt knew that the only agency that could handle these numbers of men was the Army.

Since Senator Couzens introduced his bill in January, 1933, calling for the Army's involvement in unemployment relief, the War Department had been gearing up for some kind of a major role in relief programs, and, by the time the CCC was starting to grow in April, the Army was ready for the corps. The original role of the Army in the CCC was conditioning, clothing, and transportation of the enrollees to their camps. From there, the technical agencies (Departments of Agriculture and Interior) were to operate the camps and the work projects. The technical agencies quickly realized that they had neither the men, the money, the equipment, nor the experience to administer the CCC's camps. The Army accepted these responsibilities of camp administration.

The CCC mobilization was essentially trouble-free primarily because the United States Army was ideally suited to handle this large influx of men and equipment. Faced with this flood of 300,000 men, the Army fell back on a familiar organizational style. The Army used the form of its own two hundred-man companies under leaders and assistants as the basis for the CCC camps. The food was

similar to Army rations, and the clothing was Army issue. Also, the War Department already had an established contract system for supply purchases.

The War Department's job in the administration of the CCC began with the acceptance of eligible enrollees from the Labor Department and the Veteran's Administration. After this initial acceptance, the Army administered physical examinations much like those for Army recruits. The Army had command of the enrollees from this point until their discharge, including "reconditioning, organization, administration, transportation, supply, sanitation, medical care, hospitalization, discipline, welfare, and education." The Army also built and dismantled camps, and provided the technical agencies with men for project work.⁵⁰

Regardless of how well suited the Army was for the administration of the CCC, the public was uncomfortable about the military running the camps. The Assistant Secretary of War, Harry H. Woodring, did not allay these fears in the article he wrote for *Liberty Magazine*. There, he called the boys of the CCC "economic storm troops" and "the forerunners of the great civilian labor armies of the future." As Arthur Schlesinger, Jr. pointed out, these were not very well chosen words for a nation that was just learning to hate Hitler. In reaction to the article, the public flooded Washington with letters of

protest, forcing Roosevelt to demand a public apology. Woodring quickly complied.⁵¹

Some of the Army personnel resented their association with the CCC. Besides the animosity that arose from the differences between the amount of pay the enrollees received and the amount soldiers received, some officers disliked dealing with the undisciplined CCCs.⁵²

The final two departments of the cabinet involved were the Departments of Agriculture and Interior, or the "technical agencies." While these two agencies cooperated for their mutual benefit on the Advisory Council, the National Park Service, under the Department of the Interior, and the United States Forest Service, under the Department of Agriculture occasionally collided. As the National Park Service grew, some state forests became state parks. The transfer of those state forest camps, from the control of the Forest Service, to state park camps, under control of the Park Service, made the Forest Service believe that the Park Service was trying to steal foresters. Meanwhile, the Park Service accused the Forest Service of packing Army headquarter offices with liaison officers sympathetic to the Forest Service.⁵³

Another source of Park Service animosity toward the Forest Service was Fechner's authorization for Forest Service development of recreational facilities in the national forests. Many times, these facilities duplicated

or competed with similar facilities in the state or national parks completed by the Park Service.⁵⁴

Besides these differences, the Park Service and the Forest Service had different administrative forms for their work project execution. Forest Service camps were divided into platoons. Each platoon consisted of three sections, each under a foreman, and each section contained subsections under enrollee leaders. The subsections were made up of the lowest division, squads of six or seven men. These squads all performed basically the same kinds of work. Park Service camp commanders administered work projects differently. Each camp had an experienced engineer, a "technical forester," trained landscape men, history and wildlife specialists. All of these divisions worked under one project supervisor. Companies were divided into squads or groups under these supervisory personnel, and each group did its own particular job (landscaping, forestry, historical work, or road and bridge work).⁵⁵

The cooperation of these four cabinet departments enabled a rapid implementation of FDR's nation-wide plan. Only thirty-seven days after his inauguration, local selection boards admitted the CCC's first enrollees. By the end of the summer of 1933, there were camps in every state in the union except for Delaware. By the end of the CCC in 1942, camps spread from Maine to Hawaii, and from

Alaska to the Virgin Islands.⁵⁶

This nation-wide program provided the National Park Service with the manpower and funding support it needed to continue on the developmental course Mather had charted. The Service continued to emphasize developing new recreational areas over the stewardship of the national parks in their natural states. The CCC provided a ready vehicle for this agenda of development.

The establishment of the CCC changed more than the Park Service's level of funding for development. At the beginning of the New Deal, the Park Service had 2,027 employees. By 1940, there were 7,341 employees of the Park Service. This 262 percent increase in the size of the Service in only seven years demonstrates the swelling typical of many governmental bureaucracies in the New Deal. Increases in regular appropriations do not completely explain this expansion. While the Park Service's total of appropriations increased somewhat over the decade (1930: \$10,820,620; 1940: \$13,557,815), it received \$218,000,000 for emergency conservation projects. Moreover, Congress cut Park Service appropriations in 1934 by more than fifty percent (from \$10,820,000 to \$5,085,000). The Emergency Conservation Work clearly financed a portion of the Park Service's expansion.⁵⁷

Not until the early 1930s, did Park Service officials know what direction the long-range expansion and

development of the national parks would take. Beginning in 1931, under Director Albright, the Service began to draw up "master plans" by which administrators could guide the expansion and development of the nation's parks. Officials planned actual work based on regular appropriations; because of budgetary constraints, this work did not include broad conservation projects. Consequently, park officials had no assurance and little hope for the completion of these master plans developed for the years ahead. Park administrators viewed these plans as unrealistic in the face of reduced federal appropriations for the Park Service. Backed by the money and manpower of the CCC, however, the Park Service was able to reevaluate and rewrite realistic project plans.

These master plans were the primary reason that the CCC fitted so quickly and so well into the Park Service work projects. Park Service policy required development plans for six years ahead of date so that the Service would be able to use effectively any unexpected appropriations. Because of these plans, Park Service officials were not caught unprepared for the corps, in spite of the swiftness of the CCC's implementation. The CCC quickly exhausted these six-year plans, which made further planning necessary. Guided by the the National Park Service's master plans, the CCC proved to be an effective tool for park development.⁵⁸

CHAPTER 2:

The Enrollees in the Camps

The United States Army was extremely well suited to administer the camps. The Army used more than its standard 200-man camp model for CCC camp operation guidelines. The military's "meticulous attention to cleanliness, good order, personal appearance of [the personnell], and individual and general sanitation [and] the standards of interior economy" guided all of the camps' operation. Camp commanders were either activated reservists or transferred from active duty elsewhere. They held all of the power of Army commanders and followed normal functions of the Army, except for military training and discipline, and had final authority for all aspects of camp operation.⁵⁹

These camps provided almost all of the basic necessities for the young men of the CCC. The first need that the camp fulfilled when the enrollees arrived at camp sites was shelter. The CCC boys had to erect their tents if they were not up already. Most of the CCC's camps in Glacier and Yellowstone were summer camps, in which the CCC boys slept on straw mattresses and cots in ten or twelve-man tents with wooden plank floors and walls. The enrollees of the Fort Missoula CCC District, which included all of Glacier and YNP-1, Mammoth, had reason to celebrate

in the summer of 1935. It was not until then that Fort Missoula's supplies caught up with demands and the Army could issue sturdier cots, real mattresses and mattress covers to replace the straw-stuffed wool sack mattresses.⁶⁰ Since all of the enrollees traveled east or south for other camps during the CCC's first winter, canvas tents provided sufficient summertime shelter.

In the summer of 1933, American Forest Products, Incorporated protested against the use of canvas tents in the CCC camps and argued in favor of wooden barracks. Fechner liked the idea of housing enrollees in wooden camps, and ordered their construction. By November of that year, the CCC claimed to have over 40,000 carpenters building camps in forty-six states out of nearly 300,000,000 board-feet of lumber. The second year of the CCC saw the introduction of the wooden barracks in the corps. By 1935, prefabricated wooden camps were the standard for year-round camps, while most summer camps continued to use tents.⁶¹

At least one of the camps' structures did not provide sufficient shelter. The latrine was notoriously lacking in comfort. One latrine in particular merited mention in a letter home. Enrollee Alfred Strode in Glacier Park wrote to his mother that "the worst feature [of the camp was] the defecation trench. Mosquitos bite the H--l out of you when you sit down."⁶² Besides providing shelter for the

enrollees, the CCC also clothed the young men.

Clothing the CCCs was one of the reasons that the Army took over the administration of the corps. The Army not only had tons of stored Army-issue clothing, but it also had the built-in mechanism for acquiring more clothing: the Quartermaster Corps. To supply the CCC, the Quartermaster General placed orders for 2,500,000 yards of denim, 500,000 pairs of shoes, and 1,250,000 pairs of trousers. The original government clothing issue to each enrollee included three pairs of underwear, six pairs of socks, one pair of shoes, two pairs of denim pants, one pair of wool pants, two flannel shirts, one tie, one belt, one hat, one raincoat, one overcoat and one pair of gloves.⁶³

Much of this clothing had been previously used. Among the used items of clothing enrollee Alfred Strode received was his shoes. He wrote to his mother that they were "a year and a half old & worn...." He also received a used mess kit with "John J. Roach, A.E.F. 1919" scratched into the back. His pants, however, were new but fit him extremely poorly: size 40 waist, 32 inseam. Some companies began to stay in the parks for the winter in 1934-1935, which made winter clothing necessary. The winter issue included, in addition to the standard issue, three pairs of long underwear. Enrollee Burton Appleton from New York found that this issue was insufficient for the long Glacier

winters, and claimed that the enrollees were "not clothed properly for [winter woods] work." The CCC's clothing gradually became more appropriate as summer-issue clothes consisted of comfortable cotton khaki instead of the Army's wool olive drab fatigues. By 1939, the CCC had replaced the Army's dress olive drab and had adopted its own spruce green dress uniform.⁶⁴

Food was another item that the Army demonstrated it could deliver cheaply. Unfortunately, the \$.37 per day per enrollee bought little more than regular Army rations. The food was not always palatable, but it was usually nutritious and varied. The menu changed daily, but staples usually remained the same. Most breakfasts featured eggs and bacon or ham, hash browns or biscuits, canned fruit, toast, butter, milk, and coffee. Lunches, when served in the camp, usually consisted of meat (stew or roast), potatoes, two vegetables, pudding, and coffee. Trail lunches consisted of sandwiches, pie, and coffee. Dinner was the main meal, and the only meal when the CCC boys could eat at their leisure. Braised beef or veal, mashed potatoes, two vegetables, fruit salad, biscuits, pie (sometimes with ice cream), coffee, and tea tided the hungry boys over until breakfast the next morning.⁶⁵

The quality of the food was inconsistent from camp to camp. Some enrollees enjoyed the good food, and ate well. A camp observer reported witnessing 2,200 pancakes consumed

in a single sitting in a standard 200-man camp. Others found the food neither satisfying nor plentiful. One Glacier camp, GNP-15, was known throughout the area for having the worst food around.⁶⁶

Poor food caused most of the low morale problems in the CCC camps, and mess strikes were a popular form of protest. One such strike occurred in GNP-15. The enrollees "all marched in and were seated as they always were. Plates were filled and someone whistled. They all lined up to the garbage cans with their filled plates and dumped them without anyone taking a bite." Another popular form of protest was a work strike. In a Yellowstone Park camp one day, 125 enrollees refused to work until they got better food. Some of the mess strikes turned violent. One camp commander narrowly averted violence when he threatened to use his .45 calibre pistol if anyone threw his (cold boiled) potato at him. Junior officers instigated other protests. Charles Green, a Project Superintendent in GNP-15, was one of those officers:

...one morning after [a] breakfast of black coffee, burned toast and wormy oatmeal, I told the Camp Commander I was refusing to take the boys to work until after they had something to eat. An hour later after they had been given some bacon and eggs, I accepted them for work.⁶⁷

Most of the time, camp cooks did wonders with what they had to work with. There were frequent shortages of

fresh food such as milk and butter. One camp experienced a lengthy shortage of beef. The cook at that camp improvised by augmenting the camp's larder with wild meat. He shot porcupines with an unauthorized gun, dressed them out, and cooked them in stews like beef. The boys were so happy to have meat that they did not notice the difference. When the camp commander asked about the meat, he found out about the gun, and supplied the camp with plenty of beef thereafter. The CCC boys in camps where the food was particularly poor got frequent breaks from the cursed cuisine during the fire seasons. Whenever the CCC boys were away from camp on fire detail, the Park Service had to feed them. The Park Service food was very good, and the boys regretted going back to camp.⁶⁸

While the CCC attempted to provide adequate health care for the CCC boys, most CCC camps shared a doctor with two or even three other camps. With physicians spread so thinly, it is a wonder that the enrollees stayed as healthy as they did. In spite of the best efforts of the CCC doctors, disease still exacted a stiff toll.⁶⁹ Many camps had to be quarantined, especially in Yellowstone Park. Yellowstone camps YNP-1, YNP-5, and YNP-7 were quarantined more than any of the other camps. Two- or three-week quarantines for scarlet fever, mumps, diphtheria, or measles were the most common in Yellowstone. Influenza and waves of other diseases swept through CCC camps

throughout the West. In one Yellowstone camp, a 1937 influenza outbreak spared but six enrollees from the entire camp.⁷⁰

In spite of these health risks, the enrollees as a whole were much healthier when they left the CCC than when they entered. At enrollment, twenty-five percent of the CCC boys were below the minimum acceptable weight for induction into the Army, and seventy-five percent were below the Army's desired weight. At the time of discharge, only four percent were below the Army's minimum weight, and eighty-four percent who were below weight gained enough to get into the Army. The average enrollee gained from eight to twelve pounds while he was in the CCC. The CCCs were also healthier than their non-CCC counterparts. The tuberculine death rate for males, age 15-29 in the general population was .4 per 1,000 in 1938. In the CCC, the death rate for tuberculosis was only .06 per 1,000. The overall mortality rate per 1,000 for the general population of boys (15-29) was 8.07, but for the CCC it was 2.87. CCC officials attributed this to the good food, exercise, regular hours, and plenty of sleep of the CCC. Not only were their bodies healthier, so too were their teeth. In 1937, CCC dental teams filled 300,000 teeth and pulled 170,000 others. Director Fechner estimated that "over ninety percent of this volume of dental attention never would have been received had these young men not have

enrolled in the CCC."⁷¹

Another aspect of the CCC's concern for the health of the enrollees was its safety program. This program, initiated in February 1934, had dual goals: 1) the elimination of physical hazards; and 2) minimizing human hazards. To accomplish these goals, the CCC concentrated training on five areas: transportation (there were 40,000 vehicles in the CCC), first aid, handling of tools, fire protection for the camps themselves, and Red Cross lifesaving.⁷² An alarming number of accidental deaths and injuries in the first months of the corps made this safety program necessary. The Advisory Council initiated the "Safety First!" campaign to carry out this training.

The "Safety First!" campaign helped reduce the CCC injury rate throughout the life of the corps.⁷³ This program involved lectures, bulletins, incentives, and weekly meetings which kept the CCC boys thinking about safety in the camps and at work. Another part of the program insured that not only were the CCC trucks safe, but that those enrollees assigned to drive CCC vehicles knew how to do so safely. CCC drivers and mechanics regularly inspected all trucks. Some drivers lost their licenses "due to negligence and [lack of] proper care of equipment, and speed."⁷⁴ It is a tribute to both luck and the Safety First! campaign that no more CCC boys were killed in the CCC than actually were, considering the great amount

of time the enrollees spent working in Glacier's and Yellowstone's forests.

The CCC's daily schedule established times for more than just work in the woods.⁷⁵ Evenings and weekends provided the CCCs with a welcomed respite from their work. While their evenings were the enrollees' own recreation time, camp commanders reserved Saturday mornings for camp work (Appleton claimed that "Saturdays were devoted to the Army."), or to make up work time lost during the week due to inclement weather. Saturday afternoons, the enrollees could engage in a wide variety of recreational activities. The camps had no official CCC funds with which they could buy athletic equipment, but local communities usually donated some sports equipment. Also, companies used the proceeds from their camp canteen, or snack bar to buy the equipment. Saturday evenings, those enrollees who so desired to could usually find a ride into town to see a movie or attend local dances. On Sundays, ministers from various denominations visited the camps. After religious services, the enrollees had the rest of the day to themselves to do with as they pleased. For those who chose not to partake in games and talk, the CCC had an educational program of classes and lectures in a wide variety of subjects.

The CCC educational program evolved over time out of need. FDR wanted some sort of an educational program for

the CCC, so he appointed Dr. Clarence Marsh as the CCC Director of Education in 1933, one year before the CCC educational program was formalized in June, 1934. Within three months of FDR's approval of the program, 654 educational advisors were on duty in the CCC camps. FDR favored an educational program of voluntary classes because he sought to interest some of the enrollees, upon discharge, in working in the nation's forests. Roosevelt believed that if the CCC were to provide young men with practical education in forestry, they would prefer work in the forests to returning to the cities and unemployment. Further, the CCC educational program offered a perfect way to hire unemployed teachers and help the enrollees. Although he favored this idea, Roosevelt also saw the potential for the CCC classrooms to become fertile ground for "radical and leftist infiltration." The Army was wary of the CCC educational system also. Colonel Duncan Major on the Advisory Council, claimed:

Instead of teaching the boys how to do an honest day's work we are going to be forced to accede to the wishes of the long-haired men and short-haired women, and spend most of the time on some kind of an educational course.⁷⁶

While CCC classes were voluntary, camp officials urged all CCC boys to take part in the program." One critic of the CCC educational program, James Howard Hull, claimed that "a very small percentage of the CCC boys are

inspired by the same thirst for knowledge which committed Ben Franklin in his early youth to the drastic schedule of laboring days and studying nights." This criticism notwithstanding, the urging evidently paid off, since by 1939, 91.3% of the enrollees regularly attended some sort of class.⁷⁸ However, not all of these classes were academic.

Many CCC boys took classes in history, arithmetic, English, and foreign languages, but the majority were more interested in vocational training. Tension built between the Army, which ran the educational programs, and the Departments of Agriculture and Interior. These tensions centered around whether or not the Army was best able to operate the vocational training program. Assistant director McEntee resolved this tension on May 21, 1937, when he signed an agreement between the Army, the Department of Agriculture, and the Department of the Interior. The agreement stipulated that while the Army controlled all academic instruction, job training, both on-the-job and after hours, was the responsibility of the technical agencies. Furthermore, any vocational training not connected with the work project at hand, such as cooking, clerical and supply work, was the responsibility of the Army alone.⁷⁹

The Army had lofty, yet well established goals for its educational program.⁸⁰ The Army's ultimate goal was

to return "to the normal work-a-day world, citizens better equipped mentally and morally for their duties as such and with a better knowledge of the Government under which they live and of all that that Government means."⁶¹

Individual states supported the CCC educational program. In April, 1936, all CCC camps in Montana became fully accredited institutions for "preparing men for elementary and secondary school completion in conjunction with the local, county, and city systems." In early 1938, the State of Montana was the first officially to designate the CCC camps in the state as technical high schools. Other states followed Montana's lead, and by 1939, forty-one states granted credit for classwork done in the CCC camps. During the 1939-1940 school year, 159 schools and colleges granted 564 scholarships to enrollees. Enrollees benefited educationally not only through their classes, but also through the work projects. Fechner believed that the CCC project work should provide:

...an outstanding opportunity to teach enrollees the skills and operations involved on the job assigned, good work habits, the dignity of labor, and the meaning of a day's work. In addition, it should be used to aid the men in discovering the types of work for which they are best fitted and in developing the skills necessary for entrance into employment.

The huge size of the CCC enabled many young men to go through its academic and vocational training program (400,000 in 1939). This, according to Fechner, made the

CCC "one of the country's major educational and training agencies."⁸²

Another popular part of the CCC educational program was the lecture series that the park rangers delivered to the CCC boys in Glacier and Yellowstone. Glacier Superintendent Eivind Scoyen, in the "CCC Lectures" section of his *Superintendent's Annual Reports* noted that by far the most popular lectures in Glacier dealt with the park's natural history and wildlife. The CCC enrollees in Glacier were lucky to have the opportunity to listen to renowned authorities such as Richard Mahard, a geologist from Columbia University, Rene Blondeau, a botanist from the University of Montana, and Dr. Alton Lindsey, a biologist from the American University in Washington, D.C., all of whom were seasonal rangers in the park.

CCC officials had statistics to back them up when they claimed that the CCC educational program was a huge success. Teachers educated tens of thousands of illiterate enrollees in the CCC; during the 1939 fiscal year, 8,936 illiterates learned to read and write. During that same year, 5,176 enrollees received eighth grade diplomas, 1,048 graduated from high school, and 97 earned college degrees. The CCC vocational education program churned out 45,000 truck drivers, 7,500 bridge builders, 2,000 bakers, and 1,500 welders per year.⁸³

Improved discipline was a welcomed result of the

CCC educational program, since discipline had been a steady problem in the corps. Roosevelt believed that, to keep the fears of militarism in the CCC to a minimum, camp commanders should not impose military discipline. Rather, disciplinary measures were to be like those "customarily imposed by the management in industrial enterprises in order to maintain efficiency of production and equality of opportunity and privileges for those employed."⁸⁴

Discipline seemed to derive from the enrollees themselves--from their own fear of dishonorable discharge (and the resulting unemployment and hunger) and from their own "practical social discipline." This practical discipline caused loafers or "gold brickers" to either pull their own weight or go "over the hill" and desert.⁸⁵ Captain David E. Washburn, commander of a CCC company in Glacier, claimed that "without strict military regulations the boys in camp were put on their own in a matter of self-government.... Within a week...rowdiness had become both unfashionable and unpopular. As self-governing young Americans, these youths found their own way of eliminating or taming the bully and tough guy."⁸⁶ Dishonorable discharge was not really a deterrent or punishment, but it did solve part of the problem of keeping control of the enrollees. If commanders shipped troublemakers out, the officials avoided many of the camp's potential discipline problems. Since many junior officers used the CCC as a

proving ground for their leadership ability, some resisted discharging enrollees since it would show their inability to handle men directly.

Sometimes, these junior officers could not control the enrollees and older, street-wise boys ran roughshod over them. There were many incidents of intracamp riots and fighting.⁸⁷ The most renown was the Abraham Yancovitch incident at Bacon Rind Creek in Yellowstone Park. On the evening of July 13, 1933, Yancovitch, an enrollee, refused to wash his mess kit anywhere but the one spot in the nearby stream which was off limits to the enrollees. Yancovitch went over to the pool used solely for refrigeration of perishable foodstuffs, and began to wash his dirty mess kit. United States Army Sergeant George Satriano told him to stop, but Yancovitch refused and verbally assaulted Satriano. Fisticuffs ensued and Satriano asked the enrollee to take their fight into the woods. Satriano punched Yancovitch in the right temple. Yancovitch died of a cerebral hemorrhage shortly thereafter. The Jewish boys in the camp asked for and received permission to hold a vigil over Yancovitch's body. In the late evening, two of the boys began to incite the others to lynch Satriano, who was in jail in Mammoth Hot Springs. The next day, the two inciters were arrested and discharged. One of the boys commented that his arrest probably prevented him from accomplishing "the work he had

been sent to do." Federal Bureau of Investigation agents investigated the two and found that they were Communists who were to enroll in the CCC and infiltrate a camp. Records of the incident end with the FBI hot on the two Communists' trail.⁸⁸ Besides these uprising in the camps, the local communities also had problems with the enrollees.

Initial attitudes of communities toward the CCCs stemmed from fear and intimidation. As stated earlier, families feared the threat the CCC boys represented to their daughters' virtue. CCCs terrorized Missoula (theft, vandalism, rowdyism), but the CCCs in Glacier caused local communities few problems. The editor of the Kalispell *Daily Interlake* claimed that crime in the first five months since the CCCs arrived in Glacier was "nothing more serious than occurs ordinarily [sic] in this community." Nonetheless, the presence of CCCs in the parks offended the sensitivities of some Western Montanans: "Many citizens of Missoula cancelled trips to National Parks when friends returned telling of camp-grounds and hotel lobbies 'swarming with the scum of New York's east side.' " Stories circulated about a gang of enrollees from a New York camp in Yellowstone that broke into a ranger's cabin, stole his horses and raped his wife. This caused the people of West Yellowstone to treat all CCCs harshly. A sign on a bar door in Utah typified early attitudes toward

the CCCs: "No CCC boys or Dogs allowed."⁹⁹

Shortly after the CCC camps began work, however, communities near the camps began to reap CCC benefits. Businessmen cheered the loudest as camps provided economic stimulation for communities. Local food purchases added up to over \$1,500 per month, and the total monthly expenditures for each camp, including individual enrollees' spending, was nearly \$5,000. In addition, camp construction employed local labor. Many towns profitted greatly by the CCC. One community, Plains, Montana, was completely removed from depression standards by income from local producers and carpenters supplying and constructing the CCC camps.⁹⁰

Before camp construction began, however, CCC administrators had to do a great deal of planning. In the beginning of the CCC, FDR personally authorized all specific camp locations, which increased the inefficiency of the corps. Later, Park Service officials recommended sites, and Fechner authorized the camp construction. After a site had been selected, a company's advance cadre settled on the site. Cadres consisted of the camp commander, some non-commissioned officers, and about twenty regular enrollees. It was their duty to pitch tents, establish a mess, and arrange for local purchase of food, other supplies, and water for the camp.

As stated earlier, the average company strength for

CCC camps in Glacier and Yellowstone was 200 men.⁹¹ Camps that housed this many men in the woods needed to have enough support buildings to keep the camp operating smoothly. The ideal camp contained twenty-four buildings.⁹² One of the criticisms of the 200-man camps was that they were too inflexible--some work projects demanded less men, but were far from camp in the back country. Most of these criticisms came from those officials who sought to make full use of the CCC to develop more of the wild areas in the parks. To solve this problem, Roosevelt and Fechner authorized the establishment of side ("spike") camps.

These small side camps, holding from twenty to fifty enrollees, were meant for the sole use of the technical agencies, and only when absolutely necessary to complete a particular project. Fechner transferred the administration of spike camps from the Army to the technical agencies. He insisted that spike camps provide "all the facilities and opportunities that a main camp afforded."⁹³ There were, however, no educational advisors or doctors, and seldom a library. The technical services could not be expected to duplicate all of these facilities in every side camp. Nonetheless, project supervisors tried to make life in the spike camps as comfortable as possible.

Before long, different agencies began to abuse the spike camp privilege. The Forest Service and the Soil

Conservation Service were notorious for this. The Forest Service regularly sent enrollees from spike camps to man fire lookouts to avoid having to pay local regular employees. The Soil Conservation Service used spike camp enrollees as clerks in agency offices. Such use of enrollee labor violated the original intentions behind spike camps. As abuse and over-use of the system increased, some CCC officials claimed that side camps were more trouble than they were worth because of supply and medical care requirements. Feeding the critics' fire was the fact that spike camps always cost more per enrollee than main camps. In the face of these conditions, Fechner ordered all spike camps closed on May 7, 1942.⁹⁴ Inefficient or not, Park Service administrators put both spike and regular camps, and the money they brought with them, to use in the Park Service's plans for the development of Glacier and Yellowstone National Parks.

CHAPTER 3:

The Enrollees at Work in Glacier and Yellowstone

As stated earlier, the Park Service developed "master plans" for all of the national parks before the CCC had been established. Using these plans, drawn up to map the course of future park operations and development, and backed by the huge injection of CCC funds and manpower, the Park Service engaged in an extensive agenda of work and development projects throughout both Glacier and Yellowstone Parks.

At the beginning of the CCC experiment, park administrators were not quite sure of the potential projects that the CCC could handle. In fact, Yellowstone officials believed that the CCC would be able to work on only mountain pine beetle eradication projects. The CCC, however, proved to be much more versatile. Author Nancy Ouderkirk claimed that in the corps' nine and one-half years, the three million men of the CCC executed over half of the forest planning and development projects performed in the history of the nation.⁹⁵

Before the enrollees could begin work on these forest improvement and development projects, most of the young men needed to prepare physically and mentally for their work in the woods. Since many of those entering the corps were

undernourished, a regimen of good food and healthy exercise in special conditioning camps strengthened their bodies for the rigors of life in the woods. Conditioning camps also helped the young men adjust to communal living. However, the three to four weeks that the new enrollees spent in these conditioning camps slowed the Park Service's plans for CCC development of the parks.

Even after the CCCs became accustomed to work in the woods, several factors slowed the progress of work projects in both Glacier and Yellowstone. Three chronic conditions, particularly in Yellowstone, hampered progress. Yellowstone Superintendent Roger W. Toll repeatedly reported that low numbers of men available for work slowed work in Yellowstone. Sickness, injury, and adjustment periods at the end of each enrollment period and before replacements arrived all combined to reduce the number of men available for work. Later, a loss of men due to the wartime build-up also reduced company sizes. Toll, in his January, 1942 monthly report, stated that "a sample contingent of approximately fifty men were available for CCC activities...." instead of the normal work contingent of 130-150 per camp.⁹⁶

Another situation that hobbled CCC efforts on projects in the parks was a lack of equipment, particularly trucks. When companies shipped out of the summer camps in Glacier and Yellowstone in the late autumn, trucks and

other equipment either went with them, or the CCC administrators sent the trucks to other CCC camps in the East or South. Getting the trucks back proved difficult at times. Priority projects had to be postponed when the enrollees returned to the parks because there were not enough trucks to take the enrollees to the work sites. Consequently, crews worked around the camps, or on trail projects adjacent to the camps.⁹⁷

A lack of supervisory personnel also slowed progress in both Glacier and Yellowstone. During the later years especially, qualified supervisory personnel were increasingly rare. In 1941, for example, GNP-1 and GNP-7 shared a project supervisor for several months.⁹⁸

In spite of these hinderances, the CCC boys completed a wide variety of work projects. These projects fell into two basic categories: "Improvement" and "Protection." "Improvements" were the major projects for park administrators' plans for development.

One of the primary "improvement" projects the CCC undertook was one FDR held near and dear to his heart. Roosevelt recognized the value of reforestation at his estate on the Hudson River, Hyde Park, where his reforestation project had increased the real and potential value of the once profitable corn fields of the estate. He recognized that reforestation could renew the value of the nation's forests and also make them profitable, as it had

done to Hyde Park.

Reforestation included many projects beyond simple tree planting. The entire process began with seed collecting. Enrollees collected pine cones, dried them in kilns or out, in the sun, agitated the cones to free the seeds, removed the seed wings by passing them through screens, and packed the seeds for spring planting. Before planting began, the enrollees had to build nurseries. Construction of one of the CCC nurseries near the Game Ranch in Yellowstone occupied enrollees for months.⁹⁹

Enrollees assigned to nursery duty planted seeds in the spring. By 1937, one 18-acre CCC nursery in Yellowstone produced 500,000 seedling a year for CCC reforestation projects. This nursery grew lodgepole pines, Douglas firs, birches, willows, aspens, and poplars.¹⁰⁰

CCC reforestation projects concentrated on campgrounds and vast areas of burned forest. Glacier enrollees spent a large part of 1938 planting aspens, willows, and cottonwoods in and around the Many Glacier campground to rejuvenate the fire scar left by the huge 1936 Heaven's Peak Fire. In 1939, enrollees planted over 15,000 seedlings in the Many Glacier campground alone.¹⁰¹ The Sprague Creek campground in Glacier also benefited from extensive reforestation efforts.

The nursery near the Game Ranch closed in May, 1941. The CCC shipped all of the seedlings from that nursery to

Glacier. Of them, 50,000 2'-3' lodgepole pines, cottonwoods, and shrubs found homes in the Many Glacier campground and the Fish Creek campground. Reforestation of the Many Glacier area continued into the last days of the CCC in 1942. In that year alone, the enrollees planted 43,765 3'-4' lodgepole pines in the Many Glacier area. One authority estimated that the total of trees planted by the CCC nationally was over 2,356,000,000, of which the CCCs planted 425,175,000 in 1936 alone.¹⁰²

Tree planting played a major role in making many areas, particularly campgrounds, more attractive for visitors (the primary goal of park development plans). The second major "improvement" project, campground development, was also aimed at making the parks more attractive and comfortable for visitors.

Railroads had dominated the transportation industry since the mid-nineteenth century and had controlled the passenger trade to Glacier and Yellowstone since the parks were established. By the late 1920s and early 1930s, however, fewer and fewer tourists traveled on the railroads. In 1915, 51,895 visitors flocked to Yellowstone, of which only 7,418 arrived by car; the remainder rode the rails to the park. In 1930, however, 194,771 people entered Yellowstone by car while only 26,845 arrived at the park by train.¹⁰³ The 1930s had witnessed the ascendancy of the individual automobile as the

preferred form of transportation for park visitors. The shift effected profound changes in the parks by changing both the typical park visitor and the activities he enjoyed. As the numbers of this "new breed" of visitor increased, park administrators planned to increase the parks' facilities designed to accommodate them.

In Glacier, campground development centered around five major campgrounds: Sprague Creek, Avalanche, Roes Creek, Many Glacier, and Two Medicine. Yellowstone campground development projects involved Mammoth Hot Springs (the major project), West Thumb, Canyon, Tower Falls, Lake, and Fishing Bridge campgrounds. In each of these areas, and in many minor campgrounds, Park Service landscape architects oversaw the projects "to see that the work [carried] out the ideal of greater beauty and utility."¹⁰⁴

"Utility" was the key word for campground development. Development and general expansion involved paving the forest for parking spaces to accommodate the new onslaught of automobiles, building and improving roads, relocating the trails around the project areas, and developing the water and sewer lines to accommodate the increased bathing facilities and comfort stations. Enrollees also equipped the campgrounds with new picnic tables and benches, fireplaces and barbeque grills, new garbage dumps and pit toilets.

CCC campground development projects had a tremendous effect on visitation in these parks. Park Service and CCC officials seemed to measure the success of CCC works by increases in the numbers of visitors in the parks. As early as 1934, Fechner received reports that "the work of the CCC... made it possible for park authorities to accomodate virtually all of the large influx of visitors" to the parks. In 1938, Fechner again reported that "National Park superintendents report twenty-five per cent, fifty, one hundred, three hundred, and in some cases, even five hundred per cent increases in visitor accommodations in their areas," and that campground development and enlargement have been "making it easier and more pleasant for men, women, and children to visit and enjoy America's most scenic and historic spots."¹⁰⁵

Supplied with this huge expansion of facilities, Park Service administrators wanted even more. Park Service officials predicted that they needed 10-20 years of work by the CCC to "complete" the parks' facilities. This was over and above the fact that the Park Service had stated in 1935 that "through Emergency Conservation Work, the development of the Nation's recreational areas [had] been advanced farther than would have been possible in 10 to 20 years under the old order...." Campground development projects exemplified administrators' attitudes toward the national parks: a greater emphasis on construction and development

with less attention paid to the natural, yet primitive scene.¹⁰⁶ Development in favor of visitor comfort and access had come at the expense of the preservation of natural habitat.

Another CCC "improvement" project that exhibited this emphasis on development over preservation in the national parks was general construction. The CCC boys worked on construction projects under the supervision of experienced carpenters and contractors. In spite of this supervision, the CCCs were not as efficient at construction projects as were professionals. Frank A. Kittredge, the regional CCC director, claimed that the work of "a number of enrollees will not exceed more than the production of one experienced workman in private practice."¹⁰⁷ These handicaps notwithstanding, the CCC boys built a variety of structures throughout Glacier and Yellowstone Parks. While CCC funds provided the Park Service with a unique opportunity to develop facilities in these parks, undoubtedly some of the construction in these parks would have been completed without CCC money through regular Park Service appropriations. The CCC, however, provided funds that freed regular appropriations for the completion of other projects.

The Park Service benefited from the CCC in another way. The CCC enrollees proved valuable by freeing regular park employees to perform other tasks. For instance,

enrollees performed visitor contact duties in these two parks. In Yellowstone, a lack of certified park service personnel at popular sites resulted in rampant fish limit violations. To solve this problem, CCC boys manned entrance stations, thus freeing rangers to be more visible to the visitors.¹⁰⁸

Another of these contact services placed enrollees in park museums. In these museums, enrollees not only manned desks and guided tours, but they also helped out in the museum laboratories. Enrollees helped curators mount animals and arrange exhibits for display cases. Also, CCC wildlife technicians directed CCC enrollees in performing autopsies of dead animals to help study animal disease control.¹⁰⁹

Other than this lab work, CCC enrollees undertook a great many other wildlife development projects. In Glacier, enrollees built fish hatching ponds, worked at hatcheries, and restocked Glacier's well-fished streams. Yellowstone's wildlife projects centered around that park's unique elk herds.

CCC elk projects basically involved herd maintenance. Enrollees worked on forest stand improvement to provide more browse and better cover for the animals. In the winter, CCCs fed the large herds with hay stored in the summer and autumn. These herd maintenance projects, combined with early park administrators' programs that

avored the elimination of the elk's natural predators brought about an explosion in elk herd populations.

The major herd maintenance project the CCCs performed to deal with these tremendous numbers of elk was the annual culling of the herd. CCCs established spike camps in January at Lower Slough Creek Ranch to help with the cull. Enrollees built elk traps into which mounted park employees drove the elk. Once the CCCs caught the elk, Park Service technicians examined the animals to determine their fate. The CCC boys slaughtered some of the animals. The government, through the Park Service, distributed the meat from the slaughter to Indian reservations throughout Montana and Wyoming. Technicians determined other animals to be healthy, yet excess to the herd. CCC and Park Service trucks transported these animals live to the Crow Indian reservation in southern Montana."⁶

Enrollees at a three-man spike camp at the Dome Mountain Ranger Station, near Carabella and Gardiner, operated a check point for elk killed in regular season hunts near Yellowstone. These Park Service CCC enrollees worked in cooperation with the Montana Fish & Game Commission and the United States Forest Service."⁷

One of the major "improvement" projects the CCC undertook involved aspects of both improvement and protection. CCC road and trail projects afforded not only developed recreational opportunities for tourists, but they

also aided in the control of forest fires. Demands for road and trail improvements were perennial. Increasing motor travel to and through the parks compounded these demands. CCC labor helped meet these demands, not only by building the roads and trails but again by freeing regular park employees from many of their usual activities, giving them more time for road and trail development. Also, CCC funds allowed these parks to open trails for which the regular park appropriations were insufficient. However, many people criticized the use of CCC labor on tourist trail projects.

George T. Hopper, Glacier's Assistant Engineer, claimed that "the use of CCC laborers is not...[as] adaptable to trail work as other projects because of the short hours [they work], and the isolated nature of the work," referring to the travel time to and from the camps. One trail crew from GNP-4, at work on a trail from Many Glacier to Crocker Lake walked some ten miles getting to and from the project site.¹¹²

Regardless of these handicaps, CCCs spent much of their time in these parks cutting trails. Road and trail work in both Glacier and Yellowstone stretched from East to West and North to South, and from the beginning to the end of the CCC stay in these parks. Besides building new trails, CCC boys improved and maintained existing trails. The Howard Eaton Horse Trail along Yellowstone's Grand Loop

Road is one good example of trail improvement. CCC boys spent part of each summer on this 157-mile trail blasting out tripping hazards (rocks and logs) and grading for a more comfortable ride."¹³ Of much more importance to these parks than tourist trails were the fire trails vital to the protection of the parks' forests.

"Protection," as far as these parks are concerned dealt ultimately with the prevention and combat of fire. Conrad L. Wirth, the Department of the Interior's first representative on the CCC Advisory Council, in his 1944 report to Secretary of the Interior Harold Ickes, summarized the CCC fire trail work in the parks in this way: "The National Park Service benefited immeasurably by the Civilian Conservation [Corps'] building of many greatly needed fire trails...."¹⁴ Fire control requires that suppression measures be applied to a blaze during the first minutes of the fire. Fire trails allowed fire fighters to get as close to a fire as possible as quickly as possible.

Fire trails remained a top priority of park administrators, although the same criticisms cropped up about CCC fire trail work as developed concerning tourist trail projects. Glacier Superintendent Eivind Scoyen complained that the limits on CCC labor, such as the amount of time they could work, hindered the progress of CCC fire trail efforts. Many of the "vital" fire trails planned were in the back country, where spike camps were necessary,

and where there were no established roads. The limits on spike camps and road construction in the backcountry reduced the CCC fire trail usefulness to a minimum.¹¹⁵

Scoyen was not the only person criticizing CCC fire trail efforts. A hiker named Raymond Torrey claimed in the *New York Times* that such projects "invade the integrity" of wild lands and preserves and were "out of line" with the intentions behind the establishment of parks and other preserves.¹¹⁶ CCC and Park Service officials saw the situation differently: improvement was more important than preservation.

By 1930, tree diseases and insects attacked and killed more trees than did fire. White Pine Blister Rust eradication was a major CCC protection project in Glacier and Yellowstone. White Pine Blister Rust eradication efforts in Glacier and Yellowstone had preceded formation of the CCC. Park Service Glacier employees began eradication as soon as appropriations allowed, starting in the early 1930s.

White Pine Blister Rust is a fungus that enters white pine trees through their needles. Once inside the tree, the fungus spreads down the trunk and eventually girdles the tree, killing it. If the girdling does not kill the host tree, complete defoliation eventually does. The first signs of an infection in a tree do not show up for three years after infestation.

One characteristic of the fungus that makes the eradication of White Pine Blister Rust easy is the fungus' particular life cycle. The rust needs an alternate host for incubation of the spores that attack the pines. Bushes of the genus *Ribes*, gooseberries and currants, are the only suitable alternate hosts for this fungus. Therefore, elimination of *Ribes* bushes in an area makes the white pines in that area safe from White Pine Blister Rust.

The CCCs used three main methods for eradicating *Ribes* bushes. The most common method of attack was to pull the bushes up by hand or with a "grubbing" tool. This was difficult work, since all of the roots had to be removed, or the plant would grow back fairly rapidly. Second, in areas where the *Ribes* were hard to reach, CCCs sprayed the plants with either a mixture of sodium chlorate and calcium chloride, or diesel oil. For this method, the enrollees wore the same backpack-mounted pump as they did for fire fighting. Finally, if the area to be worked was large, enrollees used bulldozers to scrape up the roots of the bushes. In these large areas, CCC boys seeded the scraped areas to grass, since *Ribes* cannot easily grow in grass.

There are restrictions to effective White Pine Blister Rust eradication efforts. Effective control work can only be attempted for a few months out of the year, while the *Ribes* are in leaf and the rust spores are

viable. Eradication efforts undertaken either earlier or later can leave dormant spores or parts of the bushes intact. For the greatest protection, white pine stands should undergo eradication efforts every five years to catch any bushes missed and those grown from seed in the soil. This requirement frustrated park administrators in Glacier and Yellowstone since they did not know if they would have access to CCC crews every five years. Further frustration resulted when CCC crews had to leave White Pine Blister Rust eradication projects to fight fires. Besides the CCC boys' efforts at eradication of White Pine Blister Rust in Glacier and Yellowstone Parks, the enrollees battled another threat to the parks' forests: insect infestations.

Insects posed a formidable threat to America's forests. Experts estimated that by 1939, bark beetles destroyed over 5,000,000,000 (*billion*) board-feet of standing timber annually. These insects brought a greater "drain of commercial pine timber than has been sustained from any other destructive agency." Bark beetles attacked trees by digging through the bark and laying eggs. The larvae killed the trees by burrowing through the wood just below the bark, girdling the tree.¹⁷

Each of the three main species of beetles that

The Western Pine Beetle →

(*Dendroctonus brevicomis*) attacked healthy, injured, or felled western yellow pines. The Mountain Pine Beetle (*Dendroctonus monticolae*) threatened healthy, injured, or felled silver or western white pines, western yellow pines, and lodge-pole pines. Finally, the Pine Bark Beetle (*Ips pini*) thrived in dying and dead white pines, spruce, and larch.¹¹⁸

Control of these insects involved cutting and burning. CCCs shipped out timber that was not totally destroyed by the insects. If the timber was unuseable, crews burned the logs, bark, and limbs. Technical supervisors found that in the heat of the summer, logs left lying in the sun could develop internal temperatures well over 100 degrees--high enough to kill the beetles. In areas where cutting and burning were not possible, Naphtalene or paradichlorobenzene dissolved in fuel oil and sprayed on trees was also effective.¹¹⁹

Limits on CCC labor reduced the enrollees' progress on bark beetle control projects, which frustrated park administrators. CCC labor rules requiring enrollee free time on Saturdays and Sundays, and the enrollees' inexperience in woods-work hampered their progress. These limitations notwithstanding, the CCC contributed a large amount of manpower and money on beetle eradication projects, which contributed significantly to the protection of the parks' forests from fire. Fire frequently followed

insect infestations because of the greatly increased fuel loads of beetle-killed trees. Park Service Director Arno Cammerer praised the CCC insect eradication efforts: "There is no question but that insect-control work started under regular park appropriations and carried on...by the CCC has saved hundreds of thousands of trees."¹²⁰

One vital link in the protection of forests from fire in Glacier and Yellowstone was the CCC construction of telephone systems throughout the parks. A solid, dependable phone system played a major part in the fire plans for these parks. Telephones enabled personnel in fire lookouts to notify rapidly the fire crews in nearby CCC camps. This quick-response capability, made possible by the CCC's improved telephone systems, proved valuable in preventing small fires from becoming large ones.

CCC crews worked on phone line projects throughout the corps' stay in Glacier and Yellowstone. Perhaps the most ambitious project of all took place in 1938 in Glacier Park. While most CCC phone line projects involved small systems of copper wire and cedar telephone poles, one project was much more complicated. CCC crews from GNP-11, Roes Creek, built a 450-mile circuit of lead-coated heavy copper cable over Logan Pass via Avalanche Creek and Hidden Lake. To move the cable into position, sixty-four enrollees each carried forty-five pounds of cable over the 7,000+' pass at a time. In all, enrollees moved eighteen

tons of cable by hand for this project. One and one-half miles of cable stretched from Avalanche Creek Campground to the 1,000' cliff near Hidden Lake. The CCCs buried all of the cable from this project to protect it from wind and avalanche danger and to preserve the back country's pristine nature. One of Yellowstone's outstanding telephone line projects was 1935's Firehole Cascade-West Yellowstone phone line.¹²¹ While the CCC telephone line projects were important to the protection of these parks from fire, other projects proved to be more instrumental to forest protection. One of the two largest, and the most controversial, protection projects the CCC undertook was called "fire hazard reduction."

"Fire hazard reduction" was a general heading for a number of different projects, all intended to prevent and/or limit the severity of future forest fires. These various projects fell into three basic divisions: detection, preparation, and prevention. The CCC's detection efforts involved construction of both fire weather stations and fire lookouts. Weather stations helped Park Service technicians detect and analyze weather conditions that would either help or hinder fire control. CCC crews built and operated these stations throughout both Glacier and Yellowstone. Fire lookouts were the first line of defense against fires. By the summer of 1936, CCC boys both built and manned eight lookouts in Yellowstone Park

and a similar number in Glacier. The value of these lookouts is evident in the fact that only two hours after CCC boys finished building the primary lookout at Bechler River in Yellowstone, enrollees manning it spotted a fire in Idaho.¹²² Weather stations and lookouts played primary roles in the detection of fires in Glacier and Yellowstone. Once the CCCs detected the fires, preparation work paid off.

The preparation portion of fire hazard reduction projects dealt primarily with the construction of fire caches. Caches were storehouses or sheds built deep in the woods where supply to a fire would be difficult. Enrollees built these caches before fire season arrived and stocked most of them with tools for 595 men, 485-man mess units, 161 sleeping bags, 80 bed rolls, 17 "N" pumps, 10 "Elto" pumps, 2 "A" pumps, 1 "K" pump, 1 "L" pump, and 50,450' of hose.¹²³ Later, during the fire season, these caches proved extremely valuable in battling fires. Enrollees expended the greatest amount of time in these parks, next to actual fire fighting, in fire prevention, or "presuppression."

"Presuppression" described one of the most blatant departures from the conservation ideal, and involved the cutting of fire breaks and general fuel load reduction. Fire breaks are paths cut through strategic areas of the forests wide enough to prevent the spread of fire. Park

administrators placed so much faith in the utility of fire breaks that they seriously considered proposals to widen some of the ridge-top fire trails to 1,000' to provide effective fire breaks in Glacier. Ernest A. Davidson, the Park Service Regional Landscape Architect, vehemently criticized this plan. He failed to see the logic in clearing and burning a 1,000' path through the forest just to prevent a similar fire scar sometime in the future. Also, Davidson claimed that areas of second burns *do* reforest, perhaps not with "desired" species, and that the Park Service had no right to dictate which species are indeed "desirable." Finally, he questioned whether Park Service landscape planners should "throw overboard (even to a greater extent than we now do) the theory of preservation of natural conditions within the parks."¹²⁴

The second part of fire hazard reduction, reduction of fuel loads, was just as controversial as building fire breaks, but was a far more major undertaking. The first major fuel load reduction project involved clearing the dead brush and trees from the flooded areas around Sherburne Lake. Sherburne Lake, on Glacier Park's east side, is a man-made reservoir.

The Sherburne Lake dam and other reclamation projects¹²⁵ showed how the park service administration "clearly placed resource development and additional park revenue above the principle of preservation."¹²⁶ As

discussed earlier, the United States Reclamation Service received major concessions in the Glacier Park Act. These concessions opened all of Glacier to the Reclamation Service. The Reclamation Service favored damming the Sherburne Valley for irrigation purposes over damming the St. Mary's Lakes.

Sherburne dam construction began in 1914. Park officials continued to exploit the park by authorizing the harvest of timber in the Sherburne and Red Eagle Valleys for use in the construction of the dam and supporting camps, and for the trapping of fish in Sherburne Lake (a small natural lake predated the larger reservoir) to feed the construction crews. The Reclamation Service closed the gates to the dam in 1919 and only partially filled the reservoir. Before the reservoir could be filled to capacity, one problem needed to be resolved.¹²⁷

The partial filling of the reservoir introduced the problem of the dead trees and brush in the flowage area (area to be flooded). In 1927, Steven Mather recommended to the Commissioner of Reclamation, Elwood Mead, that "before flooding any tree covered land [in the Sherburne Valley], all tree growth and brush should be cut and burned."¹²⁸ Mead ignored Mather's advice and ordered the dam closed and that the water level be brought to capacity. The Park Service did not touch the resulting acres of dead wood until the CCC provided sufficient funds for the

clean-up.

Glacier's east side CCC boys spent many summers clearing the piles of dead wood and brush that accumulated along the lake's shores each year. Enrollees began near the dam and removed all of the trees and brush within fifty feet of the shore line. CCCs piled the resulting dead wood in stacks. Either the winter enrollees or the rangers burned the "acres of piles" in the late autumn and winter, after any danger of wildfire had passed. The clean-up of Lake Sherburne's flowage area was, according to Fechner, of "direct benefit" to the nation as a whole since it eliminated a major eyesore in one of the nation's most beautiful parks.¹²⁹

Roadside clean-up was one of the first projects begun in the parks after the establishment of the CCC, and it was one of the last to be abandoned when the CCC left Glacier and Yellowstone. Clearing the brush, litter, and dead wood from the sides of the parks' roads was an on-going job throughout the summer. Enrollees also dynamited "ugly" tree stumps within sight of the road.¹³⁰ Depending upon the terrain, CCC boys cleared brush from ten to eighty feet from each side of the road. Roadside clean-up was a perfect project for Yellowstone Park, since it had many more visitors than did Glacier (resulting in more flammable garbage along the roads), and, since it was a low-supervision job, enrollees could always keep busy when

supervisory personnel were at a premium. Clearing roadsides was neither as important, nor as controversial as was clearing fire scars.

The controversy surrounding fire scar clean-up involved Glacier's forests, since the presence of two very prominent fire scars in Glacier in two of its most heavily used areas (the McDonald Valley and the Swiftcurrent Valley/Many Glacier area) obviously made the project much more important there than in Yellowstone. Fire scar clean-up consisted basically of felling snags (standing fire-, insect-, or disease-killed timber), cutting the logs into manageable lengths, stacking them, then either burning the wood or salvaging it for other purposes. Critics were adamant about putting an end to this work. The most vocal critic was Dr. Adolph Murie, Glacier's Assistant Wildlife Supervisor, who developed an extensive list of reasons why clean-up of burned areas should not take place. His reasons for leaving the scar as it was included the fact that removing the dead wood from those areas would significantly reduce the amount of nutrients available for the surrounding soils. The soils, according to Dr. Murie, would be exposed to the drying sun and wind, which would increase erosion, as would the increased run-off due to a lack of structure to hold rain. Burning stacks of dead wood would cause fire scars of their own. But most of all, removing the dead wood from burn areas would be eliminating

a natural habitat. According to Dr. Murie, "destroying a natural condition in a burn is just as sacrilegious [sic] as destroying a green forest."¹³¹

Dr. Murie was not alone in his criticism. Ernest A. Davidson, the Regional Landscape Architect, claimed that fires spread through "growing, green, lodgepole pine and other trees just as easily, and with far more rapidity, than they burn the old snags," regardless of whether or not those snags are standing. One historian claimed that this project exemplified the Park Service administration's attitude toward the parks: "human demands, and human aesthetic values pre-empted the primitive or natural condition" in parks.¹³²

Proponents of the fire scar clean-up project were as vocal as were the opponents. George C. Ruhle, Glacier's Park Naturalist from 1929 to 1941, was "thoroughly won over by the practical evidence of [the project's] feasibility and desirability...."¹³³ Ruhle refuted Murie's contentions. The naturalist claimed that only volatile nitrogenous compounds would be lost by the removal of dead wood. Further, future fires, fueled by abundant dead wood, combined with the McDonald Valley's prevailing warm southwesterly winds, would certainly scorch the entire remainder of the valley, an area most heavily used by visitors. Even if no fires started, the standing snags were a perfect breeding ground for Douglas fir bark beetles

(*Dendroctonus pseudotsugae*) that had destroyed Douglas fir stands in the surrounding territory. Ruhle had still other justifications for the project.

Ruhle based his additional justifications on the widely-held belief that standing snags were not, in all actuality, a natural aspect of the Rocky Mountains. Fires as huge as those in 1926 (northwest of the 1929 McDonald Valley burn), and 1929 were "almost as rare an agent as man in shaping the aspect of Glacier's features 100 years ago [1830s]." He used the age of the cedars in the 1929 fire as proof. A cedar-hemlock forest is a "climax", or mature forest which takes 250-500 years to produce. Consequently, fires the size of the one in 1929 must have been rare. In any case, the area to be cleared represented a small portion of the park's total burned areas. Ruhle assured Dr. Murie that "there will always be opportunity...to study wild life in a 'natural habitat' of unnatural burns in the park." The Park Naturalist was not alone in his defense of the project.¹³⁴

Both Superintendent Scoyen and the National Park Service's Chief Forester, John D. Coffman, supported the work. Coffman, in fact, recommended that the clean-up be "the first priority project for any and all CCC camps...to the exclusion of all other projects...." Scoyen was not so zealous in his support. His rationale for the project were similar to Ruhle's. Scoyen knew that frequently

burned-over areas, such as the Middle Fork of the Flathead, take many, many years to reforest. He ultimately approved of the fire scar clean-up, as long as project supervisors followed a strict set of guidelines. First, crews had to leave five to ten non-cedar snags per acre standing for cover and homes for birds (the CCC boys called these the "Bird Trees"). Also, crews had to leave small pieces of wood, bark, and other debris on the ground, along with "occasional logs" for cover and to keep the soil from drying out. Paths, trails, and sawed surfaces could not be visible from tourist trails and/or roads. CCCs could cut *no* green trees. Stumps had to be cut no higher than the diameter of the butt of the tree being cut--in no cases higher than twelve inches. Finally, any snags with nests or animal homes could not be disturbed.¹³⁵

Fire scar clearing proceeded in four main burn areas in Glacier Park. The Two Medicine area burned in 1916, and much debris remained into the 1930s. The fire of 1926 was northwest of the 1929 fire, in the vicinity of Fish Creek. The 1929 fire burned Apgar and the lower half of the McDonald Valley. In August and September, 1936, an horrific fire burned from Heaven's Peak over the Continental Divide, and down the Swiftcurrent Valley to the Many Glacier Hotel. CCCs began to clean up the results of this terrible fire in the late autumn and winter, 1936-1937. Yellowstone companies spent their fire

presuppression time clearing smaller burns and removing stumps from within sight of park roads. Clearing all of this area resulted in thousands of tons of displaced wood. The CCC put much of it to good use.

While the CCCs simply burned a large part of the cleared wood, enrollees used much of it much more efficiently. Yellowstone had less wood to deal with, so most of the Yellowstone CCCs' cleared wood heated the park administration building in Mammoth Hot Springs and the CCC camps themselves. Glacier companies shipped fire wood to the drought stricken communities of eastern Montana. Glacier salvaged a tremendous amount of wood and shipped much of it to the Blackfeet Reservation just east of the park. Glacier companies used the railroad to ship poles, fence posts, corral poles, and fire wood to the Blackfeet Reservation. F.R. Stone, the Superintendent of the reservation, claimed that supplying logs and poles to the Indians was "one of the finest things ever done for the Indians on the reservation."¹³⁶ The Fort Peck Indian Reservation also received salvaged wood from Glacier. During the 1935 fiscal year alone, Glacier companies saved a total of 158 80,000-pound railroad carloads of logs, poles, and posts for shipment east.¹³⁷ Not all of the salvaged wood left the parks, however.

CCCs used many of the sound and sturdy logs cleared at CCC project sites in these parks in their telephone line

construction projects. Creosoting facilities in Glacier produced a surplus of telephone poles. In fact, one camp, GNP-1, in one summer, 1933, salvaged 1,978 telephone poles and 117 cords of fire wood. Saw mills in both Glacier and Yellowstone provided lumber for CCC construction in these parks. In 1939, Glacier Park bought surplus sawmill equipment from Fort Peck Dam and Mount Rainier National Park. Using this equipment to process fire-killed timber, enrollees saved significantly on the costs of construction projects. From January 1, 1939 to September 30, of that same year, CCC sawyers produced 347,071 board-feet of construction-quality lumber. In fiscal 1941, CCC boys sawed nearly 1,000,000 board-feet of lumber, and 1,686,160 board-feet in fiscal 1942.¹³⁸

Clearing fire scars was another instance of the modification of the Park Service's goal of preservation. This project was a clear example of altering a natural condition for the enjoyment of the people of that time. Curtis Buchholtz claimed that "three thousand acres of burned timber [in Glacier] were not left unimpaired for the future, but made more pleasing for those living in the area."¹³⁹ Fechner considered the clean-up of the lower McDonald Valley fire scar, like the clearing of the Sherburne Lake flowage area, to be valuable not only to the park, but to the nation as a whole.¹⁴⁰

Of even greater import to the nation's forest

resources was the CCC's fire fighting efforts. Roosevelt's dedication to the protection of forests from the predations of fire stem back to one of his last activities as a healthy man. On August 10, 1921, while he was sailing alone off the Bay of Fundy, Roosevelt spotted a fire. He sailed to shore and beat the fire out with pine boughs. To clean off the dirt and smoke of the fire, he dove into warm Lake Glen Severn, and then he jumped into the icy Bay to get to his boat. Later that evening, he retired early due to chills and aches. He began to experience the paralysis of polio the following morning.¹⁴¹ This account perhaps helps explain his interest in CCC fire fighting work.

The CCC involvement in fighting forest fires in the national parks was the result of a long history of protection and planning. Federal control of fires began with the Army's administration of the parks. From the Army's arrival in 1886, it began fire control programs in the parks. In fact, the civilian custodians' inability to control fires was one of the initial reasons for the Army's intervention. In 1910, when a series of fires entered Glacier from surrounding forests, an Army contingent from Ft. Missoula had already prepared to fight them. The Army furnished valuable protection to Yellowstone's forests as well.¹⁴²

For years prior to the establishment of the Park Service in 1916, a small group of professional foresters

from the Forest Service directed fire control in the parks. These foresters began to build the Park Service fire control organization in the late 1920s through the Forest Protection Board (established in 1927 as an interagency federal land board). This new reorganization laid the foundation for CCC fire control efforts. The Forest Protection Board decided that the parks were "an economic service in the form of national education and recreation of a value probably already even greater than an equivalent area of the choicest commercial forests."¹⁴³ This generous estimation of the value of park forests opened the door for increased Park Service fire control measures.

The CCC provided the Park Service with a source of manpower and finances that enabled the Service to implement the increased fire protection plans of the Forest Protection Board. One result of this supplemental money was an expanded Park Service fire organization. In 1929, the total Park Service fire organization consisted of one national fire officer, one special fire crew at Glacier Park, and a fire guard at Sequoia National Park. After the establishment of the CCC, however, the Park Service hired 7,000 new employees, "a figure not exceeded even in the early 1970s," for logistical support and administrative services of the Park Service fire organization.¹⁴⁴

The Park Service relied heavily upon the Forest Service for fire protection. There were no "foresters" in

the Park Service. They all came from forestry schools or the Forest Service. Also, the Park Service adopted Forest Service techniques for fighting fires--lookouts, fire roads and trails, and a solid telephone system. There remained, however, fundamental philosophical differences concerning fire control between the two agencies, which were reflected in the directors' backgrounds. Gifford Pinchot prided himself on being a professional forester, while Stephen Mather gained early repute in business advertising and promotion. These different backgrounds help explain their different approaches to fire control on the land entrusted to them. Stephen Pyne, an authority on fires in America, claimed that "the Forest Service often regulated access to its lands as a means of controlling fire; the Park Service tended to promote access, even at the risk of fire."⁴⁵ In either case, both agencies used the CCC fire fighters as the primary means of controlling fire in the 1930s.

The changes in United States fire fighting policies in the early twentieth century was one reason that the men of the CCC could assume their roles as fire fighters as easily as they did. Most of these changes dealt with the Forest Service. As stated above, the Park Service derived Park Service fire strategies and tactics from Forest Service policies. The Weeks Act was the first of these policy changes. In 1911, Congress passed the Weeks Act, which provided for cooperative fire protection between the

various states. This act unified forest fire control policy by stating that the Forest Service had "to cooperate with any State or group of states, when requested to do so," to protect the watersheds of navigable streams."¹⁴⁶ The Weeks Act also authorized Congress to purchase forest lands on headwaters for the protection of watersheds.

The Clarke-McNary Act, 1924, broadened the Weeks Act. Cooperation now extended from watersheds of navigable streams "to any timbered or forest producing lands within the co-operating States." The Clarke-McNary Act, also known as the Cooperative Forest Protection Act, authorized the use of federal labor on forest fires and pre-suppression on privately owned lands, bringing the total amount of land protected under this act to 236 million acres. The federal power to purchase lands also broadened. The government could buy land for timber production, not just for the protection of watersheds, as the Weeks Act stipulated.¹⁴⁷

Two fires in particular brought forth the third policy change. On August 17, 1933, Director Fechner authorized, for the first time, the use of CCC labor in actual fire fighting on a fire near Craig, Montana. This set a precedent of the use of CCC's which remained throughout the corps' existence. The second fire that affected fire policy was the huge Tillamook Burn of late August, 1933. This fire, which scorched Tillamook County

on Oregon's Pacific coast, inaugurated the first commitment of a large-scale contingent of CCCs on fire lines--"collectively their real baptism by fire."¹⁴⁸ The manpower and money that the CCC supplied forced a restructuring of fire attack plans, resulting in the third major change in fire policy, the 10 A.M. Policy.

The 10 A.M. Policy of 1934, which dealt not with the areas to be protected, but with the strategy behind battling fire, was a direct result of the CCC involvement in the Tillamook Burn. This policy dictated that fires not controlled by the initial attack were to be analyzed and planned out: "each succeeding day will be planned and executed with an aim, without reservation, of obtaining control [of the blaze] before ten o'clock of the next morning." The CCC involvement in the Tillamook fire was the first time entire organized crews fought fire instead of the older method of a huge effort of semi-organized individuals. Pyne claimed that this CCC involvement was a revolution in fire control. He claimed that CCC fire work was not only a revolution, but that it was the basis for "practically all of the organized crews so essential to modern fire control."¹⁴⁹

These organized crews of CCC fire fighters were absolutely essential to the parks, since administrators viewed fire as a top-priority problem. So vital was effective fire control to the park administration, that CCC

fire organization directives stipulated that "the suppression of fires takes precedence over any other park activities, except the safeguarding of human life." Moreover, CCC crews were subject to emergency calls by project superintendents on any day, twenty-four hours a day.¹⁵⁰

The CCC enrollees were not well trained at first. CCCs first received formal fire training in July, 1933. This training was not as effective as some park administrators would have liked. In 1936, Glacier's Superintendent Scoyen criticized the CCC training. He cited a fire on Chief Mountain that two CCC enrollees failed to contain. Scoyen claimed that one well-trained Park Service firefighter could have provided more protection than the two CCCs. In 1936, in an attempt to improve fire training, the CCC inaugurated a formal training system nationwide. Glacier and Yellowstone officials provided training to all enrollees, unlike most parks which trained only special squads. These classes continued seasonally until the Isle Royal National Park fire of 1936. After this fire, the Park Service changed its fire protection program to include monthly day-long classes for the duration of the fire season.¹⁵¹

The CCC boys proved to be capable fire fighters when properly trained and lead. Fire training consisted of basically five parts. The first segment of the fire

control program dealt with general fire prevention, including the handling of smoking materials, burning operations, fire hazard reduction activities, and public fire prevention contact work. The second phase of training insured safe handling and inspection of fire control tools and equipment, and efficient fire crew organization. Safety on the fire lines was the third and last lesson for the general enrollees. Select enrollees received further direction on the use of pumpers, radios, fire trucks, and instruction on manning fire lookouts. These enrollees also learned how effectively and safely to use backfires, how fire behavior changes at different times of the day and at different altitudes, and how wind effects fires. Finally, those in charge of handling the enrollees on the fire lines (camp supervisory personnel, rangers, and fire guards) received instruction on the organization and leadership of fire crews, safe handling of men, and on thorough inspection of fire fighting equipment.¹⁵²

The trained CCCs were well organized to battle forest fires. Each camp contained approximately 200 enrollees, 150 of whom could be released for fire duty. Fire crews of ten CCC boys organized under an experienced leader, usually an LEM, and every twenty enrollees had a Park Service foreman. During periods of peak fire danger, one select crew of fifteen to thirty men remained in camp at all times with tools, transportation, water, and rations close at

hand to provide quick response to fire calls. These select crews became known as "flying squads."

Flying squads provided the first line of defense against fires in Glacier and Yellowstone. Two secondary crews of twenty-five men each also trained extensively in each camp. These backup crews arrived on the fire scene after the flying squads with fire cache trucks, a mess unit, a pump unit, bedrolls and rations. As one crew responded to the fire call, the camp commander grounded another crew in camp.

Smaller crews of "smokechasers" remained at each of the ranger stations throughout the parks. Smokechasers armed with a sleeping bag, a shovel, a pulaski, a canteen, and a day's rations arrived first on the scene to assess the situation. When a call came out from a lookout tower, the smokechasers drove to as near to the fire scene as possible. One man carried a radio, and he established a radio hook-up with two lookouts. The smokechasers lit a flare to indicate their position. The lookouts would triangulate their position and radio directions to the crews to guide them to the fire.¹⁵³

In 1938, the height of CCC fire protection in these parks, each camp had a flying squad and a backup on call for two days each, and each ranger station had a small smokechaser crew. By 1942, however, reductions in enrollments and the decline of the CCC forced regular Park

Service employees to fill the ranks of the flying squads.¹⁵⁴

General Bedford Forrest's advice typified the methods that the CCC used in fighting fires: "Git thar fustest with the mostest men." The corps employed time-honored and proven methods of fire control. CCC fire control tactics involved four "waves" of men. The first crew used axes to cut down small trees and other brush. A second crew of "brush throwers" picked up all of the cut trees and brush and threw them in toward the fire. A third crew of enrollees used mattocks to dig into the ground to cut roots and still smaller growth. They dug a 6"-8" trough down to rock to cut the ground fire fuel. The last group of boys cleared away all of the ground fuel--roots, leaves, bark, needles--with shovels to stop the spread of ground fires. After the four crews had passed, "there was left as clean a trail as any hiker could ask for."¹⁵⁵

Work on the fire lines was hard and unpleasant. When the CCC's chance to rest came, there was only one thing on their minds: "eat all you could [the food was exceptional], take a cold bath in the lake [if you were lucky enough to be near one] & find a sleeping bag for a rest. Only one small problem--some [one] had it before you & it was full of bugs & lice, etc." At night, some enrollees had to join the "night watch crew." These boys had to walk the fire lines from dusk to dawn to extinguish any sparks they saw.

One enrollee, named Arthur Youwer, while on night watch duty on a fire in the upper McDonald Valley, saw a glow coming from over McDonald Pass (he saw the Swiftcurrent Valley burning from a blown ember). Enrollee Youwer was also a "water boy," which entailed climbing down the mountain 1,000'-1,500' to the creek, and climbing back up the mountain with a twenty-five pound, three gallon canvas bag filled with water.¹⁵⁶

The fire in the upper McDonald Valley and the Swiftcurrent Valley burn became collectively known as the Heaven's Peak Fire. This fire was one of the few spectacular fires which, in spite of the enrollees' training and organization, all but exceeded the boys' skills. On August 19, 1936, a lightning storm in Glacier started a small blaze on the southwest shoulder of Heaven's Peak. Lookout observers discovered the fire on August 21. CCC fire crews attacked the fire which swept down into the upper McDonald Valley. Winds quickly spread the fire to over 200 acres, but the enrollees brought it under control. On August 31, high winds kicked up live embers and the fire spread past the CCC fire lines. Camp commanders throughout the park responded with 500 CCCs. The next day, the fire spread across the Going-to-the-Sun Highway and threatened to burn the Granite Park Chalet. By 8:00 that evening, the fire had jumped the chalet and spread east through Swiftcurrent Pass, where it merged with

two smaller fires (the glow reported by Youwer). The fire's march down the Swiftcurrent Valley continued, but stopped within yards of the Many Glacier Hotel. In the end, fire fighters, including 700 CCC enrollees, arrested the Heaven's Peak Fire (only with the help of favorable winds and a light rain). This burn ranks among the park's most devastating fires since it denuded one of the park's most beautiful valleys (the Swiftcurrent), and partially destroyed another (the McDonald Valley). The Heaven's Peak fire consumed a park museum, a campground, ninety cabins, a ranger station, and nearly 9,000 acres of forest. Of the 700 enrollees, seventy from GNP-9, Belton, spent *ninety-four hours* on the fire lines, the last twenty-four in cold rain with neither shelter nor adequate clothing. Enrollees eventually pulled out because their health was "being unnecessarily impaired."⁵⁷

One of the most tragic fires in the history of the CCC was the Blackwater Creek Fire on Yellowstone's eastern border, in the Shoshone National Forest. On August 20, 1938, lightning started a small fire near the headwaters of Blackwater Creek, a tributary of the North Fork of the Shoshone River, 35 miles west of Cody, Wyoming. Later that evening, a crew of fifty enrollees, one superintendent, and a foreman arrived in the National Forest from Yellowstone Park. Upon their arrival, they found that the fire had crossed a ridge into the next drainage. Two CCC crews from

Texas and Oklahoma cut a fire break below that ridge. While they worked, the wind blew some sparks that started a spot fire below the CCCs. This new fire went unnoticed until both fires flared up at the same time, trapping the CCCs. The fire trapped both crews, but one crew sought the refuge of a nearby rock outcropping (one man panicked and fled to his death in the flames). The second crew had no such refuge, and chose to try to fight the spot fire. Ten CCCs, three foremen, and a Bureau of Public Roads employee died. All of those who survived on the rocks were burned, eighteen critically.¹⁵⁸

The deaths in the Blackwater Creek fire hurt the CCC fire fighting organization. The Director called for a board of inquiry. The board found no fault with any organizational weaknesses, and claimed that "in man's control of forest fires some accidents will occur...without fault or failure on the part of anyone."¹⁵⁹ After the Blackwater Creek tragedy, young men began to see themselves as "cannon fodder" for fire fighting. Enlistments dropped and desertions increased.¹⁶⁰

In response to the low morale and deaths in 1938, Fechner promulgated new stricter regulations for the use of enrollees on fires. All enrollees had to be better trained, and in some situations, CCC labor was disallowed. In 1939, Fechner further limited CCC labor on fire fighting. No longer could CCCs be used as a first line of

defense in many instances, but instead, only as a last resort (this was not evident in Glacier or Yellowstone). This ruling came partly as a result of the fact that during the first five years of the CCC, no other project occupied as much time as fighting fires. One example of when fire suppression preempted all other work was August of 1940, when "the entire eligible enrollee strength of all [Yellowstone CCC] camps was used most of the month in suppressing the forty forest fires in Yellowstone."¹⁶¹

Officials of both the CCC and the Park Service recognized the contributions the enrollees made as fire fighters. The CCCs were excellent fire fighters, in spite of their inexperience. Fechner claimed that "what he lacks in experience is made up by his willingness, adaptability, availability, and numbers. His youth and good physical condition have enabled him to strike hard during the initial and vital stages" of a fire.¹⁶² Working under the poorest of conditions, the vast majority of the enrollees performed well, if not without complaint. The value of the CCC as a whole as a fire fighting force was evident to park officials. In fact, Scoyen, the Superintendent of Glacier Park claimed that "...the Corps' *primary purpose* [was that] of pre-suppressing and fighting forest fires...." The fact that the CCC was ready at a moment's notice to meet any fire with a well-trained, well-equipped army contributed greatly to reduced acreage

lost to fire throughout the life of the Corps. In 1933 alone, the CCC kept losses in the nation's forests to fire to "less than 17 percent of the annual average loss during the previous 5-year period." In the first nine months of 1937, one of the Park Service's dryest years to date, the CCC fire fighting efforts reduced losses ninety percent from those for the same period of 1936. In fact, that same year, 1937, saw the smallest acreage burned in the national parks since 1927. To accomplish this vast reduction, the CCCs spent an average of 840,000 man-days annually on fire fighting. The boys of the CCC spent a total of 6,459,000 man-days fighting fires.¹⁶³

Fire season usually ended by mid-September. In early October, the majority of the companies from both Glacier and Yellowstone headed for work in forest or soil conservation camps in California, Nevada, Tennessee, Florida, South Carolina, Utah, or Virginia. Before these companies headed south, the enrollees secured their camps for abandonment for the winter. Some of the parks' companies, however, could not relax--their work continued.

The onset of winter did little to slow the CCC boys. Although Roosevelt authorized the continuation of the CCC through the winter of 1933-1934, neither Glacier nor Yellowstone had any camps that winter. Both parks had winter camps during the fourth enrollment period, the winter of 1934-1935. Glacier's first winter camp was GNP-1

in Belton; the first for Yellowstone was YNP-1 in Mammoth Hot Springs. Neither park had a second winter camp until the eighth enrollment period, 1936-1937, when two camps, GNP-9, Belton, and GNP-15, Apgar flats, joined GNP-1. Yellowstone's second winter camp was YNP-7, Mammoth, established during the winter of 1937-1938.¹⁶⁴

The winter camps for both parks had full work agenda. The work projects they carried out were all close to the camps since the use of trucks was impossible due to deep snow. Enrollees used snowshoes to get to their work sites. The major work project for the winter camps of both parks was fire hazard reduction and building construction. The wood cleared in fire hazard reduction provided badly needed fire wood for these camps, where enrollees from the Midwest and East had to adjust to the sub-freezing temperature for most of each winter.

The long winter hours also provided ample time for educational and recreational pursuits. On days when either storms or bitter cold prevented any CCCs from working on projects, school work occupied most of the boys' time. Also, movies, pool and billiards tournaments, card parties, and monthly dances were extremely welcome additions to the routine. Basketball was tremendously popular when the boys could manage to get to the local school gymnasiums. The cold weather notwithstanding, enrollees seemed to enjoy spending the winter in the parks.¹⁶⁵

CHAPTER 4:

The Corps Winds Down

The coming of the war in Europe, and especially the fall of France to the Nazis in May, 1940, sparked a change in the CCC. The push by some members of Congress to militarize the corps resulted in Public Resolution No. 88, which authorized the training of CCCs in skills "incident to the successful conduct of military and naval activities", including shop, blueprint reading, engineering, cooking, baking, and signal communications. CCC Director James J. McEntee estimated in his annual report that over seventy-five percent of the CCC projects were the same kinds of work as engineer troops do in war, such as construction of roads, trails, bridges, dams, telephone lines, and lookout towers, auto mechanics, supply and procurement, radio operations, and training of medical orderlies. In fact, most of the 1940 report relates how present projects could be made useful in wartime. In 1941, there were 235,420 enrollees trained in skills useful to national defense.¹⁶⁶

Not only were the work skills valuable to the nation's defense, but the men themselves were an asset to the nation. Their CCC training of discipline, living with others, personal hygiene, and strict sanitation made them

prime candidates for military service. General Douglas McArthur claimed that "there would be nothing finer than that the men in the CCC camps should be used as a nucleus for an enlisted reserve." Fechner himself stated that by the end of 1937, "the 300,000 boys now in camp and the 2,000,000 who were trained before them could be turned into first-class fighting men at almost an instant's notice."¹⁶⁷ Fechner, however, still insisted that the CCC was a civilian organization¹⁶⁸ when he read that ninety percent of Americans in 1939 believed that voluntary military training should begin in the CCC. Nonetheless, by August 16, 1941, all enrollees had to drill in simple military formations. The Army had to supply at least twenty hours per week for basic defense training, with up to eight hours of that twenty during project work hours.¹⁶⁹ The military was not the only group interested in the CCCs. As the war approached, and employment rose, enrollments dropped radically, and young men for enrollment were scarce. Eligible men were caught in the middle of a three-corner war between the CCC, the National Youth Administration, and manufacturers, each vying for badly needed labor.

The attack on Pearl Harbor on December 7, 1941, forced the United States' hand in the growing World War. National attention shifted away from recovery to meeting the threat posed by the Axis. In the final eight months of

1941, after Roosevelt declared a limited emergency in May, 100,000 CCCs left the corps to join the Army or to take some of the growing number of private jobs. Even before the Japanese attack on Pearl Harbor, enrollment rolls for 1941 showed a nearly fifty percent drop from 300,000 enrollees to a low of 160,000.¹⁷⁰

The CCC had lost its base--the unemployed--in wartime prosperity. The CCC organization had decayed under dissention and weakness in the temporary agency's structure. Personalities had much to do with the decay. Fechner's demands for more directorial power only worsened under McEntee. These demands for power upset the delicate balance between the central organization and the technical agencies, which wanted to retain control over their operation of the CCC.

The House of Representatives sought an effective way to kill the CCC. Rather than going through the time and expense of formally abolishing the CCC through money and time-consuming legislation, the House merely refused to vote for regular CCC appropriations. On June 5, 1942, the House as a whole refused funds, but voted for \$500,000 for liquidation costs. The Senate countered and narrowly voted a CCC continuance (33 for, 32 against, and 31 abstained). The House then proposed an appropriation of \$8,000,000 for liquidation, and the Senate reversed its previous decision. The CCC was dead. The final termination of all

CCC activities, including warehousing, was to be completed by June 30, 1943.¹⁷¹

Many people believed that the liquidation of the CCC was not wise. One of them, Ovid Butler, editor of *American Forests*, insisted that the CCC was one of the nation's most valuable forces, especially in wartime. The Army needed an uninterrupted flow of wood (for camps and for decks on ships and PT boats); fire could place the American war effort in jeopardy. Since the CCC was already organized for fire fighting, it made sense to continue at least that part of the corps. Butler's opinions were ineffective, and liquidation continued. The CCC abandoned Glacier when GNP-9, Belton, was evacuated on July 7, 1942, and Yellowstone when enrollees left YNP-16, Yellowstone Lake, on July 24 and YNP-1, Mammoth on July 25, 1942.¹⁷²

The dissolution of the CCC resulted in a problem of the disposal of CCC property. There was a huge amount of property involved in the dissolution: 35,000 cars, trucks, and tractors; large stocks of clothing, food, automotive replacement parts, and tires; and a massive amount of small tools "from screwdrivers to air compression hammers," all of which are useful in war preparedness. The War and Navy Departments, and the Civil Aeronautics Administration received first choice of the CCC materials and property.¹⁷³

The CCC had difficulty handling this huge quantity of

surplus. The CCC allowed hundreds of pounds of salt, sugar, and soap in abandoned camps to go to waste. CCC officials burned huge piles of clothing, shoes, pots and pans in the northern Rocky Mountain camps. The CCC administration claimed that these articles were contaminated, and since they could not be sterilized, federal law prohibited their transportation over state lines. CCCs burned piles of tires, badly needed in the war effort, near Bridger, Montana (with "tread good for 25,000 miles of use" according to one observer). Some of these reports turned out to be rumors, but, undoubtedly, waste did occur. On August 27, 1942, the Army Adjutant General forbade burning any supplies, and ordered that they be donated to local scrap drives.¹⁷⁴

Besides these smaller pieces of property, there were 1,717 closed or operating camps, each with twenty to twenty-four buildings. Twenty-four former CCC camps in twenty states became venereal disease hospitals for United States service men. The CCC administration turned over the camps in Glacier and Yellowstone to different agencies in the government. Some Glacier camps housed conscientious objectors who worked in the park during the war. After the war, the Selective Service gave all of these camps back to the Park Service for final disposal. The CCC turned over two portable Yellowstone Park camps, composed of collapsable panels, to the War Relocation Authority, which

moved the buildings to the Heart Mountain Relocation Project near Cody, Wyoming in May, 1943 for use as a Japanese internment camp.¹⁷⁵

CONCLUSION

Nearly three million young men benefited from the CCC. For those employed by the corps, the CCC offered food, clothing and work that most would not have had. As with any large organization, there were those who had bad experiences with the corps. Most of these malcontents disliked camp life, the food, or the work.¹⁷⁶ For the majority, however, their time in the CCC was valuable to them.¹⁷⁷ An indication that the CCC had a positive effect on those involved is the fact that the National Association of Civilian Conservation Corps Alumni has chapters in nearly every state in the country.

When the CCC boys left camp at the end of their enrollment in the CCC, "the men themselves were tougher, browner, heavier, more self-assured, confident and cooperative."¹⁷⁸ The January through May, 1934 issues of *American Forests* included a series of ten articles from enrollees on the topic of "What the CCC Has Done For Me." These articles describe the feelings of self-worth, renewed purpose, and new awareness that the CCC inculcated in its enrollees. One enrollee who felt "rebuilt" was Ray Johnston who claimed:

No longer was I crushed hopelessly in the rut of indifference through a forced dependency; no longer did my fingers twitch from restlessness

nor was I haunted with worries. At last I could lift my eyes and square my shoulders and meet my fellows, man to man.¹⁷⁹

Another CCC benefit was economic. The enrollees had paying jobs, and their dependents at home received allotments that many times kept body and soul together. In the nine and one-half year CCC experience, enrollees sent over \$662,885,000 home. Not only did the enrollees and their dependents profit economically from the CCC, local communities also benefited, as previously discussed.¹⁸⁰

Employers and farmers reaped a huge benefit from the CCC. Motel and restaurant owners and manufacturers recognized the excellence of CCC instruction. Besides the enrollees' vocational training, employers praised the discipline of ex-CCC workers and lauded them "for rigid and willing adherence to orders, for resourcefulness, and for strict cleanliness of mind and body." Farmers benefited from the CCC since the Corps' food demands were so high, that "there is no agricultural or farm industry not involved in their supply, and hundreds of other industries are involved in [the foods'] processing and handling." For example, the CCC removed over 70,000,000 pounds of wool from surpluses. Each day, the CCCs consumed 250,000 loaves of bread. By 1935, farmers supplied 52,074 hogs, 6,926 steers, 4,185,185 pounds of potatoes, 1,666,667 pounds of fresh pork, and 5,000,000 pounds of flour per month to the

CCC.¹⁸¹ Clearly, the nation benefited economically and vocationally from the CCC experience.

From the Glacier and Yellowstone visitors' perspective, the young men of the CCC changed the faces of the parks. In all, nearly 11,500 enrollees served in Glacier, and almost 10,000 young men worked in Yellowstone Park under the CCC.¹⁸² They completed a wide variety of work projects from planting seedlings to fighting forest fires. The park visitor witnessed the transformation of vast areas of burned timber and charred ground into newly-planted forest. These seedlings came from within the parks themselves, raised by enrollees' sweat. One CCC nursery provided over one-half million seedlings every year. Visitors camped in newly-established campgrounds wrought out of forest. Yellowstone enrollees spent more than 6,000 man-days during the summer of 1938 developing drive-through camping sites in the new Mammoth Hot Springs campground, which was the primary project that summer. Besides building these campsites, the CCCs healed them of the scars fires left behind. In the years after the Heaven's Peak fire destroyed Many Glacier campground in 1936, enrollees planted nearly 92,000 trees in and around that area alone.¹⁸³

Expanded campgrounds in Glacier and Yellowstone made campground equipment and other facilities necessary. In Glacier Park, enrollees dug ditches six feet deep and laid

tens of thousands of feet of water line to new comfort stations and watering stations. To augment the new comfort stations in the new campgrounds, CCCs built garbage facilities, elaborate fireplaces, benches, and picnic tables for the comfort of the parks' visitors. CCC boys also built cabins and cottages throughout both Glacier and Yellowstone, along with most of the buildings at Yellowstone's Lamar Buffalo Ranch and the lower Mammoth residential area.¹⁸⁴

The CCCs in Glacier and Yellowstone also helped visitors enjoy these parks more by protecting the park forests from disease, insects, and fire. Efforts at White Pine Blister Rust eradication kept enrollees from both parks busy, as did beetle extermination projects. Enrollees in Glacier worked most of each summer clearing up the fire scars from the fires of 1929 and 1936. Enrollees burned or salvaged thousands of acres of dead wood in Glacier alone. Since there were few forest fires in Yellowstone and many in Glacier, the CCC concentrated fire scar salvage activities mostly in Glacier.

The most evident way that the CCCs protected the Glacier and Yellowstone forests was by fighting fires. "Smoke chasers" and flying squadrons were the shock troops in the CCC's battle against wildfire. Glacier enrollees spent 109,294 man-hours fighting fires in the CCCs' first summer in the park. Yellowstone enrollees fought many

fires beyond the park's boundaries in the surrounding national forests.¹⁸⁵

The CCCs affected both Glacier and Yellowstone parks in a profound way by enabling more and more visitors to experience the national parks, for better or worse. From the National Park Service's perspective at the time, this was a definitely positive result. According to Park Service administrators, an active, interested public held the promise of solid appropriations. Officials sought to attract visitors by making the parks more attractive to tourists, thus drawing more and more people into the parks.

Faced with reduced appropriations in the depth of the Depression, any park expansion or development to accomplish the end of making the parks more attractive seemed unrealistic. The establishment of the Civilian Conservation Corps in 1933 changed all that.

Franklin D. Roosevelt's CCC was surprisingly well-funded, considering the national condition at the time. The "Tree Army" brought with it not only hundreds of thousands of men at a time, but millions of dollars as well. The National Park Service took full advantage of this seemingly endless wellspring of manpower and funds to execute its plans for development of the parks.

Some bureaucrats may have rationalized the development of the parks by claiming that the developmental

projects that the CCC undertook were actually preservationist. An example is the idea that extensive campground development would concentrate tourists in certain areas of the parks. However, the Park Service attitudes toward the parks, such as the parks' need for development before America could enjoy them, and the manifestation of these beliefs through the CCC development of these parks, were antipreservationist. Park Service policy emphasized the "use" side of the Park Service's dichotomous mission, to the detriment of preservation.

The Park Service has, since its genesis, walked a tightrope between use and preservation. Today's policies reflect a renewed interest in preserving the parks in their natural condition. White Pine Blister Rust, pine beetle infestations, and wildfire are left to run their courses as naturally-occurring phenomena. The Park Service is currently making an attempt to restore Yellowstone's popular Fishing Bridge campground, in prime grizzly bear habitat, to its natural condition for the benefit of the bears. This is a clear departure from the National Park Service's attempt to develop the nation's parks through the men and money of the Civilian Conservation Corps.

ENDNOTES

¹ United States Statutes at Large 17 (1872), p. 32.

² Franklin Lane to Steven Mather, 5/13/18, as quoted in John Ise, *Our National Park Policy* (Baltimore: The Johns Hopkins Press, 1961), p. 194; and Horace M. Albright (as told to Robert Cahn), *The Birth of the National Park Service: The Founding Years, 1913-1933* (Salt Lake City: Howe Brothers, 1985), p. 69.

³ Jay Cooke and the Northern Pacific Railroad: Alfred Runte, *Trains of Discovery* (Flagstaff, Arizona: Northland Press, 1984), pp. 24-25; Louis W. Hill and the Great Northern Railroad: *ibid.*, p. 44; "Dignified exploitation...": *ibid.*, p. 47; Muir and the railroads: *ibid.*, p. 39.

⁴ Mather and the railroads: Robert Shankland, *Steve Mather of the National Parks* (New York: Alfred A. Knopf, 1954), pp. 66, 146; "lying fallow...": Steven Mather, "National Parks on a Business Basis," p. 430, as quoted in Curtis Buchholtz, "The Historical Dichotomy of Use and Preservation in Glacier National Park" (unpublished masters thesis, University of Montana, 1969), p. 31; Mather's intentions: *ibid.*; see also Alston Chase, *Playing God in Yellowstone* (New York: Atlantic Monthly Press, 1986), p. 201.

⁵ "Proceedings of the National Park Conference," 1915, p. 147, as quoted in Buchholtz, p. 23.

⁶ United States Department of the Interior, *Annual Report of the Director of the National Park Service*, fiscal year 1931, p. 6, as quoted in Buchholtz, p. 51.

⁷ "for the preservation..." [*italics mine*]: US Stat. 17 (1872), p. 32. While there were no laws prohibiting any killing of the park's animals, those who killed them for reasons other than sport or food were considered "poachers."

⁸ United States Department of the Interior, *Report of the Secretary of the Interior*, 1880, p. 576, as quoted in Ise, p. 25; Army in Yellowstone on August 20, 1886: H. Duane Hampton, *How the U.S. Cavalry Saved Our National Parks* (Bloomington, Indiana: Indiana University Press, 1971), p. 80 and Ise, p. 44; Lacey Act: Hampton, pp. 123-125 and Ise, pp. 45-46.

⁹ Ise, p. 47.

¹⁰ Logan: Buchholtz, p. 15; Doody: Buchholtz interview with Mrs. George Henderson, as quoted in Buchholtz, p. 23.

¹¹ Frank E. Hill, *The School in the Camps: The Educational Program of the Civilian Conservation Corps* (New York: American Association for Adult Education), p. 15, see also John Paige, *The Civilian Conservation Corps and the National Park Service, 1933-1942* (Washington, D.C.: United States Department of the Interior, 1985), p. 1.

¹² William James, *Memories and Studies* (New York: Longmans, Green & Co., 1924), pp. 290-291, see also Frank A. Silcox, "Our Adventure in Conservation," *Atlantic Monthly* 160 (December, 1937), p. 714, and Paige, pp. 1-2.

¹³ George H. Maxwell, *Our National Defense--The Patriotism of Peace* (Washington, D.C.: Rural Settlement Association, 1915), p. 74.

¹⁴ Silcox, p. 714.

¹⁵ Paige, p. 4.

¹⁶ Arthur Schlesinger, Jr., *The Crisis of the Old Order*, Vol. I of *The Age of Roosevelt*, 3 Vols. (Boston: Houghton Mifflin Co., 1957), p. 337.

¹⁷ Kenneth Davis, *FDR: The New Deal Years 1933-1937* (New York: Random House, 1986), p. 13.

¹⁸ "as dreary...": *ibid.*, p. 26; "action...": *ibid.*, p. 30; "return...": *ibid.*, p. 22.

¹⁹ *ibid.*, p. 35.

²⁰ Any unemployment statistics are calculated, since no such studies existed. Statisticians based their results on averaged population counts from the 1930 and the 1940 census results. Fifteen to twenty-four year olds: George P. Rawick, "The New Deal and Youth: the Civilian Conservation Corps, the National Youth Association, and the American Youth Congress" (unpublished doctoral dissertation, University of Wisconsin, 1957), pp. 18-29, and Broadus Mitchell, *Depression Decade* Vol. IX of *The Economic History of the United States* (New York: Rinehart & Co. Inc., 1947), pp. 98, 452, 453, and Russell A. Nixon and Paul Samuelson, "Estimates of Unemployment in the

United States," *The Review of Economic Statistics* 22 (August, 1940), pp. 101-111.

²¹ Schlesinger, p. 268.

²² Ise, p. 356.

²³ Captain Francis V. FitzGerald, "The President Prescribes", *The Quartermaster Review* 13 (July-August, 1933), p. 9.

²⁴ FitzGerald, p. 10; see also Salmond, p. 9 and Paige, p. 6.

²⁵ The ECW, better known as the CCC, remained the official name of the corps until Congress changed the name on June 28, 1937.

²⁶ FDR's notes to secretaries: Edgar B. Nixon, ed. and comp., *Franklin D. Roosevelt & Conservation, 1911-1945*, 2 Vols. (Hyde Park, New York: General Services Administration, National Archives and Records Service, FDR Library, 1957), p. 138; "to create...": U.S. House. 73rd Congress, 1st Session. Committee on Labor, *Message from the President of the United States on Unemployment Relief*, House Miscellaneous Document #6 (Washington, D.C.: United States Government Printing Office (USGPO), 1933), Serial Set 9751.

²⁷ Schlesinger, Vol. II, *The Coming of the New Deal*, 1959, p. 335.

²⁸ "a social...": Harold T. Pinkett, "Records in the National Archives Relating to the Social Purposes and Results of the Operation of the Civilian Conservation Corps", *Social Service Review* 22 (May, 1948), p. 46; "employment,..." [italics mine]: James J. McEntee, *Now They Are Men* (Washington, D.C.: National Home Library Association, 1940), p. 52; "major purpose...": Nixon, Vol. VII, p. 322 and New York Times, April 26, 1939, p. 18.

²⁹ Stewart Holbrook, "The Forest Goes to War," *American Forests* 48 (February, 1942), p. 55, and Carl Richell, "Wood Goes Down to the Sea in Fighting Ships," *American Forests* 48 (April, 1942), p. 157; see also John Salmond, *The Civilian Conservation Corps, 1933-1942: A New Deal Case Study* (Durham, North Carolina: Duke University Press, 1967), pp. 197-198, and John J. Saalberg, "Roosevelt, Fechner and the CCC--A Study in Executive Leadership" (unpublished doctoral dissertation, Cornell University, 1962), pp. 167-168.

³⁰ Green's criticisms: Charles Price Harper, *The Administration of the Civilian Conservation Corps*, (Clarksburg, West Virginia: Clarksburg Publishing Co., 1939), p. 15; "smacks...": U.S. Senate, 73rd Congress, 1st Session, Senate Committee on Education and Labor, House Committee on Labor, *Joint Hearings on S. 598: A Bill for the Relief of Unemployment*, March 23, 24, 1933 (Washington, D.C.: USGPO, 1933), p. 46.

³¹ *Congressional Record*, Vol. 77, p. 965.

³² Trees: *New York Times*, July 6, 1932, p. 1; "take men away..."; U.S. Senate, *ibid.*, p. 70.

³³ DePriest, "no discrimination...": Salmond, p. 23.

³⁴ Robert Fechner, "Objectives and Results of the Civilian Conservation Corps Program" (Washington, D.C., Office of the Director, 1938), p. 2; see Appendix 1 for a copy of the Act.

³⁵ Harper, p. 83.

³⁶ Democrats and Republicans favor: Perry Merrill, *Roosevelt's Forest Army: A History of the Civilian Conservation Corps* (Montpelier, Vermont: Perry Merrill, 1981), p. 2; Robert R. McCormick: Fred E. Leaky, Ray S. Carter, *Roosevelt's Tree Army: A Brief History of the Civilian Conservation Corps*, 2nd Edition (Manassas, Virginia: NACCCA, 1980), p. 2.

³⁷ Privates earned \$.575 per day, while junior enrollees made \$1.00 per day. *New York Times*, April 29, 1933, p. 12; Green still opposed the \$1.00 per day CCC wage, see *Congressional Record*, Vol. 77, p. 965.

³⁸ "to fight a war...": McEntee, p. 11; general information on Fechner: Charles Johnson, "The Army and the Civilian Conservation Corps, 1933-42," *Prologue* 4 (Fall, 1972), pp. 139-156; and Salmond, p. 28.

³⁹ See Appendix 2 for a copy of sketch.

⁴⁰ Donald Swain, *Wilderness Defender: Horace M. Albright and Conservation* (Chicago: University of Chicago Press, 1970), pp. 223-224; Paige, pp. 12-13; see Appendix 3 for full list of Advisory Council members.

⁴¹ See Appendix 4 for profile of an average

enrollee.

⁴² This attitude seemed to change when FDR tried to double the CCC'S size in 1935, when he claimed that doubling the CCC would "clear the streets of cities of the vast army of 'deserving' transients": *Great Falls Tribune*, January 13, 1935, p. 3.

⁴³ Many of the boys in the CCC at the start were not poor, as evidenced by the great number of families who visited the conditioning camps in expensive cars. See *New York Times*, May 8, 1933, p. 17.

⁴⁴ Harper, pp. 32-33. Roosevelt first accepted LEMs for employment on April 22, 1933: Salmond, p. 34.

⁴⁵ Davis, p. 79; Henry Clepper, "The Birth of the C.C.C.," *American Forests* 79 (March, 1973), p. 11.

⁴⁶ James Austin Hanson, "The Civilian Conservation Corps in the Northern Rocky Mountains" (unpublished doctoral dissertation, University of Wyoming, 1973), p. 7.

⁴⁷ Regardless of FDR's decision, blacks made up less than five percent of the CCC by the end of the corps' first year, and remained below the ten percent goal until 1935: Saalberg, p. 177.

⁴⁸ Hanson, pp. 173-174.

⁴⁹ 275,000 enrollments: Charles W. Johnson, "The Army and the Civilian Conservation Corps, 1933-42," *Prologue* 4 (Fall, 1972), p. 147; 8,700 per day: *ibid.*, p. 146; 13,843 on June 1, 1933: McEntee, pp. 15-16; renewals: *Summary Report of the Director of Emergency Conservation Work*, April, 1933 to September 30, 1935, p. 24.

⁵⁰ The War Department, *Civilian Conservation Corps Regulations* (Washington, D.C.: United States Government Printing Office (USGPO), 1937), p. 2, para. 3.

⁵¹ "economic stormtroops...": Salmond, p. 117; Schlesinger: Schlesinger, Vol. II, p. 339.

⁵² One disgruntled officer wrote his thoughts anonymously: "Trees (apologies to Joyce Kilmer); I know I never want to see; Another foul-mouthed CCC.; Those boys whose lives must have been spent; Around the sewer's reeking vent.; They lie, they steal, they curse all day; And try to loaf the time away.; These ill-bred pups of this new deal; Just watch the devils wolf a meal.; Then take a

stroll around their tents; In fruitless search of common sense.; This life is Hell on earth for me; This detail with the CCC.": From Scrapbook of Colonel Allen Spitz, as quoted in Barrett G. Potter, "The Civilian Conservation Corps in New York State: Its Social and Political Impact (1933-1942)" (unpublished doctoral dissertation, State University of New York, Buffalo, 1973), p. 64.

⁵³ National Park Service control over state parks: Park Service Director Horace Albright, with the support of Secretary of the Interior Harold Ickes, telegraphed all state park authorities and informed them that the National Park Service was "the designated agency to administer the ECW programs within state parks." Albright named Conrad Wirth, his Chief Planner, as administrator of the state parks program--see Paige, pp. 39-40; National Park Service charges: Paige, p. 61; Forest Service charges: "Report on the Civilian Conservaton Corps," *Journal of Forestry* 34 (March, 1936), p. 307.

⁵⁴ Paige, pp. 62-63.

⁵⁵ Forest Service structure: Harper, p. 43; Park Service structure: *ibid.*, pp. 65-66.

⁵⁶ FitzGerald, p. 8.

⁵⁷ Expansion: Donald C. Swain, "The National Park Service and the New Deal, 1933-1940," *Pacific Historical Review* 41 (1972), pp. 323-324; appropriation cuts: Ise, p. 359.

⁵⁸ Master plans: Ise, p. 360, Swain, p. 325, and Emergency Conservation Work, *Annual Report of the Director of the Emergency Conservation Work*, 1936, p. 37.

⁵⁹ *Green Guidon*, July 12, 1935, and *War Department Regulations*, 1937, p. 5, as quoted in Hanson, pp. 90-91.

⁶⁰ Bill Sharp, "The Civilian Conservation Corps In Montana And Under The Fort Missoula C.C.C. District--May, 1933 through July, 1942," (unpublished manuscript, "Bill Sharp Collection," University of Montana K. Ross Toole Archives, p. 53.

⁶¹ Alison Otis, et al. *The United States Forest Service and the Civilian Conservation Corps, 1933-1942* (Washington, D.C.: United States Department of Agriculture 1986), p. 8.

⁶² Alfred Strode letter to mother, June 3, 1933, "CCC Correspondence File," Matthew Redinger Collection, University of Montana K. Ross Toole Archives (hereafter referred to as "Redinger Collection").

⁶³ Quartermaster General order: Johnson, p. 147; individual issue: Major John A. Porter, "The Enchanted Forest," *The Quartermaster Review* 13 (March-April, 1934), p. 10.

⁶⁴ Strode's equipment: Letter home, end of June, 1933, Redinger Collection; Appleton's claim: Burton Appleton interview at Glacier National Park, August 8, 1987, *ibid.*

⁶⁵ Food cost: *2nd Report of the Director of the Emergency Conservation Work*, p. 6; Menus: Porter, "The Enchanted Forest," p. 10, and *Great Falls Tribune*, Special Report by Martha Plassman, October 31, 1933.

⁶⁶ Arthur Youwer, personal correspondence, October 22, 1987, Redinger Collection; 2,200 pancakes: Nelson Brown, "The Civilian Conservation Corps Program in the United States," (Washington, D.C.: USGPO, 1934), p. 5; Burton Appleton, personal correspondence, November 17, 1987 and November 21, 1987, Redinger Collection; See Appendix 5 for story about GNP-15's food.

⁶⁷ "all marched in...": Charles Green, *Montana Memories*, Vol. IV of 4 (Coram, Montana, by the author, 1972), pp. 65-67; Yellowstone work strike: Yellowstone National Park, *Superintendent's Monthly Report*, December, 1935, p. 11; pistol/potato: H.F. Johnny Gillen, personal correspondence, January 6, 1988, Redinger Collection; "one morning...": Green, pp. 65-67.

⁶⁸ Porcupine meat: John G. Mitchell, "FDR's Tree Army," *Audubon* 85 (November, 1983), p. 87; Park Service food: Green, p. 54.

⁶⁹ See Appendix 6 for deaths due to disease, nationally.

⁷⁰ The "doctor" at YNP-1, James H. Phillips, who served for a full six-month term, was actually not a licensed doctor at all. The impostor, Arthur Osburne Phillips, performed all of his duties without any complaints filed against him: Sharp, pp. 26, 38; 1937 influenza outbreak: personal correspondence, Robert Robeson to author, October 21, 1987, Redinger Collection.

⁷¹ Weight: McEntee, pp. 60-61; *Summary Report of the Director of the Emergency Conservation Work*, April, 1933-June 30, 1935, p. 6; Tuberculosis death rates: *Annual Report of the Director of the Civilian Conservation Corps*, 1938, p. 32; Mortality rate: *Summary Report of the Director of the Emergency Conservation Work*, p. 6.; Dental work, "over ninety percent...": Office of the Director, Press Release, January 26, 1939, pp. 1-2.

⁷² Federal Interdepartmental Safety Council, "Safety in the Civilian Conservation Corps," (Washington, D.C.: USGPO, 1938), p. 1.

⁷³ United States Department of the Interior officials cited the 45.41% reduction in fatalities from 1938 to 1939--the largest single annual drop--to the Safety First! program: *Annual Report of the Director of the Civilian Conservation Corps*, 1938, p. 39. See Appendix 7 for deaths due to injury, nationally.

⁷⁴ Yellowstone National Park, *Superintendent's Monthly Report*, March, 1935, p. 14.

⁷⁵ See Appendix 8 for daily scheduals.

⁷⁶ Roosevelt's appointment of Marsh as CCC Director of Education: Merrill, p. 3; FDR's wish to keep boys at work in the forests: Nixon, p. 212; 654 educational advisors: *2nd Report of the Director of Emergency Conservation Work*, April 5, 1933-September 30, 1933 & October 1, 1933-March 31, 1934, p. 7; "radical and leftist...": Hanson, p. 183; "Instead of teaching...": Salmond, p. 49.

⁷⁷ On June 3, 1942, all CCC enrollees with less than a fourth grade education were ordered to attend classes in reading and arithmetic. The United States Commissioner of Education, Dr. John W. Studebaker, claimed that up to 250,000 physically fit young men were ineligible for the draft because of illiteracy (fourth grade education was required by the Selective Service for the draft): *New York Times*, June 6, 1942, p. 20.

⁷⁸ "a very small percentage...": James Howard Hull, "Our Permanent Conservation Corps," *Nation's Business* 28 (May, 1940), p. 24; 91.3%: *Annual Report of the Director of the Civilian Conservation Corps*, 1939, p. 45.

⁷⁹ Guy B. Arthur, *A Statement of Principles* (Washington, D.C.: United States Department of the

⁷¹ Weight: McEntee, pp. 60-61; *Summary Report of the Director of the Emergency Conservation Work*, April, 1933-June 30, 1935, p. 6; Tuberculosis death rates: *Annual Report of the Director of the Civilian Conservation Corps*, 1938, p. 32; Mortality rate: *Summary Report of the Director of the Emergency Conservation Work*, p. 6.; Dental work, "over ninety percent...": Office of the Director, Press Release, January 26, 1939, pp. 1-2.

⁷² Federal Interdepartmental Safety Council, "Safety in the Civilian Conservation Corps," (Washington, D.C.: USGPO, 1938), p. 1.

⁷³ United States Department of the Interior officials cited the 45.41% reduction in fatalities from 1938 to 1939--the largest single annual drop--to the Safety First! program: *Annual Report of the Director of the Civilian Conservation Corps*, 1938, p. 39. See Appendix 7 for deaths due to injury, nationally.

⁷⁴ Yellowstone National Park, *Superintendent's Monthly Report*, March, 1935, p. 14.

⁷⁵ See Appendix 8 for daily scheduals.

⁷⁶ Roosevelt's appointment of Marsh as CCC Director of Education: Merrill, p. 3; FDR's wish to keep boys at work in the forests: Nixon, p. 212; 654 educational advisors: *2nd Report of the Director of Emergency Conservation Work*, April 5, 1933-September 30, 1933 & October 1, 1933-March 31, 1934, p. 7; "radical and leftist...": Hanson, p. 183; "Instead of teaching...": Salmond, p. 49.

⁷⁷ On June 3, 1942, all CCC enrollees with less than a fourth grade education were ordered to attend classes in reading and arithmetic. The United States Commissioner of Education, Dr. John W. Studebaker, claimed that up to 250,000 physically fit young men were ineligible for the draft because of illiteracy (fourth grade education was required by the Selective Service for the draft): *New York Times*, June 6, 1942, p. 20.

⁷⁸ "a very small percentage...": James Howard Hull, "Our Permanent Conservation Corps," *Nation's Business* 28 (May, 1940), p. 24; 91.3%: *Annual Report of the Director of the Civilian Conservation Corps*, 1939, p. 45.

⁷⁹ Guy B. Arthur, *A Statement of Principles* (Washington, D.C.: United States Department of the

⁸⁷ See Appendix 11 for narrative of a the most important incidents.

⁸⁸ Hanson, pp. 169-170; quote: *ibid.*, p. 170.

⁸⁹ "nothing more serious...": *Daily Interlake* editorial, September 27, 1933, p. 6; "Many citizens...": Stanley Davison, "The Establishment and First Year's Administration of the Civilian Conservation Corps" (unpublished masters thesis, University of Montana, 1935), p. 46; Yellowstone rape: Robert Ohls, personal correspondence with Bill Sharp, July 8, 1975, Redinger Collection; "No CCC boys...": Francis Johnston, personal correspondence, November 18, 1987, *ibid.*

⁹⁰ Salmond, p. 111.

⁹¹ See Appendix 12 for Glacier and Yellowstone companies' numbers and home state information.

⁹² See Appendix 13 for camp building specifications

⁹³ Hanson, p. 240.

⁹⁴ *ibid.*, pp. 241, 249, 253.

⁹⁵ Yellowstone officials' expectations: *Superintendent's Monthly Report* (April, 1933), p. 10; forest planning and development: Nancy M. Ouderkirk, "The Civilian Conservation Corps: Roosevelt's Robin Hoods," *Northern Logger and Timber Processor* 23 (May, 1975), p. 57.

⁹⁶ Lack of men: see *Superintendent's Monthly Reports*, Glacier and Yellowstone, especially April, 1937, April, December, 1938, January-March, 1940, and January, June, 1942; "a sample contingent...": *Superintendent's Monthly Report*, January, 1942, p. 4. Usually, sixty-five to seventy percent of the camps' enrollees were available for project work. The remainder worked in the camp cleaning, cooking, and repairing equipment: compiled from *Superintendent's Annual Reports*, and *Superintendent's Monthly Reports*, Glacier and Yellowstone, see particularly Glacier's *Superintendent's Annual Reports*, 1934, pp. 9-10, 1935, pp. 17-18, and 1936, p. 13, and Yellowstone's *Superintendent's Monthly Reports*, September, 1940, p. 15, and October, 1940, p. 17.

⁹⁷ For winter activities, see end of Chapter 3; lack of trucks: see *Superintendent's Monthly Reports* (Yellowstone), especially June, July, 1934, June, 1935, and

Interior, 1937), pp. ff. 4.

⁶⁰ See Appendix 9 for a full list of the Army's educational aims.

⁶¹ War Department, *CCC Regulations* (Washington, D.C.: USGPO, 1937), p. 130, para., 162; see also *Annual Report of the Director of the Civilian Conservation Corps, 1938*, p. 24.

⁶² "preparing men...": Colonel E. L. Hooper, "Accrediting of CCC Camps by State Board of Education," Office of the District Commander, Ft. Missoula CCC District (April 18, 1936) as quotes in Harry A. Westley, "Education in the Civilian Conservation Corps Camps of Montana," (unpublished masters thesis, Montana State University, 1936), p. 75; Montana, 1938: *Annual Report of the Director of the Civilian Conservation Corps, 1938*, p. 28; scholarships: *Annual Report of the Director of the Civilian Conservation Corps, 1940*, pp. 35-36, and *New York Times*, December 9, 1940, p. 19; "an outstanding...": Federal Security Agency, *Annual Report of the Director of the Civilian Conservation Corps, 1942*, p. 7; "one of the country's...": *New York Times*, December 31, 1939, Sec. 2, p. 6.

⁶³ Illiterates and diplomas: *Annual Report of the Director of the Civilian Conservation Corps, 1939*, p. 46; Vocational education: *Annual Report of the Director of the Civilian Conservation Corps, 1940*, pp. 7-8.

⁶⁴ Executive Order No. 6101, Sec. 2, p. 1; see Appendix 1 for copy of Executive Order, and Appendix 10 for punitive authority of commanding officers.

⁶⁵ Desertion was "the worst spot on the whole record of the camps." In the first year of the corps, the desertion rate was only 8%. By April 1937, desertion accounted for 18.8% of all discharges, and over 20% by the end of 1938. In 1940, desertion took such a toll on the CCC that some Glacier camps could not open because of small company strength: Salmond. p. 181, see also Paige, p. 88.

⁶⁶ Lewis Chandler, personal correspondence, November 27, 1987, Redinger Collection, and Frank A. Silcox, "Our Adventure in Conservation," *Atlantic Monthly* 160 (December, 1937), p. 720; "without strict...": *New York Times*, September 24, 1933, p. 2, and Richard A. Bartlett, *Yellowstone: A Wilderness Beseiged* (Tucson: University of Arizona Press, 1985), p. 297.

June, July, 1942.

⁹⁸ Lack of supervisors: see *Superintendent's Monthly Reports* (Yellowstone), especially June, 1935; GNP-1 and GNP-7; Hanson, p. 114.

⁹⁹ Game Ranch is the tract of land West-Northwest of Gardiner, Montana, which President Herbert Hoover added to Yellowstone National Park on October 20, 1932: Aubrey Haines, *The Yellowstone Story* Vol. II of 2 (Yellowstone National Park, Wyoming: Yellowstone Library and Museum Association; Colorado Associated University Press, 1977), p. 332; *The Green Guidon*, November 15, 1937, Vol. 3; #95, no pagination.

¹⁰⁰ Yellowstone nursery in 1937: *New York Times*, May 23, 1937, p. 9.

¹⁰¹ Alan S. Newell et al., *Historic Resources Study, Glacier National Park and Historic Structures Study* (Denver: National Park Service, 1980), p. 224.

¹⁰² 50,000 trees: *Superintendent's Annual Report*, fiscal year 1941, p. 6; 1942, 43,765 trees: *Superintendent's Annual Report*, fiscal year 1942, no pagination; 2,356,000,000 trees: Merrill, p. 196; 425,175,000 trees: *Annual Report of the Director of Emergency Conservation Work*, fiscal year end June 30, 1936, p. 2.

¹⁰³ Runte, p. 32.

¹⁰⁴ *Superintendent's Monthly Report* (Yellowstone), July, 1933--Press Release: Number 1933-27.

¹⁰⁵ "the work of the CCC...": *Great Falls Tribune*, October 11, 1934, p. 7; "National Park superintendents...": Fechner, "Objectives...", p. 15.

¹⁰⁶ 10-20 years: Fechner, "Objectives...", p. 16; "through E.C.W....": *Summary Report of the Director of Emergency Conservation Work*, April, 1933-September 10, 1935, p. 6; attitude/emphases: Buchholtz, p. 63.

¹⁰⁷ Memo to Superintendent Libbey from Frank A. Kittredge, Regional Director of CCC, November 11, 1937, pp. 1-2.

¹⁰⁸ *Superintendent's Monthly Report* (Yellowstone) July, 1935, p. 11.

¹⁰⁹ *Superintendent's Monthly Report* (Yellowstone), December, 1934, p. 8, February, 1935, p. 9, March, 1936, p. 8, and February, 1937, p. 8.

¹¹⁰ *Superintendent's Monthly Report* (Yellowstone), March, 1936, p. 9, and January, 1937, p. 15.

¹¹¹ *Superintendent's Monthly Report* (Yellowstone), January, 1935, p. 7, February, 1935, p. 10, November, 1935, p. 12, and December, 1935, p. 10.

¹¹² "the use of...": Memo from George T. Hopper, Assistant Engineer, to Eivind Scoyen, Superintendent, no date, GNPHC, Box 67, File 4; GNP-4 trail crew: *Superintendent's Annual Report* (fiscal year 1935), no pagination.

¹¹³ Howard Eaton Trail work: *Superintendent's Monthly Reports* (Yellowstone), July, 1936--Press Release: Number 1936-33, and May, 1939, p. 4.

¹¹⁴ Conrad Wirth, *Civilian Conservation Corps Program of the United States Department of the Interior, March 1933-June 30, 1943* (Washington, D.C.: USGPO, 1945), p. 27.

¹¹⁵ Eivind Scoyen to John D. Coffman, United States Department of the Interior's Chief Forester, GNPHC Subject Files, "General Correspondence, 1927-1953", Box 67, File 4.

¹¹⁶ *New York Times*, October 8, 1935, p. 22.

¹¹⁷ 5,000,000,000: Civilian Conservation Corps, "Forests Protected...", p. 10; "drain of commercial...": Alfred Stefferud, ed., *Trees: The Yearbook of Agriculture* (Washington, D.C.: United States Department of Agriculture, 1949), p. 428, as quoted in Hanson, p. 222.

¹¹⁸ Ephram Porter Felt, *Manual of Tree and Shrub Insects* (New York: The Macmillan Co., 1924): *Dendroctonus brevicomis*, p. 250, *Dendroctonus monticolae*, p. 255, *Ips pini*, p. 265.

¹¹⁹ Hanson, p. 222.

¹²⁰ *New York Times*, November 29, 1935, p. 36.

¹²¹ Glacier: *Great Falls Tribune*, September 21, 1938, p. 3, and November 21, 1938, p. 7; Yellowstone: *Superintendent's Monthly Report*, October, 1935, p. 15.

¹²² *Superintendent's Monthly Report* (Yellowstone), August, 1937--Press Release: Number 1937-68, August 25, 1937.

¹²³ *Superintendent's Annual Report*, fiscal year 1934, GNPFC, Box 7, file 3, "Fire Protection," no pagination.

¹²⁴ Memo, Ernest A. Davidson to "Regional Director", August 8, 1938, GNPFC Subject Files, "General Correspondence", p. 2.

¹²⁵ The construction of an hydroelectric plant at McDermott Falls at the outlet of Swiftcurrent Lake in 1912 and the Babb/Milk River irrigation project showed the park service administration's ambivalence toward preservation, regardless of the fact that such developments were legal in Glacier, according to its organic act.

¹²⁶ R.J. Oppedahl, "Conflicts Between Resource Development and Preservation at Glacier National Park" (unpublished masters thesis, University of Montana, 1976), p. 70.

¹²⁷ Sherburne dam construction information: Oppedahl, pp. 58-64.

¹²⁸ Letter, Mather to Mead, November 9, 1927, File L-54, GNPFC, as quoted in Oppedahl, p. 68.

¹²⁹ *Great Falls Tribune*, July 26, 1936, p. 5.

¹³⁰ Gillen, personal correspondence, January 6, 1988, Redinger Collection.

¹³¹ Memo, Murie to Scoyen, undated, p. 4, GNPFC Subject Files.

¹³² "growing, green...": Memo, Davidson to Regional Director, August 18, 1938, GNPFC Subject Files, p. 1; "human demands...": Buchholtz, p. 65.

¹³³ Memo to Scoyen, GNPFC Subject Files, p. 1.

¹³⁴ "almost as rare...": Memo, Ruhle to Scoyen, undated, GNPFC, p. 3; "there will always...": *ibid.*, p. 4.

¹³⁵ "the first priority...": Memo from John Coffman, Chief Forester of the United States Department of the Interior to Scoyen and Arno Cammerer, Secretary of the

United States Department of the Interior, September 10, 1935, GNPFC, p. 9; guidelines: Memo from Scoyen to Civilian Conservation Corps Camp Superintendents and Foremen, January 4, 1937, GNPFC, pp. 1-2.

¹³⁶ Glacier Press Release, 1934, as quoted in Buchholtz, p. 65.

¹³⁷ See Appendix 14 for logs and lumber shipped out of GNP-1.

¹³⁸ 1,978 poles: *Superintendent's Annual Report*, calendar year 1933, Box 7, file 2, page 17; 347,071 board-feet: *Superintendent's Annual Report*, fiscal year 1939, Box 7, file 6, p. 10; 1,000,000 board-feet: *Superintendent's Annual Report*, fiscal year 1941, Box 8, file 1, p. 12; 1,686,160 board-feet: *Superintendent's Annual Report*, fiscal year 1942, Box 8, file 2, p. 10.

¹³⁹ Buchholtz, p. 65.

¹⁴⁰ *Great Falls Tribune*, July 26, 1936, p. 5.

¹⁴¹ Pyne, p. 323.

¹⁴² *ibid.*, p. 298, Army fire control in Yellowstone: Hampton, pp. 83, 100, 107, 226n15.

¹⁴³ Forest Protection Board, "Coordination of Forest Fire Control Policy", p. 5, as quoted in Pyne, p. 298.

¹⁴⁴ *ibid.* (Pyne).

¹⁴⁵ *ibid.*, p. 296.

¹⁴⁶ Harper, p. 55.

¹⁴⁷ "to any timbered..." *ibid.*; 236 million acres: CCC "Forests Protected...", 1939, p. 3; timber production: Otis, p. 5.

¹⁴⁸ Pyne, p. 360.

¹⁴⁹ "each succeeding day...": 10 A.M. Policy, *National Forest Manual*, 1935-1978, as quoted in Pyne, p. 260; a revolution in fire control: Pyne, p. 361; "practically all...": *ibid.*, p. 326.

¹⁵⁰ "the suppression of fires...": "ECW Fire Suppression Organization," Fire Notes, undated, GNPFC, Box

239, file 3, p. 4; emergency calls: *CCC Regulations*, 1937, p. 18, para. 33.

¹⁵¹ Scoyen's criticism: Letter, E.T. Scoyen to L.F. Cook, Regional Forester in charge of the CCC, January 8, 1936, GNPFC, Box 239, file 3; change in training: Paige, p. 100.

¹⁵² *Annual Report of the Director of the Civilian Conservation Corps*, fiscal year end June 30, 1938, "Fire Training", p. 44; special crew training: John D. Guthrie, "The CCC As A Fire Fighting Unit," *American Forests* 45 (April, 1939), p. 238.

¹⁵³ Interview with Burton Appleton, August 8, 1987, Redinger Collection.

¹⁵⁴ *Superintendent's Monthly Report* (Yellowstone), July, 1942, p. 3.

¹⁵⁵ General Bedford Forrest: CCC "Forests Protected...", 1939, p. 5; methods and quote: Letter, Martin J. Romero to father, as quoted in McEntee, p. 24; methods, only: Youwer, personal correspondence, October 31, 1987, Redinger Collection.

¹⁵⁶ Rest: William Forsyth, Jr., personal correspondence, November 17, 1987, Redinger Collection; night watch: Youwer, October 31, 1987, *ibid.*

¹⁵⁷ Fire narrative and damage: *Great Falls Tribune*, August 31-September 2, 1936; Youwer, October 31, 1987; Donald H. Robinson, *Through the Years in Glacier National Park* (West Glacier, Montana: Glacier Natural History Association, May, 1960), p. 85; enrollees' health threatened: Telegram to Scoyen from Hooper, September 6, 1936, GNPFC Box 239, file 3.

¹⁵⁸ See Hanson, pp. 272-274, *Superintendent's Monthly Report* (Yellowstone), August, 1937, p. 20, and Pyne, pp. 367-369.

¹⁵⁹ Pyne, p. 368.

¹⁶⁰ During the total lifespan of the CCC, forty-seven enrollees died fighting fires--Pyne, p. 383.

¹⁶¹ Change in the use of CCCs on fires: Pyne, pp. 369-370; "the entire eligible...": *Superintendent's Monthly Report*, August, 1940, p. 6.

¹⁶² CCC, "Forests Protected...", p. 5.

¹⁶³ "the Corps' primary purpose..." [italics mine]: *Superintendent's Annual Report*, fiscal year 1937, GNPFC, Box 7, file 5, p. 18; "less than 17 percent...": *Second Report of the Director of the Emergency Conservation Work*, April 5, 1933-September 30, 1933 & October 1, 1933-March 31, 1934, p. 8; ninety percent less lost: Paige, p. 100, and *New York Times*, October 26, 1937, p. 46; 1937 losses: CCC, "Forests Protected...", 1939, p. 3; 840,000 man-days: Fechner, "Objectives...", 1938, p. 13; 6,459,000 man-days: Merrill, p. 196.

¹⁶⁴ See Appendix 15 for occupancy charts for Glacier and Yellowstone.

¹⁶⁵ *Superintendent's Annual Report* (Glacier), (1940), p. 40; see also *Great Falls Tribune*, February 26, 1937, p. 5 and March 3, 1937, p. 4.

¹⁶⁶ McEntee: Federal Security Agency, *Annual Report of the Director of the Civilian Conservation Corps* (1940), p. 5; 235,420 enrollees: *Civilian Conservation Corps, Civilian Conservation Corps: Contributing to the Defense of the Nation* (Washington, D.C.: USGPO, 1941), p. 1.

¹⁶⁷ "there would be...": *Great Falls Tribune*, February 20, 1935, p. 2; "the 300,00 boys...": *New York Times*, December 21, 1937, p. 19.

¹⁶⁸ Fechner's attitude changed by 1941, when he used defense oriented terminology in his annual report: "At the close of the fiscal year, the Civilian Conservation Corps, a mobile and well trained work organization equipped with buildings, machinery, and supplies, representing and investment of more than \$150,000,000 stood ready to carry out whatever national-defense assignment the future might bring.": Federal Security Agency, *Annual Report of the Director of the Civilian Conservation Corps*, 1941, p. 1.

¹⁶⁹ Ninety percent of Americans supported voluntary military training: *New York Times*, October 1, 1939, p. 41; Army required to provide defense training: Paige, p. 31.

¹⁷⁰ 100,000 Civilian Conservation Corps: *Great Falls Tribune*, January 5, 1942, p. 5; 1941 enrollment: Hanson, p. 337.

¹⁷¹ Civilian Conservation Corps "death": Salmond, p. 217; House refused appropriations: Paige, p. 35.

¹⁷² Butler's editorial: *American Forests*, 48 (February, 1942), p. 52; Glacier abandonment: Robinson, p. 98; Yellowstone abandonment: *Superintendent's Monthly Report* (Yellowstone), July, 1943, p. 5.

¹⁷³ Federal Security Agency, *Annual Report of the Director of the Civilian Conservation Corps*, 1942, p. 1.

¹⁷⁴ Burning tires: Hanson, p. 349; prohibition on burning: *ibid.*, p. 352.

¹⁷⁵ Venereal disease hospitals: *New York Times*, February 17, 1943, p. 17; Japanese internment: *Superintendent's Annual Report* (Yellowstone), 1943, p. 16.

¹⁷⁶ Some men today deny ever being in the Civilian Conservation Corps for the shame they feel for being dependent on the government--Appleton interview, August 8, 1987, Redinger Collection.

¹⁷⁷ See letters from ex-enrollees, Redinger Collection, *passim*.

¹⁷⁸ Gillen correspondence, January 6, 1988, Redinger Collection.

¹⁷⁹ *American Forests* 40 (January-May, 1934): January: J. Kidwell, "A Task, A Plan and Freedom," G. Street, "Wisdom From the Trees," K.E. Teston, "A Home and Harvest Saved;" February: L.G. Crutchfield, Jr., "It Has Given Me A Niche To Fill," R. Johnston, "I Can Meet My Fellows Man to Man;" March: J.A. McMillen, "Best of All, It Gave Us a Job," C. Hiller, "It Taught Me One Way To Be Happy;" April: F. Runney, "It Has Taken Me Off The Road," J.H. Furbay, "I Have Lived With Nature--Man's First Friend and His Last;" May: H.H. Buckles, "I Have Learned To Know The Human Race;" Johnston: "I Can Meet My Fellow, Man to Man," *American Forests* 40 (Feb. 1934) p. 67.

¹⁸⁰ \$662,885,000: Merrill, p. 196; see also endnote 90.

¹⁸¹ Motel and restaurants benefited: *New York Times*, April 11, 1937, sec. 2, p. 7; Employer praises: Federal Security Agency, *Annual Report of the Director of the Civilian Conservation Corps*, 1941, pp. 12-13; "there is no...": *Annual Report of the Director of the Civilian Conservation Corps*, 1936, pp. 9, 10; 250,000 loaves: Johnson, p. 147; livestock and commodities: *Summary Report*

of the Director of the ECW, April, 1933-June 30, 1935, p. 8.

¹⁸² Numbers of enrollees in each park were derived from *Superintendent's Annual Reports* and *Superintendent's Monthly Reports* from Glacier and Yellowstone. These reports provide an average number of enrollees per camp (Glacier: 187, Yellowstone: 186). These were multiplied by the total number of camps in each of the parks, from Appendix 15. These figures include the total number of enrollments in these parks; no account is made for those enrollees who re-enrolled and returned to Glacier or Yellowstone.

¹⁸³ One-half million seedlings: Edgar M. Flowers, article in *Green Guidon*, November 15, 1937, Fort Missoula Subject Files, Missoula, Montana; 6,000 man-days in Mammoth Hot Springs campground, 1938: *Superintendent's Monthly Report*, (Yellowstone), August, 1938--Press Release: Number 1938-90; 92,000 trees planted in Many Glacier: derived from: *Superintendent's Annual Reports* (Glacier), 1941, p. 6, 1942, no pagination, and Newell, p. 224.

¹⁸⁴ Timothy Manns CCC work summary in Yellowstone, May 27, 1981, Subject Files, YNPHC, see also *Superintendent's Monthly Reports* for completion dates for various construction projects.

¹⁸⁵ 109,294 man-hours in Glacier on fires, 1933: *Superintendent's Annual Report*, 1933, pp. 16-18. The basis of the research materials used in this study includes reports and memoranda from the Glacier and Yellowstone superintendents. These superintendents changed, and with them, reporting styles, priorities, and attitudes also changed. The fact that the reports come from two different parks compounds the problem of quantifying the amount of work performed by the CCC. It is very difficult to quantify the exact number of acres of trees that the CCC planted, the exact number or locations of CCC-constructed buildings, and the amount of time that the enrollees spent fighting forest fires because while one superintendent reported that the enrollees spent 10,827 man-days fighting fires in Glacier (GNP, *Superintendent's Annual Report*, 1937, p. 18), the Yellowstone superintendent would report the number of enrollees fighting fires in a given month (for examples see YNP, *Superintendent's Monthly Reports*, August 1935, p. 16, September, 1935, p. 15, September, 1937, p. 16, and September, 1938, p. 16). Even within one park, quantifying information is difficult. Some of the reports from Glacier cite the number of man-hours, rather than man-days, spent on a fire (man-hours/man-days: for

examples see GNP, *Superintendent's Annual Reports*, 1937, p. 18, 1938, p. 13, and 1940, p. 4.)--(how many man-hours are in a man-day--eight? ten? twelve?)

Appendix 1.

Public Number 5 and and Executive Order 6101 Affecting the
Civilian Conservation Corps.

Public No. 5, 73rd Congress--S. 598.

AN ACT

For the relief of unemployment through the performance of
useful public work, and for other purposes.

Be it enacted by the Senate and House of
Representatives of the United States of America in
Congress assembled: That for the purpose of relieving
the acute condition of widespread distress and unemployment
now existing in the United States, and in order to provide
for the restoration of the country's natural resources and
the advancement of an orderly program of useful public
works, the President is authorized, under such rules and
regulations as he may prescribe and by utilizing such
existing departments or agencies as he may designate, to
provide for employing citizens of the United States who are
unemployed, in the construction, maintenance and carrying
on of works of a public nature in connection with the
forestation of lands belonging to the United States or to
the several states which are suitable for timber
production, the prevention of forest fires, floods and soil

erosion, plant pest and disease control, the construction, maintenance or repair of paths, trails and fire lanes in the national parks and national forests, and such other work on the public domain, national and State, and Government reservations incidental to or necessary in connection with any projects of the character enumerated, as the President may determine to be desirable: Provided, That the President may in his discretion extend the provisions of this Act to lands owned by counties and municipalities and lands in private ownership, but only for the purpose of doing thereon such kinds of cooperative work as are now provided for by Acts of Congress in preventing and controlling forest fires and the attacks of forest tree pests and diseases and such work as is necessary in the public interest to control floods. The President is further authorized, by regulation, to provide for housing the persons so employed and for furnishing them subsistence, clothing and medical attendance and hospitalization, and cash allowance, as may be necessary, during the period they are so employed, and, in his discretion, to provide for the transportation of such persons to and from the places of employment. That in employing citizens for the purposes of this Act no discrimination shall be made on account of race, color, or creed; and no person under conviction of a crime and serving sentence therefor shall be employed under the

provisions of this Act. The President is further authorized to allocate funds available for the purposes of this Act, for forest research, including forest products investigations, by the Forest Products Laboratory.

Section 2. For the purpose of carrying out the provisions of this Act the President is authorized to enter into such contracts or agreements with the States as may be necessary, including provisions for utilization of existing State administrative agencies, and the President, or the head of any department or agency authorized by him to construct any project or to carry on any such public works, shall be authorized to acquire real property by purchase, donation, condemnation, or otherwise, but the provisions of section 355 of the Revised Statutes shall not apply to any property so acquired.

Section 3. Insofar as applicable, the benefits of the Act entitled "An Act to provide compensation for employees of the United States suffering injuries while in the performance of their duties, and for other purposes," approved September 17, 1916, as amended, shall extend to persons given employment under the provisions of this Act.

Section 4. For the purposes of carrying out the provisions of this Act, there is hereby authorized to be expended, under the direction of the President, out of any

unobliged moneys heretofore appropriated for public works (except for projects on which actual construction has been commenced, or may be commenced within ninety days, and except maintenance funds for river and harbor improvements already allocated), such sums as may be necessary; and an amount equal to the amount so expended is hereby authorized to be appropriated for the same purposes for which such moneys were originally appropriated.

Section 5. That the unexpended and unallotted balance of the sum of \$300,000,000 made available under the terms and conditions of the Act approved July 21, 1932, entitled "An Act to relieve destitution," and so forth, may be available, or any portion thereof, to any State or Territory or States or Territories without regard to the limitation of 15 per centum or other limitations as to per centum.

Section 6. The authority of the President under this Act shall continue for the period of two years next after the date of the passage hereof and no longer.

Approved March 31, 1933.

Relief of Unemployment Through the Performance of Useful
Public Work

By virtue of the authority vested in me by the Act of Congress entitled "An Act for the relief of unemployment through the performance of useful public work, and for other purposes," approved March 31, 1933 (Public No. 5, 73rd Congress), it is hereby ordered that:

(1) For the purpose of carrying out the provisions of said Act Robert Fechner is hereby appointed Director of Emergency Conservation Work at an annual rate of compensation of \$12,000, less the reduction prescribed in subparagraph (b), Section 2, Title II, of the Act of Congress entitled "An Act to maintain the credit of the United States Government," (Public No. 2, 73rd Congress), approved March 20, 1933.

(2) The Secretary of War, the Secretary of Agriculture, the Secretary of the Interior, and the Secretary of Labor each shall appoint a representative, and said representatives shall constitute an Advisory Council to the Director of Emergency Conservation Work.

(3) There is hereby established in the Treasury a fund of \$10,000,000 by the transfer of an equal amount from the unobliged balances of the appropriation of unobliged balances of the appropriation for the emergency

construction of public buildings contained in the act approved July 21, 1932, as authorized by section 4 of the said act of March 31, 1933, which fund shall be subject to requisition by the said Robert Fechner, as Director of Emergency Conservation Work, on the approval of the President.

(4) Subject to direction by the President, supplies and materials of the several departments or establishments shall be furnished on the requisition of the Director of Emergency Conservation Work, and the departments and establishments furnishing such supplies and materials shall be reimbursed therefor in accordance with instructions of the President.

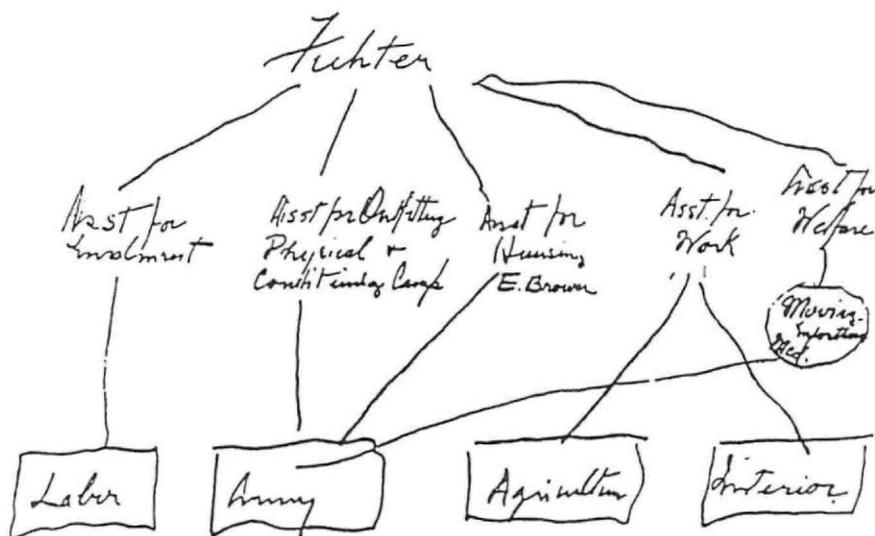
(5) Reimbursement, if any, to the departments or establishments for other services rendered shall be made in accordance with instructions of the President.

Franklin D. Roosevelt.

The White House,
April 5, 1933.

Appendix 2.

Roosevelt's Emergency Conservation Work Organizational Chart, April 3, 1933.



I want personally to check on
the location scope etc of the camps,
size work to be done etc.

FDR

Source: Edgar . Nixon, ed., *Franklin D. Roosevelt & Conservation, 1911-1945*, Hyde Park, New York: General Services Administration; National Archives and Records Service, 1957, p. 150.

Appendix 3.

ECW and CCC Advisory Council Members.

Directors:

Robert Fechner	1933-1939
James J. McEntee	1940-1943

Council Members:

War Department

Colonel Duncan K. Major, Jr.	1933-1936
Brigadier General George P. Tyner	1936-1939
Major General James A. Ulio	1940-1943

Department of the Interior

Horace M. Albright	1933
Arno B. Cammerer	1933-1937
Conrad L. Wirth	1937-1943

Department of Agriculture

R. Y. Stuart	1933-1934
Frank A. Silcox	1934-1938
Fred Morrell	1938-1943

Department of Labor

W. Frank Persons	1933-1938
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Veterans Administration

C. W. Bailey	1937-1943
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Source: Conrad L. Wirth, *Parks, Politics and the People*, in John Paige, *The Civilian Conservation Corps and the National Park Service, 1933-1942*, Washington, D.C.: United States Department of the Interior, 1985, p. 178.

Appendix 4.

Enrollee Profile and Eligibility Requirements

The profile of the average enrollee changed through the years of the CCC as the eligibility requirements for enrollment changed. These requirements changed to match the fluctuating numbers of eligible young men. Initially, only young single men from eighteen to twenty-five years of age were eligible. In 1935, when FDR chose to double the size of the corps, the minimum age dropped to seventeen, and the maximum age rose to twenty-eight. The following year, Roosevelt dropped the idea of doubling the corps and reduced the maximum age to twenty-three years.

Other standards dealt with the enrollees' financial background. On May 10, 1935, Roosevelt decided that all CCC personnel--enrollees, veterans, LEM's, and officers--had to be on public relief rolls. This ruling contradicted the original guidelines for eligibility, which stated that "selections must be made on the basis of the fitness of the applicant and the greatest possible good to the community," and that "destitution in itself, is not a badge of acceptability."* Later, Fechner convinced Roosevelt to loosen this requirement to include only the junior enrollees and the veterans.

These disclaimers in mind, the "average enrollee"

still fit a certain mold. He was young (most were from seventeen to nineteen), weighed 145 pounds, stood 5'8" tall and had an eighth grade education. He came from a family of six children and two parents, and had been unemployed for over nine months, as had his father. Many of the enrollees came from crowded cities in the East. Most of the enrollees were underweight, but healthy. Those who succeeded in the CCC were adventuresome (willing to leave home for the uncertain) and had a capacity for regimented, structured life. While no individual enrollee fit all of these generalizations, these were typical conditions out of which the enrollees came. While all were unemployed, this was common in the 1930s. One enrollee claimed that "there was no seething ghetto which spilled its human effluvia out of some manhole into the CCC. People just could not find work, few anywhere were unaffected."**

* Department of Labor, E.C.W. Official Letter No. 2, September 18, 1933, as quoted in John Saalberg, "Roosevelt, Fechner and the CCC: A Study in Executive Leadership," Ph.D. dissertation, Cornell University, 1962, p. 75.

** John A. Wynne, as quoted in Barrett G. Potter, "The Civilian Conservation Corps in New York State: Its Social and Political Impact (1933-1942)," Ph.D. dissertation, State University of New York, Buffalo, 1973, p. 249.

Other sources: Kenneth Holland and Frank E. Hill, *Youth in the CCC*, Washington, D.C.: American Council on Education, 1942; and Harold K. Steen, *The U.S. Forest Service*, Seattle: University of Washington Press, 1976.

Appendix 5.

Food

Charles Green, a project superintendent in GNP-15, Belton, wrote extensively in *Montana Memories* about the food in his camp. He claimed that the food was so poor that the enrollees were almost at the point of rebellion. The company knew that the Congress allocated a plenty of money for food and mess operations. Many enrollees believed that the company commander, Captain Charles Ekman and his Mess Sergeant were selling the camp's food for their own profit. The boys put the pieces of the puzzle together when both the commander and the mess sergeant bought new cars in the summer of 1940. Enrollee accusations and complaints brought about an Army investigation, which resulted in the replacement of both Captain Ekman and the mess sergeant. Before Ekman left the camp, GNP-15's foremen frequently went to Belton for their meals. Carl Masters, an ex-foreman at the camp, in a letter to Burton Appleton, an ex-enrollee, claimed to remember that:

one day at the noon meal I was served a bowl of soup and it had a dead cockroach floating in it. I took the bowl over and set it down before Captain Ekman and without saying a word I walked out and got in a car and went to Belton for lunch.... It did not take too much imagination to

Appendix 6.

Death rates due to disease.

Period (below)	strength:	deaths:	rate per 1000:
1:	200,368:	89:	0.8883
2:	270,379:	206:	1.5238
3:	300,121:	205:	1.3661
4:	339,955:	349:	2.0532
5:	318,932:	141:*	1.7684
fiscal year 1936:	405,856:	839:	1.97
" " 1937:	315,899:	556:	1.76
" " 1938:	262,906:	338:	1.29
" " 1939:	275,455:	292:	1.06
" " 1940:	268,837:	282:	1.05
" " 1941:	248,926:	273:	1.09
" " 1942:	115,620:	160:	0.14

* deaths for first half of period, to June 29, 1935.

Period:	Dates:
1	June 1, 1933-September 30, 1933
2	October 1, 1933-March 31, 1934
3	April 1, 1934-September 30, 1934
4	October 1, 1934-March 31, 1935
5	April 1, 1935-September 30, 1935

Sources: *Annual Reports of the Director of Emergency Conservation Work*, periods 1-5; *Annual Reports of the Director of the Civilian Conservation Corps*, fiscal years 1936-1939; Federal Security Agency, *Annual Reports of the Director of the Civilian Conservation Corps*, fiscal years 1940-1942; all published in Washington, D.C. by the Government Printing Office in their respective years.

Appendix 7.

Death rates due to injury.

Period (below)	strength:	deaths:	rate per 1000:
1:	200,368:	138:	1.37755
2:	270,379:	178:	1.3167
3:	300,121:	231:	1.5394
4:	339,955:	211:	1.2413
5:	318,932:	81:*	1.0159
fiscal year 1936:	405,856:	501:	1.18
" " 1937:	315,899:	417:**	1.32
" " 1938:	262,906:	298:***	1.13
" " 1939:	275,455:	276:	1.00
" " 1940:	268,837:	297:	1.10
" " 1941:	248,926:	248:	0.99
" " 1942:	115,620:	123:	0.10

* deaths for first half of period, to June 29, 1935.

** 11 deaths in the National Park Service.

*** 6 deaths in the National Park Service.

Period:	Dates:
1	June 1, 1933-September 30, 1933
2	October 1, 1933-March 31, 1934
3	April 1, 1934-September 30, 1934
4	October 1, 1934-March 31, 1935
5	April 1, 1935-September 30, 1935

Sources: *Annual Reports of the Director of Emergency Conservation Work*, periods 1-5; *Annual Reports of the Director of the Civilian Conservation Corps*, fiscal years 1936-1939; Federal Security Agency, *Annual Reports of the Director of the Civilian Conservation Corps*, 1940-1942; all published in Washington, D.C. by the Government Printing Office in their respective years.

Appendix 8.

Average Weekday Schedule.

A. M.

6:00 Reveille.
6:30 Physical Training.
7:30 Breakfast.
8:00 Leave for Work.
12:00 Lunch.

P. M.

1:00 Work.
4:00 Return to Camp.
5:00 Dinner.
6:00-10:00 Free Time: recreation or class time.
10:00 Lights Out.
11:00 Bed Check.

Source: *Annual Report of the Director of the Civilian Conservation Corps*, fiscal year ending June 30, 1937, Washington, D.C., United States Government Publishing Office, p. 3; John Salmond *The Civilian Conservation Corps, 1933-1942: A New Deal Case Study*, Durham, NC: Duke University Press, 1967, pp. 137-141.

Appendix 9.

Army Goals for Educational Program

1) To develop in each man his powers of self-expression, self-entertainment, self-culture.

2) To develop pride and satisfaction in cooperative endeavor.

3) To develop as far as practicable an understanding of the prevailing social and economic conditions, to the end that each man may cooperate intelligently in improving these conditions.

4) To preserve and strengthen good habits of health and of mental development.

5) By such vocational training as is feasible, but particularly by vocational counseling and adjustment activities, to assist each man to better meet his employment problems when he leaves camp.

6) To develop an appreciation of nature and of country life.

These goals will be met by:

1) Elimination of illiteracy.

2) Raising the level of enrollees deficient in school subjects.

3) Providing instruction on camp work jobs and projects.

4) Providing vocational training.

5) Providing training in constructive and worth-while use of leisure time.

6) Providing cultural and general education.

7) Providing training in health, first aid, and safety.

8) Providing character and citizenship training.

9) Assisting enrollees in finding employment.

Source: War Department, *CCC Regulations*, Washington, D.C.: United States Government Printing Office, 1937, pp. 131-132, para. 164 a, b.

Appendix 10.

Punitive Authority of Company Commanders: Punishments.

These punishments may be imposed either singly, or in combination:

- 1) Admonition.
- 2) Reprimand.
- 3) Suspension of privileges for not to exceed one week at a time.
- 4) Assignment of extra work within the camp on non-working days, but not in excess of eight hours per day on two such days.
- 5) Forfeiture of cash allowance, but not in excess of three days' allowance in any one month.
- 6) Reduction of leaders and assistant leaders.
- 7) Discharge (administrative) without forfeiture of pay (including allotments).
- 8) Dishonorable discharge with forfeiture of pay (including allotments) due, and unpaid at date of discharge, for service on and after the date of commission of offense. Deposits may not be forfeited.

Offenses where these punishments apply.

- a) Minor offenses observed by those in authority or admitted by the enrollee committing them: 1, 2, 3 (above).
- b) Inexcusable failure to perform duties: 1-6 inclusive.
- c) Refusal to perform duties: 1-8 inclusive.
- d) Absence without leave: 1-6 inclusive.
- e) Desertion: 7 or 8.
- f) Continued or serious misconduct: 7 or 8.
- g) Infractions of rules or regulations: 1-7 inclusive.
- h) Conviction of a civil court or order of a juvenile court involving actual confinement not suspended: 7 or 8.
- i) Larceny and other offenses involving moral turpitude: 8.

Source: War Department, *CCC Regulations*, Washington, D.C.: United States Government Printing Office, 1937, pp. 25-26, para 40 c.

Appendix 11.

Camp Riots and Disturbances.

June, 1933, GNP-4, Many Glacier: A passive work strike gripped the camp shortly after the arrival of "Italians and Hebrews from New York City and Brooklyn who have been raised where the communists and gangsters ruled their neighborhoods. They have little respect for law and order or the rights of others."* They tried to take control of the camp upon their arrival by train. They complained about the type and amount of food, and made an assault on the mess hall. They destroyed much food in their attempt to get some more. Army personnel guarded the mess stores at night. This group was frequently absent without leave and carried knives.

One night in the mess line of this same camp, an enrollee cut in front of LEM Joseph Dean, who pushed him out of line. A roit erupted, but axe-wielding LEM's saved Dean. Fourteen enrollees were arrested and discharged. Later, the commander gladly discharged nineteen more of the enrollees, and the camp felt as if "a heavy load had been lifted from their shoulders, in fact it was not the same camp."**

June 19, 1933, YNP-5, Lake: Enrollees refused to

board trucks for work detail. Rangers and Canyon camp CCCs arrived armed with axe handles. The ringleaders were caught and sent home.

June 1936, GNP-13, Sherburne Lake: The commander, Captain William Brame, was relieved of his duties because he could not end a food strike that lasted for six days. Two enrollees, Louis Pepper and Charles Whitcup, lead the strike yet faced no charges.

July 6, same camp: the camp utility man saw Whitcup and Pepper in the camp light plant, off limits. The power went out shortly thereafter, and was not restored for two days. Sand and other foreign matter were found in the generator, and Pepper and Whitcup were suspected of sabotage. Other enrollees called them "gold bricks" since they were unwilling to work.

Glacier rangers provided campfire entertainment for the park's tourists. These campfires were three miles from camp the CCC camp (GNP-13). Many enrollees were rude and obnoxious to tourists, and the CCCs were banned from the campfires. Since the camp had few recreational facilities, and the nearest town was thirty miles away (Cardston, Alberta), Whitcup and Pepper began stirring the enrollees up again. Enrollees stormed the campfires under Whitcup and Pepper's leadership. Brame's replacement, Captain Waldo Tefler, called Whitcup and Pepper before a review

board. They refused to speak to the board, and were summarily dishonorably discharged for "long and continuous misconduct."***

* Hanson, p. 256. ** Hanson, p. 258. *** Hanson, P. 261.

Source: James Hanson, "The Civilian Conservation Corps in the Northern Rocky Mountains," unpublished doctoral dissertation, University of Wyoming, 1973.

Appendix 12.

Company Numbers in Glacier and Yellowstone and Explanation.

Glacier Companies:		Yellowstone Companies:	
262	1220	501	586
264	1240	535	596
281	1241	538	730
298	1246	539	736
299	1259	544	1306
529	1340	550	1349
574	1341	560	1506
697	1636	581	1723
953	2901		
955	4729		
967			

Companies' numbers indicate the part of the country the company came from. Companies formed in the first corps area (see map of corps areas) have numbers 101-199. Companies from the second corps area have numbers 201-299, and so on. After these numbers were used up, 1,000 was added to the numbers. Therefore, first corps area companies were numbered 1101-1199; the second corps area, 1201-1299... through to the ninth corps area's companies, 1901-1999.

Source: War Department, *CCC Regulations*, Washington, D.C., 1937, p. 11, para. 16 b.

Appendix 13.

Camp Building Specifications, 200-man camp.

- 5 Barracks, 20' x 120' 7.25"
- 1 Mess Hall, 20' x 120' 7.25"
- 1 Technical Services Quarters, 20' x 80' 7.25"
- 1 Officers' Quarters, 20' x 40' 7.25"
- 1 Technical Services Headquarters and Storehouse, 20' x 80' 7.25"
- 1 Army Headquarters and Storehouse, 20' x 70' 7.25"
- 1 Recreation Building, 20' x 100' 7.25"
- 1 Dispensary, 20' x 30' 7.25"
- 1 Lavatory and Bathhouse, 20' x 40' 7.25"
- 1 Latrine, 10' 2" x 25' 7.25"
- 1 Garage, 24' 5.5" x 60' 7.25"
- 4 Oil Houses, 10' 2" x 25' 7.25"
- 1 Pump House, 10' 2" x 10' 7.25"
- 1 Generator House, 10' 2" x 10' 7.25"
- 1 Blacksmith Shop, 20' x 20' 7.25"
- 1 Educational Building, 20' x 130' 7.25"
- 1 Equipment Repair & Maintenance Building, 30' 9.25" x 30' 9.25"

Source: John Paige, *The Civilian Conservation Corps and the National Park Service*, Washington, D.C., Department of the Interior, 1985, p. 72.

Appendix 15.

Glacier and Yellowstone camp occupation by periods (below).

Glacier Camps

<u>Camp No.</u>	<u>Location</u>
GNP-1	McDonald Creek
GNP-2	Apgar
GNP-3	Fish Creek
GNP-4	Many Glacier
GNP-5	No Name Creek
GNP-6	Two Medicine
GNP-8	Anaconda Creek
GNP-9	Belton
GNP-10	(no name)
GNP-11	Roes Creek
GNP-13	Sherburne Lake
GNP-14	Round Prairie
GNP-15	Apgar flats

Glacier Camps by Period

<u>Camp No.</u>	<u>Periods.</u>																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
GNP-1	1		3	4	5	6	7	8		10	11	12		14		16		
GNP-2	1																	
GNP-3	1		3				7											
GNP-4	1		3		5				9		11		13		15			
GNP-5	1		3															
GNP-6	1		3		5													
GNP-8	1		3															
GNP-9	1		3		5		7	8	9	10	11	12	13	14	15	16		
GNP-10	1																	
GNP-11			3		5						11		13		15	16		
GNP-13					5		7		9									
GNP-14					5													
GNP-15								8	9	10		12	13	14	15			

Yellowstone Camps

<u>Camp No.</u>	<u>Location</u>
YNP-1	Mammoth
YNP-2	Canyon
YNP-3	Lake
YNP-4	West Gallatin
YNP-5	Nez Perce Creek (Old Faithful)
YNP-6	Snake River
YNP-7	Glen Creek (Mammoth)
YNP-8	Cascade Creek
YNP-15	Old Faithful
YNP-16	Yellowstone Lake

Yellowstone Camps by Period

Camp No.	Periods.																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
YNP-1	1		3	4	5	6	7	8	9	10	11	12	13	14	15	16		
YNP-2	1		3		5		7		9									
YNP-3	1		3		5		7		9		11					15		
YNP-4	1		3		5													
YNP-5			3		5		7		9		11		13		15			
YNP-6			3		5													
YNP-7										10	11	12	13	14	15	16		
YNP-8													13		15			
YNP-15																15		
YNP-16																		

Approved, but not occupied due to delays in
camp construction.

CCC Periods:

Period No.	Dates.
1	June 1, 1933-September 30, 1933
2	October 1, 1933-March 31, 1934
3	April 1, 1934-September 30, 1934
4	October 1, 1934-March 31, 1935
5	April 1, 1935-September 30, 1935
6	October 1, 1935-March 31, 1936
7	April 1, 1936-September 30, 1936
8	October 1, 1936-March 31, 1937
9	April 1, 1937-September 30, 1937
10	October 1, 1937-March 31, 1938
11	April 1, 1938-September 30, 1938
12	October 1, 1938-March 31, 1939

13	April 1, 1939-September 30, 1939
14	October 1, 1939-March 31, 1940
15	April 1, 1940-September 30, 1940
16	October 1, 1940-March 31, 1941
17	April 1, 1941-September 30, 1941
18	October 1, 1941-March 30, 1942
19	April 1, 1942-June 30, 1942

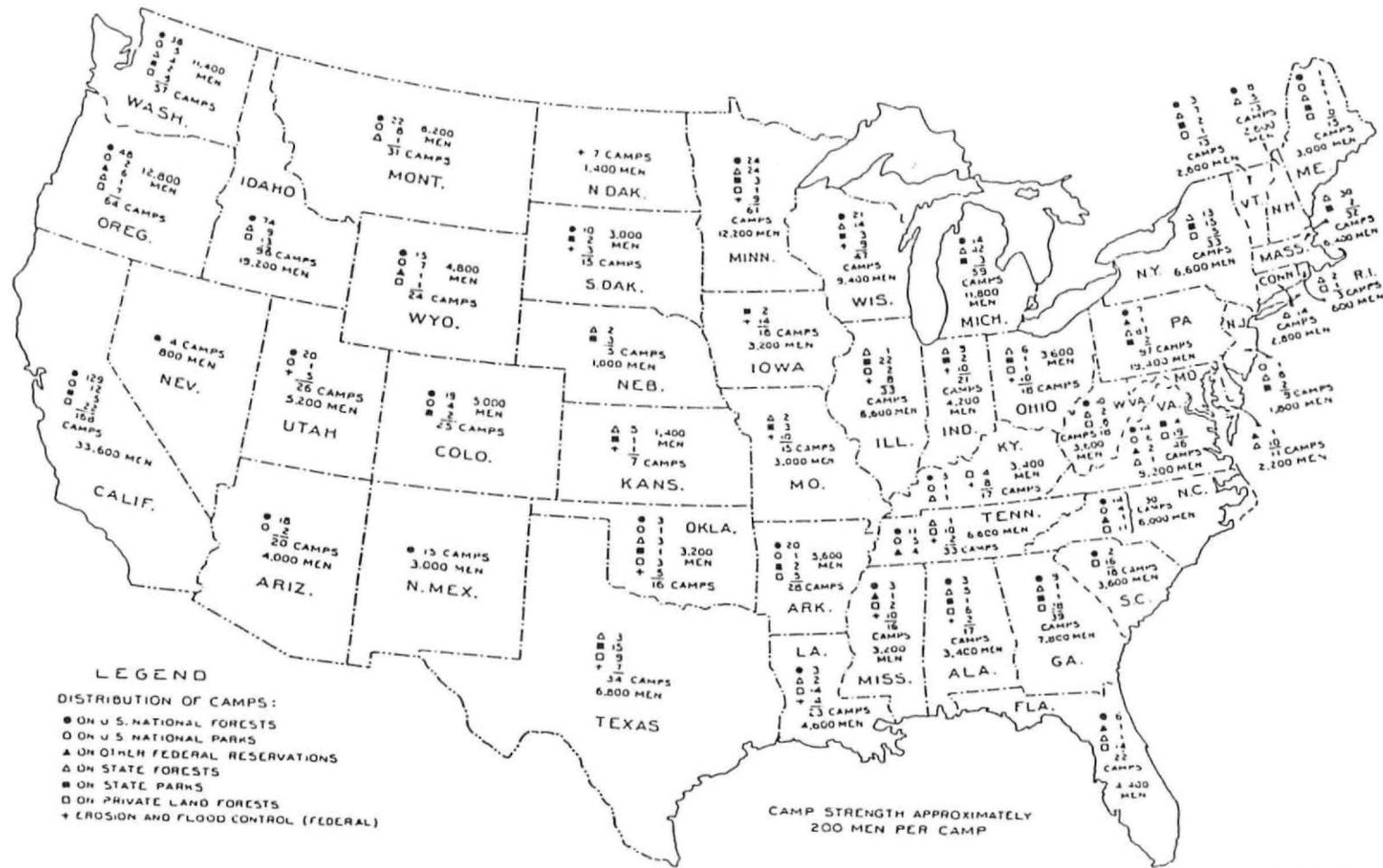
Source: John Paige, *The Civilian Conservation Corps and the National Park Service, 1933-1942*. Washington, D.C.: United States Department of the Interior, 1985, pp. 194, 204, 214.

Civilian Conservation Corps Areas of the United States



Source: Frank E. Hill, *The School in the Camps: The Educational Program of the Civilian Conservation Corps*, New York: American Association for Adult Education, 1935, p. 1.

Distribution of CCC Camps in the Nation, 1933.



AUGUST 1933

Source: Alison Otis, et al, *The Forest Service and the Civilian Conservation Corps: 1933-42*, Washington, D.C.: United States Department of Agriculture, 1986, p. 11.

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Numerous contemporary personal correspondence between enrollees and their families, and current personal correspondence between former enrollees and the author on file as the "Matthew Redinger Collection" in the K. Ross Toole Archives in the Mike and Maureen Mansfield Library, University of Montana.

Collections

Fort Missoula Historical Collection at Ft. Missoula, Montana contains files filled with items of interest including CCC memorabilia and photographs.

Glacier National Park Historical Collection at Glacier National Park Headquarters contain a wide variety of records, artifacts, and extensive correspondence relating to the area history. The collection also includes an extensive array of annual and monthly reports, telegrams, memoranda and maps. The collection includes Historical Reference Files of photographs and items of interest pertaining to Glacier's history.

Yellowstone National Park Library and Archives at Yellowstone National Park Headquarters contains an extensive collection of reports, fire logs, ranger logs, correspondence, memoranda, maps, etc. This is an excellent collection of local historical information.

Ex-enrollee Bill Sharp has spent countless hours of painstaking work indexing the CCC news stories in the *Great Falls Tribune*, the *Missoulian*, and the (Butte) *Montana Standard*. These indices, along with numerous photographs and original camp newspapers, and other materials comprise the "Bill Sharp Collection" at the K.

Ross Toole Archives in the Mike and Maureen Mansfield
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