

CHAPTER II - WHAT THE CCC DID FOR CONSERVATION OF NATURAL RESOURCES

The great adventure of American youth in conservation of natural resources ended on June 30, 1942. It lasted for nine and one-third years -- less than a decade. In that short time the Civilian Conservation Corps wrote its name into the economic, social, and educational history of this country; it did even more than that -- it started a change in the landscape of a Nation. Obviously, the neglect, waste and destruction of many generations could not be repaired or restored in a decade, but a heartening start has been made by the CCC. Maybe CCC has taught America a lesson in real national thrift, which is another name for conservation of natural resources.

Although a global war was not in the National picture when CCC started, by 1939 National Defense had come in, and by 1941 War had entered. Conservation of natural resources is important to a nation at all times but in days of war, it is vital. As Dr. Hugh Bennett has recently said -- "Before the war is over, Hitler will know that conservation was one of the weapons we used to wreck him."

The CCC did not come any too soon. It shoved forward the conservation of our natural resources by many years; there is still need for such an agency, and when war ceases, the need will be increased tenfold.

The conservation picture of this country has for too long been a dark one. That picture was strikingly painted in 1940 by Henry A. Wallace, now Vice-President, then Secretary of Agriculture, in these words:

Thoughtlessly we have destroyed or wounded a considerable part of our common wealth in this country. We have ripped open and to some extent devitalized more than half of all the land in the United States. We have slashed down forests and loosed floods upon ourselves. We have torn up grassland and left the earth to blow away. We have shallowed and befouled our creeks, rivers, and other living waters. We have built great reservoirs and power plants and let them be crippled with silt and debris, long before they have been paid for.

Out of a realization of the waste of natural resources and of the waste of idle youth, President Franklin D. Roosevelt in 1933 combined the two into one of the most constructive programs this country has ever witnessed. He had long been convinced of the urgent need to check the heedless waste of our natural resources, and when the depression furnished idle man power, he seized the opportunity to remedy both. It was a bold stroke of conservation statesmanship. However, it was obvious that

Franklin Roosevelt had given much thought to this use of idle labor in the cause of the country's natural resources. It was no overnight idea, for even in March 1933, less than a month in the White House, he surprised a group of less imaginative foresters, park executives, naturalists, and conservationists with details of what kinds of forest, soils, park, and stream improvement work should be done, by sketching for them a specific organization chart. After the announcement of these advance plans, he wanted action -- immediate action; he got it. In less than three weeks after Congress passed the Emergency Conservation Act of March 31, 1933, the first CCC camp was set up and working in the George Washington National Forest in Virginia. By July 15, 1933, there were 300,000 youths and veterans at work for natural resources, and by September 1935, there were over 500,000 CCC in camps in every state and in Alaska, Hawaii, Puerto Rico, and the Virgin Islands.

PRACTICAL EDUCATION
THROUGH CONSERVATION WORK

The Civilian Conservation Corps charted more than a gigantic program of conservation of the natural or renewable resources of this country. It charted effective cooperation between four executive departments; it charted a plan to help youth by the most effective and practical method -- to give it worthwhile outdoor work to do, to require an honest day's work of each youth; with no semblance of the dole or "made work." And it should be emphasized that the CCC returned to the American people fair value for what the people paid these youths and veterans. It was healthful work in the outdoors, out in the forests, parks, and soils of this country. As Dr. Paul T. Davis says in "Youth and the Future" (American Youth Commission) -- "The physical organization and character of the CCC has been determined from the first by the nature of the work to be done. Conservation work cannot be done in a workshop; it has to be carried on at the points where the natural resources in need of conservation are located."

The CCC set a new pattern for the most practical kind of education for youth yet found in this country; it gave youth serious, worthwhile outdoor jobs to do -- real work day by day -- jobs which had to follow blueprints and specifications, jobs which when done were inspected and had to stand up. It was not only the finest kind of education for any and every American youth but it was the finest kind of training in citizenship. It was essentially public service work. The Corps set a pattern in the practical teaching of youth which is going to have far-reaching effect on the American system of education; it was education through daily conservation work; it was learning-by-doing. The CCC between 1933 and 1942 proved this pattern was workable.

WHAT THE CCC DID
FOR CONSERVATION

The average American was a strong supporter of the CCC but because of the tremendous scope of CCC operations he did not and could not have full knowledge of what the CCC actually did for the conservation of his country's resources or what it actually did for youth. The variety of work was great and total accomplishments were stupendous. The job lists and the statistics were staggering but without interpretation meant little to the average citizen.

The CCC left the Nation a vastly improved natural resources balance sheet which carried such items on the asset side as three billion of trees planted, 125,000 miles of truck trails built, 89,000 miles of telephone lines, 800 new state parks developed, 40,000,000 acres of farm lands benefited through erosion control, and the rehabilitation of drainage ditches, better grazing conditions on the public domain and an increasing wildlife population. The present and future value of the work completed was estimated as having a present and future value of \$2,000,000,000.

When the CCC was liquidated, what did the figures on conservation accomplishments mean in terms of national security, national welfare and the future? The truck trails built, the fire towers erected, the telephone lines laid and the fire prevention and fire hazard removal work completed meant that on June 30, 1942 the United States had a far stronger forest fire prevention and suppression system than this country had ever had before. It meant that a time when the Nation faced possible incendiary bombing attacks on its vital forest resources, the country had the truck trails, the fire towers and the communication systems necessary to combat them. The erosion control work done in the dust bowl and on southern, middle western, and western lands meant that at a time when the Nation's food production machinery was being taxed to capacity, it had 40,000,000 acres capable of producing much more food than would have been the case if the Corps had not been organized. It meant that the West, which produces the bulk of the beef, wool, and hides needed for victory, had more water and more grass because of the CCC grazing control and water conservation operations.

The trees planted by the Corps meant that about two and one half million acres of lands which were bare and unproductive ten years ago are now green with growing trees planted by the youngsters of the Corps. The millions of man-days spent by CCC enrollees on the forest fire front lines in years past mean that today this country has millions of acres of growing and mature timber which otherwise would have been destroyed. The work done on park lands means that the capacity of

our recreational areas to accommodate visitors had been increased by millions.

Let us look in detail at some of these conservation results from the CCC. The CCC put in 6,459,403 man-days on fighting forest fires. What do all these days of work mean. They mean, among other things, the hardest kind of work, they mean danger from falling limbs and burning snags, or being surrounded by fire -- and perhaps burned to death -- as 42 CCC enrollees and 5 foremen were. It means fighting forest fires hour in and hour out, day and night. It means that the mere boys of the CCC fought fire on a thousand fronts, to save vital American resources badly needed right now in the World War. The annual fire loss in America's forests dropped materially when the CCC got out in the forests. They saved forests for human needs, from going up in smoke and flame; the records of both the U. S. Forest Service and the National Park Service show this.

The CCC boys set out some 2-1/3 billion tree seedlings. What does the planting out of 2,355,587,000 young trees mean. It means for one thing that over 2½ million acres of otherwise barren, denuded, or unproductive land now has a chance to grow timber for human needs, or for human enjoyment, or to help stop valuable soil from washing away, or to shelter and protect wildlife. Many of these young trees will be ready to harvest by the sons of these CCC kids. Trees grow slowly; the CCC was planting for the future. It also means that the seed from which these young trees sprang had to be collected and sown in forest nurseries, and the CCC spent 6,111,258 man-days in preparing land, sowing seed, weeding, transplanting, watering, and tending these 2 billion young trees before they were ready to be set out on the 2 million acres. Many millions of denuded acres yet remain to be planted, to make them productive. And back of all this, the CCC had to collect 375,970 bushels of conifer seed and 13,634,415 pounds of hardwood and other seed to plant in the nurseries to grow the seedlings to plant on the barren soils.

Also, the forests on some 4 million acres have been improved and bettered by having the poorer, crooked, diseased trees cut and taken out, thus giving more light and moisture to the trees remaining. This is a permanent improvement, a real forestry investment; it is called "timber stand improvement." The material removed went into fuel wood, poles, fence posts, guard posts, and charcoal. Foresters supervised this stand improvement. At least 4 million acres of American forests are in better condition because of the CCC boys.

The boys built 126,230 miles of truck trails or minor or forest roads, and in addition, they maintained 580,995 miles. What good did all these miles of road do. It helped fire crews to get to forest fires while they were still small and while there was a chance to stop them, or put

them out. It opened up new forest and park areas, for use of the timber and other resources, or for public recreation and enjoyment. The 88,883 miles of telephone lines they built also gave quicker action on fires and helped in better administration of forest and park lands -- federal and state. Many a mile of these CCC roads is helping in the better defense of the country.

Forests are also killed by other enemies than fire. The annual toll by fungus diseases and forest insects is silent and steady -- and enormous. The insect and fungus attacks on the forests go on, through peace-time and war-time. Blister rust kills the white pines, in the Northeast and in the Northwest. To check or control tree and plant diseases, the CCC worked on 7,955,707 acres. Besides, forest and other insect pests -- like pine and bark beetles, spruce sawfly, Mormon crickets and grasshoppers -- were checked or controlled on 6,161,742 acres.

For many years before the CCC came, the soils of this country had been washed, and were still being washed away, going down the millions of gullies, clogging small streams, creeks, rivers, and harbors with silt, mud and debris. The invaluable top-soil of the Nation was being lost forever. Not only soil fertility but the soil itself was being lost. And the tragedy of it was that it could have been prevented. Millions of acres had been abandoned as farm land. We talked of marginal and submarginal farm lands, rural slums, share-croppers, farm migrants, "The ill-fed, the ill-housed and the ill-clothed." The CCC came and provided man power to do something practical about this problem.

Soil erosion control started early in the CCC but largely as "gully control" on some national forests and on farm lands in some of the Southern states. By October, 1935 there were 500 camps working at the control of soil erosion. The work was planned, developed, and inspected by the soil scientists, agronomists, and engineers but practically all of the actual work on the land was done by CCC enrollees, under camp technicians and foremen. Soil erosion work was done in 45 states, stretching from coast to coast. Soil erosion control meant the doing of many different jobs. Some of the more important were: check dams, seeding and sodding, tree planting, diversion ditches, terracing, channel outlets, water spreaders, quarrying, contour furrows and ridges, road and wind erosion treatment. Accomplishments on these run to large figures. For example: 318,076 permanent and 6,341,147 temporary check dams were built; 33,087 miles of terraces were put in; 431,321 outlet structures built; 638,473 acres were planted to stop sheet erosion. CCC did erosion control on more than 25 million acres since 1933, but a "drop in the bucket" of the millions of acres needing attention. This is essentially farm land, though much erosion was controlled on Western grazing lands. Today in these war times this improved land is better able to do its share in

the farm battle to out-produce the Axis; this fact is due in no small part to the CCC in starting the protection of our most precious natural resource -- the soil.

Grass or forage is an important natural resource throughout the West, Middle West and the South. Sheep and cattle must have forage and water, especially on the ranges of the West. Oftentimes grass, weeds, and other herbage is unusable because there is none or not enough water, or the water is too far from the forage. This means poor distribution of stock, unused range, and overgrazed range. To help this situation on national forest, public domain and Indian reservation range, the CCC improved 12,346 springs by damming or otherwise, 3,311 waterholes, and built 9,805 small reservoirs. These range improvements mean better stock, and more stock. And beef, mutton, wool and hides are all needed more in war-times than in peace-times.

Americans have become more and more an outdoor people, especially during the past two decades. More and more folks go hunting, fishing, hiking, mountain climbing, skiing, camping and just picnicking. This has meant, among other things, better knowledge of the outdoors, of nature, a broader understanding, better health and better citizens. Good roads and the automobile have helped to bring this about. The CCC recognized this fact of American life and built camping spots, picnic grounds, overnight cabins and other outdoor life necessities, all over this country. The Corps did landscaping on 233,793 acres, developed 52,319 acres as public campgrounds. It developed 10,398 acres as picnic grounds. These new developments have been widely distributed, in the high mountains, in the foothills, along the seacoasts; they are accessible to the American people.

State parks came into their own through CCC work; 704 camps devoted most of their time to these projects. Eight states had no state parks prior to 1933, and those states which did have parks were able to improve, increase and develop other areas of CCC labor. State, county and municipal park work was done in 47 states, 35 counties and 74 municipalities by the CCC. Not only was needed work done on 97 units of the National Park and Monument areas but restoration was carried out on 3,980 historic structures, while to insure accuracy in this restoration work, a total of 9,005,407 man-days was spent in necessary reconnaissance and archaeological investigations by CCC enrollees.

The CCC helped to give wildlife a "place in the sun." During the years the Corps operated, the wildlife population trend was reversed from a downward spiral to an upward curve. Actually the CCC gave migratory game birds a new lease on life by improving living and nesting conditions and through aiding in the construction of a great chain of refuges

along the traditional flyways used by ducks and geese in their semi-annual pilgrimages north and south.

The Corps built 4,622 fish-rearing pounds, worked on fish food, cover planting and seeding on 112,912 acres, developed 6,966 miles of streams for better fishing, and stocked streams, ponds, lakes and reservoirs with the enormous number of 972,203,910 fish or fingerlings! CCC spent 116,384 man-days on wildlife feeding and built 32,148 wildlife shelters. They developed large and small wildlife refuges and game reservations, some brand-new, and enlarged and improved older ones. Through ECW funds, lands for many new wildlife areas were bought and older ones enlarged. They planted trees and shrubs on over 2½ million acres much of which will serve as habitats or refuges for wildlife. They kept forest fires from destroying wildlife habitats and sanctuaries all over the country. And yet there were critics who said the CCC was ruining the game and wildlife of this country!

In addition to all the above work, the boys accomplished many miscellaneous projects. They built 80 airplane landing fields, 116 radio stations, 532 landing docks and piers, they fought coal fires on the public lands in Wyoming for 201,739 man-days, they marked 35,442 miles of forest, park and other boundaries. During 1941 and 42 there were 156 CCC companies doing much needed work on 92 military reservations of the country and thus relieved new soldiers so they could be trained for combat service. And with all the above they spent 2,079,440 man-days on Emergency work. And what might Emergency be? It was work, hard work, on floods, saving people, homes, furniture, chickens and livestock; it was helping clean up and helping stricken humanity after hurricanes and tornadoes; it was rescuing prospectors, miners, and sheep and cattle during unusual blizzards in the West. Some 40 CCC camps put in almost 2 years in cleaning up the debris and making safe from fire the forests of New England after the hurricane of 1938. Whenever or wherever there were great disasters or emergencies, the CCC was always called on -- and they always answered, with supplies, food, and ready and willing hands and backs.

These are just a few CCC accomplishment statistics. To foresters and other conservationists they stand for the greatest boon ever to come to conservation. When transplanted to the forests, soils, parks and waters of the United States -- out of a report and on to the ground -- these CCC statistics are full of meaning for the future of this Nation.

OTHER VALUES

Moreover, not only has the CCC taught 3 million youths through daily practice something of what conservation is but it has brought to the American people a better idea of conservation than they ever had before. Conservation has become a household word. The CCC also gave a new meaning

of the word to foresters, soil scientists, naturalists, and other conservationists. In dollars and cents the value of the work done by the CCC for conservation of natural resources of this Nation, in the 9-1/3 years of its existence, has been conservatively estimated to be about \$2,000,000,000.

The Corps built up the bodies and minds of millions of young Americans against a day of need -- which is now---made them better able and more willing to fight for their country. It also gave invaluable training to thousands of regular and reserve officers (60,000 reserve officers served in the Corps) against this same day of need. There are thousands of men now better Army officers and hundreds of thousands of youths now better non-commissioned officers and soldiers because of their training and experience in the CCC. They are better citizens, better Americans, because of the CCC -- and American is a better place to live in because of the Civilian Conservation Corps.