

THE SOCIAL OBLIGATION  
OF THE  
FORESTER

by

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The fabric of human life has been woven on earthen looms. It everywhere smells of the clay. . . .Howsoever high the spirit of man may soar . . .it is on (the stomach) that humanity, like an army, ever must advance. Beneath vegetation the soil, and beneath the soil the ceaseless and varied turmoil of terrestrial forces.

-- J. H. Bradley  
Autobiography of Earth  
(1935)

The dogmas of a quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew and act anew. We must disenthrall ourselves and then we shall save the Republic.

-- Abraham Lincoln  
Second Annual Message  
December 1, 1862

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## INTRODUCTION

This thesis in its present form might be called a product of evolution. Its first title was "Who Shall Own Our Forests?" Is ownership the important thing? Who cares who owns the land? The important thing is what is done with the land, the management of it. If the private owner can manage the land properly--and will manage it properly--so that its productivity is not impaired and so that all the people benefit from this management, well and good. And the term "all the people" is important. Land is something upon which depends the welfare of the nation and its people. Land is not to be used by one person or a group of persons at the expense of the landless. If public ownership is the answer to good use then we should revert to public ownership.

However, the important thing is what is done with the land and the relationship this has to the people. If we are genuinely interested in the proper use of our land, we will find the way properly to use it.

Then as the important thing is what is done with the land, the subject was changed to "Criteria to be Used in the Use of Land". But you can't expect a nation to support criteria that it does not understand. We know what to do with land. We know how to determine its proper use. We know that soil erosion should be

stopped, that forests should be kept growing, that land should not be overgrazed. That is, the technical man knows. Even so we have not begun to grasp the problem. Perhaps the technical man has a duty to perform for his country and his people. Perhaps we should accept the creed of the medical man and offer our services to humanity. We have a social obligation to perform, the duty to bring before the people what we know. But before we can educate the general public we must educate ourselves. There is no uniformity of purpose, no recognized common ideal among foresters. We squabble among ourselves. Foresters against foresters, foresters against graziers, and so forth. What are the problems involved? What causes us to squabble and is there any way in which we can better understand each other and present a plan to the public for the use of land? And how shall we present this plan?

## A SATISFYING CIVILIZATION - THE BASE

A satisfying civilization, that is, a civilization of plenty, of liberty and of peace, rests firmly upon an adequate economic base. This base depends upon wealth. Wealth means all material things that are of use to human beings, except their bodies. Without wealth men could not live at all. We recognize two types of wealth. The first is consumable, or that wealth used to gratify immediate needs, appetites, and desires. Examples would be a house, a meal, a suit of clothes, a pearl necklace, or a package of cigarettes. The second kind of wealth is capital. It is not used to gratify human wants, but is used to provide those things that do gratify human wants. (6)

It should be recognized here that consumables are the first, the oldest and the only really necessary form of wealth.

To produce wealth four factors are involved: Natural Resources, Human Resources, Capital, and Technology.

Natural resources are the raw materials. Economists call this factor land. It is composed of forests, minerals, grass, water, and, most important of all, soil.

Human resources, or what the economist calls labor, are the factors that use technology on natural resources

to produce capital. It is for the welfare of this factor that the others exist.

Technology is the skill and the means that man has developed to use the natural resources.

Capital is stored up work. It is the factory, the machine, the improved land, the city, and, in a broad sense, the consummables also. Capital is the result of human resources applying technology to the natural resources.

#### THE LESSON OF THE AGES ----- CHINA, EGYPT, AND INDIA

Perhaps it might be well here to look at a few of the ancient civilizations. What has happened in the past, and can we learn anything from what has happened?

China is a large country with many people. She is an old country. Her people know how to handle land. They have developed many new varieties of plants. Yet millions of her people are always on the verge of starvation. Floods and famine are common occurrences. Every tillable foot of land in China is put under cultivation. Every scrap of organic matter that will enrich the soil is gathered and spread on the land. Her farmers go to the cities and villages and gather "night soil" (human excrement) for fertilization. Mud is taken from the rivers and laid on her terraced land. If you want a

picture of the life of the Chinese farmer read "The Good Earth" by Pearl S. Buck.

But is China in any real sense self-sustaining? Paul

B. Sears says, "She is using fertility stored by the work of her great rivers during millions of years past, supplemented by present tribute on an area twice the size of China proper, but with one-sixteenth as many people. In fact her two great rivers, the Yangtze and the Hwang, rise in Tibet, with its sparse population of less than three people to a square mile. These streams are fed by seemingly inexhaustible snows, and bear mineral matter, along with vegetable material afforded by the world's largest mountains and their lush plant cover. Let modern industry penetrate to these sources and exploit them with the zeal that has been expended on our own Rocky Mountains, and China is doomed."

"It should be made clear then that the face of China is not without its man-made scars. In fairer spots she is holding her own, never far from the brink of starvation, only because of the utmost economy, hard toil, and huge reserves beneath her soil as well as beyond her immediate boundaries. And China is a nation in which prudent land management has been an official policy since 2700 B.C., the reign of the Emperor Shen-nung." (16)

And now India. Paul B. Sears let an Indian, the Agha Khan, speak for him, and he has done it so well that I will use him too.

"The ill-clad villagers, men, women, and children, thin and weakly, and made old beyond their years by a life of underfeeding and overwork, have been astir before daybreak, and have partaken of a scanty meal consisting of some kind of cold porridge, of course without sugar or milk. With bare and hardened feet they reach their fields and immediately begin to furrow the soil with their lean cattle of a poor and hybrid breed, usually sterile and milkless. A short rest at midday, and a handful of dried corn or beans for food, is followed by a continuance till dusk of the laborious scratching of the soil. Then the weary way homewards in the chilly evening, every member of the family shaking with malaria and fatigue. A drink of water probably contaminated, the munching of a piece of hard black or green champatire,

a little gossip round the peepul tree, then the day ends with heavy unrefreshing sleep, in dwellings so unsanitary that no decent European farmer would house his cattle in them." (16)

And so starvation is ever near the Indian--a regular occurrence. Famine comes often. Like China, India is watered and kept fertile by the Himalayas. If the protecting cover on these mountains is removed, India, too, is doomed. Great Britain has done much to help the Indians with their land-use problems. It's an uphill job. In the course of years the English might be able to put man in control of nature in India.

The story of Egypt is the same. Every year the Nile overflows its banks with water and silt from the wilds of the Sudan. The present robs the past, and what of the future?

The high "American standard of living" that politicians speak so much about is non-existent in parts of our country and shaky in others. The economic base that supports this standard has fallen because our natural resources were used to uphold it and destroyed in the process. We have little Chinas, little Indias, and little Egypts in our own country.

And what is the lesson of the ages? That robbing of the natural resources and exploitation of the human resources can result in only one thing--destruction. Now

that these countries have lost their wealth, they have lost their civilization. All are countries of extreme poverty and extreme riches. Every wail of a starving Chinese baby, every sick and hopeless Indian, and every Prince with a million rubies should be a warning to America. Use what you have wisely, or else!

We can be thankful in America that we have men who are attempting to instill wise use of land and to restore depleted resources. Some of our largest companies and agencies are preparing the way. Our part is to aid them, to work with them, and to see that wise use is implemented. We have not yet pulled over the crest, and only a few are pulling. Let us, as foresters, help pull.

## OUR LUMBERMEN MARCH WESTWARD

When the first white man laid eyes on this land of ours, there was 820,000,000 acres of virgin forest. Now-today-there is little more than 130,000,000 acres left. We have 250,000,000 acres of second growth but much of that is poor in quality. We are still slashing down this great natural resource four times as fast as it grows. (4)

We have not been very careful with our forests. "Lord, there was any amount of timber here." The small communities that settled along the Atlantic seaboard had small sawmills. The cutting started slowly and then as the nation spread west into Michigan and Minnesota and along the Appalachian mountains into the Southern lowlands, finally to rest in the Pacific Northwest, cutting increased. Everything got bigger--the trees, the camps, equipment, and the mills. The lumber towns were roaring places. Everything was done recklessly. Recreation, work, and life itself was daring and wasteful. What chance did the forests have? Along with the cutting went huge devastating fires as fierce as the loggers themselves. The march westward, here as in farming, was marked by denuded areas, wrecked communities, and despairing families. There was much glory in this march, but we are now wondering if a little more common sense would not have been better.

Two thousand years ago in North Africa the slopes were covered with a stand of trees. Now these slopes are

"bare rock roasting in the sun and shedding the rain like a slate roof." (4) The soil, losing the protection of the vegetation, washed into the valleys and into the sea. On the flat lands, wind erosion turned thousands of square miles into desert. The once rich communities and cities are now in ruins, and diseased beggars sit in the sand asking for alms. It can happen here.

The land in north Africa is not all desert, however. In spots where the soil was still good the country has been restored. Coyle writes: (4)

"Around the city of Sfax in Tunisia, the ruins showed that the plan was planted with olive trees in Roman times, though since the Romans left it had become a desert, with grazing in the wet season and nothing useful the rest of the year. Then fifty years ago, on the guess that olive trees might still be able to grow there, a few were planted for a trial. Today that plain has thousands of olive trees again, and the old city of Sfax is prosperous once again. So it was not the climate, it was peace and good sense that had been missing for nearly 2000 years. It wasn't the climate that changed, it was the government." (4)

The same story holds for Palestine, Mesopotamia, and China. The people forgot to take care of the land.

The story has been repeated in the forest land of this country in some sections. Read "We Too Are The People" by Louise Armstrong. She pictures the desolation and decadence of both land and people in the sandy wastes of the Northern Lake States.

Here is a statement by Daniel A. Reed, Representative from New York made before a Hearing of the Joint Committee on Forestry of Congress in Portland Oregon on December 12,

1939:

I just want to leave this thought with you, and I am looking at this thing as I come through the West here. I have a different view perhaps than some of the others who live out in this section.

"There was a time, and not very many years ago, when Pennsylvania and New York State had magnificent forests. They built up towns with schools, churches, and people invested all their hopes and aspirations in those communities and expected them to develop and grow. They put their earnings into them. Now, what happened was this: That as the mills improved and as they cut right and left and destroyed those forests, there came a time within a very few years when some of those very large towns--one in particular I have in mind in Pennsylvania--the whole town, including 400 acres of land, the sawmills, the tannery, the churches, the schools, and everything in that town was sold for the total sum of \$6,500. And they all went out practically as paupers, public charges, hopes blasted, and opportunities of their children destroyed, and all that: they became a public charge. The men that cut the timber had made theirs. They got out. They could go to Palm Beach or Europe or anywhere else they wanted to. But the community carried the load. Now, that was not one town, but hundreds of towns thru there. Even the large city of Williamsport had to struggle for its life for years. Finally it developed into industries; but we had the eastern market connected to that. You have a much more serious problem out here until your population develops and grows and your markets and transportation facilities improve.

"And as I have ridden through this State (Oregon), surpassingly beautiful State, with its wonderful scenic features and its fine farm holdings, as your Governor has said here, a new State, one of the youngest. You have this great resource, but it takes hundreds of years to restore it, once it is destroyed."

## THE SOIL IS WOUNDED AND THE LAND FESTERS

What of our soil? What have we done with it; and what are we doing with it? In 1934 an erosion reconnaissance survey was made of the 1,900,000,000 acres of land in the U. S. The facts brought out were these:

- (1) On 37 percent--700,500,000 acres-- of the total land area, mostly flat, gently undulating, or forested, erosion had been slight; less than one-fourth of the original surface soil has been lost.
- (2) On 41%--775,600,000 acres--erosion has been moderate; from one-fourth to three-fourths of the original surface soil has been lost.
- (3) On 12%--225,000,000 acres--erosion has been severe; more than three-fourths of the original surface soil has been lost.
- (4) Three percent--57,200,000 acres--of the land area has by now been essentially destroyed for tillage.
- (5) About 7½%--144,700,000 acres--consists of mesas, canyons, scablands, badlands, and rough mountain land. Overgrazing and other abuses on some of this land have caused moderate to severe erosion. (1)

That is the land area as a whole. In 1937 a Nationwide appraisal of the conditions and needs of agricultural lands only was made. These facts were brought out:

- (1) The present cropland area of the United States (1935 Census of Agriculture) is 415,334,931 acres. Of this, practically 61%--about 253,000,000 acres-- is either subject to continued erosion or is of such poor quality as not to return a satisfactory income to farmers at the price levels assumed (period 1921-36). To continue present practices on the part of this land subject to erosion, is to mine it and progressively destroy it. Over half of it is badly in need of good soil conservation practices to prevent serious damage.

- (2) It follows that only about 39%--some 161,000,000 acres--of the present cropland area can be safely cultivated under prevailing practices or should be cultivated under the price level assumed. But some land that is not now in cultivation could be safely cultivated. Adding this to the 39% gives a total of about 211,800,000 acres as the maximum that can be safely cultivated under prevailing practices. This is the equivalent to a little less than half of the present cropland area. Under prevailing practices, then, our agricultural plant would be reduced by half if we wanted to save the soil.
- (3) But agricultural practices change; and under the best practices, fully 82%--339,000,000 acres--of the present cropland area can be safely cultivated and should yield a satisfactory return at the price levels assumed. Even under these practices, however, over 76,000,000 acres--18% of the present cropland area--should be retired as submarginal or not suited for production at present.
- (4) But if the need arose, we could more than make up for this retired submarginal land, because with the best practices we could cultivate some 108,400,000 acres that are now in plowable pasture, brush, or timber, or are improvable by drainage or irrigation. This might be called the nation's production reserve. It brings the potential resources of cultivable land, under the best practices, up to 447,466,000 acres, which is a little more than the cropland today. (1)

Soil is not easily nor quickly formed. Here is what Professor T. C. Chamberlain, late head of the Department of Geology of the University of Chicago said:

"Without any pretensions to a close estimate, I should be unwilling to name a mean rate of soil formation greater than one foot in 10,000 years on the basis of observation since the glacial period. I suspect that if we could positively determine the time taken in the formation of the four feet of soil next to the rock over our average domain, where such depth obtains, it would be found above rather than below 40,000 years. Under such an estimate, to preserve a good working depth, surface wastage should not exceed some such rate as one inch in a thousand years." (3)

And remember that Professor Chamberlain was being conservative. But let us look at the rate of soil loss. "In the state of New York, alone, land has been abandoned at the rate of approximately 100,000 acres a year during the past several decades." (9) "Chamberlain estimated 1,000 million tons or more as the annual loss of soil carried into the sea from the lands of the United States. This mass of material is equivalent to the surface seven inches of soil over one million acres of land." (3) Sometimes a good rain will wash off two inches of rich topsoil--about 2,000 years of nature's work. The soil that leaves is the choicest, the finest, the very life of the nation. But not all eroded soil goes into the sea. Bennett says that the loss from fields and pastures may be a hundred times as much as that which actually enters the sea. (1) One hundred thousand million tons a year! This is staggering--almost beyond belief. The soil that does not reach the sea spills over good land and renders it sterile. It silts reservoirs and shortens their life by many years. This silting is so pronounced that engineers constructing dams provide for the elimination of silt.

Here is what Russell Lord in "To Hold This Soil" writes:

"Nowhere else in the world, probably, has land valued at \$1,000 an acre on the basis of sheer productivity been destroyed for use more rapidly than on the brown, round hills of the Southern California bean district.

Plowed and planted to **beans**, clean-tilled year after year, these farms wash out so fast that you can stand in a heavy rain storm and literally see the surface ooze away." (13)

Clean-tilled crops? Cotton and tobacco in the South are sucking the land like a leach--huge crops for a few years and then the beginning of deterioration and finally worthless land. The same holds for corn, beans, and potatoes. These crops require fertile soil, and when they get it they know no pity.

The destruction of land has marched westward with the settlers. Poverty followed. These early settlers were drunk with the overabundance of rich new land. Plow it up, farm it sterile, and move on. "Root, hog, or die!" "When you see the smoke of your neighbor's chimney, it's time to move."

"Come along; make no delay;  
Come from every nation, every way.  
Our lands are rich and broad enough.  
Don't be alarmed,  
For Uncle Sam is rich enough  
To give us all a farm!"

And they believed it. Take the free-land racket. The Homestead Law stated that the homesteader must build a habitable dwelling on his quarter section before filling on it. Some of the dwellings consisted of four sticks in a square on the ground. One was a 12 by 14 doll house-- inches not feet.

And so we "conquered" the nation. The movement towards the west is marked with wrecked and worn farms.

The people need all that the soil can produce, but the farmers cannot meet their debt. This is so because the productive capital, the topsoil, is passing away, and because new land, unfit for continuous cultivation, has been plowed up. This destroys needed forest land and needed grazing land.

This picture is not pretty, but it is not hopeless. We have men in this country, good sincere men, who preach that we can save our soil. Vegetation is nature's way. Wherever possible it should be our way. We will clothe the land with cover crops, and, when we bare the land, we will contour-till it to make tiny soil holding dams. Strip cropping and rotations we will use to keep the land fertile. Where needed we will terrace to prevent soil carrying velocities in run-off water. Above all we will practice proper land-use. Then we will save the nation.

Summarizing, the picture is not too reassuring at present. 3% of the land totally destroyed, 53% with moderate and severe erosion, and 37% on which there is some erosion or none. Twenty-two percent of our land is in cultivation. Sixty-one percent of this area is eroding.

## A HOME OF YOUR OWN--THE TENANCY PROBLEM

Two out of every five farmers in the United States do not own the land they till. Furthermore the tenancy rates are on the increase.

### TENANCY RATES IN U.S. (NUMBER OF FARMS) (21)

1880 - 25.6%	1920 - 38.1%
1890 - 28.4%	1925 - 38.6%
1900 - 35.3%	1930 - 42.37%
1910 - 37.0%	

And what is the cause of tenancy? (19) In the first place, the period of homesteading is past and there is no more free land. Land values have increased, and it takes longer to own a farm. The breakup of former landed estates and reclamation projects (private projects by large capitalists) have increased the rate. Few farmers can pass land on to all of their children, so many leave for the city, and those that remain become tenants.

It is interesting to note that in 1920 tenants farmed only 38.1% of the farms, but they operated 44% of the improved land and 46% of the total value of land. (19)

Tenancy creates a poorly balanced agriculture. Tenants want to get as much out of the land as they possibly can. They practice cropping instead of stock farming. Cropping depletes soil. That is of no interest to the tenant. He remains on the farm only a short time, and soil-building costs money. If he gets no returns from

soil-building there is no sense in his doing it. Or perhaps he is trying to buy a farm and so he makes all the money he can. Result--cash crops. Nothing put back into the soil for that taken out. No stock, no crop rotation, and no improvement crops.

Communities of tenants have a low standard of living. As they shift about continually, moving every two or three years, they do not give to institutional life; schools, churches, and cooperatives are not supported. Improvements of road, scientific farming, and the other things that a stable community fights for are ignored by the tenant. These things cost money. The tenant reasons that if he is not there to reap the benefits, why should he support them? And so his children are not well educated and community enterprises suffer. Consequently, the nation suffers. We cannot expect ever to become a democratic nation as long as this condition continues.

When tenancy increases, more land is destroyed. When more land is destroyed, tenancy increases. The problem is a vicious circle, ever widening and ever increasing.

## THE HIGHEST STANDARD OF LIVING IN THE WORLD

In 1935 the Rural Electrification Administration was established to make power and light available to unserved rural areas. At that time the REA Electric Service put out a pamphlet entitled "At a Price the Farmer Can Afford" with these statistics in it: (15)

Where our country stands in electrifying its farms:

	<u>Farms served</u>	<u>Farms not served</u>
Holland	100%	--
Germany	90%	10%
Sweden	50%	50%
Ontario	15%	85%
United States	10%	90%

How electrification ranks on American farms:

	<u>Farms with</u>	<u>Farms without</u>
Electricity	10%	90%
Water piped into house	15%	85%
Radios	20%	80%
Telephones	35%	65%
Automobiles	60%	40%

This is, of course, an incomplete list. It is also a one-sided list and does not portray the benefits that our country bestows. But it should shake the complacency of people who retard progress by a blind praise and acceptance of our system. We can afford a better life for all, and we should work for it. Even the best can be made better.

## READING, 'RITING AND 'RITHMETIC

Democracy needs education to exist. A nation that loves its liberty will educate to preserve that liberty. As a nation the United States has sadly ignored the foundation of its ideals. Our educational institutions are totally inadequate to handle the job which they were designed to do. Our schools in the cities are not so bad, although much improvement is needed. Rural education constitutes the major part of the nation's educational enterprise so this discussion will deal with it. Eighty-nine percent of our 239,000 grade schools and about 80% of our high schools are rural. Fifty-five percent of our 857,934 public school teachers and 49.2% of more than 26,000,000 public school pupils are rural. Two-fifths of the current national expenditure for public schools is for rural schools. This is a small amount of money for the amount of pupils, teachers, and schools but that is one of the problems. We as a nation should be vitally interested in rural education, for a great part of our wealth comes from the manufacture of raw materials derived from the farm, forest, and mine. A great portion of the urban population comes from the rural areas. The natural increase of population is in the rural areas. (10)

With what kind of teacher do we supply the rural

student? Of the 230,000 rural and small town teachers, 23% have gone less than 2 years past the elementary grades. One-third have not graduated from high school. The 8th grade was the top limit of schooling for 15,000 of them. (8) As was mentioned before, rural schools are inadequately financed. These schools, to which 49% of the nation's children go, are maintained chiefly by the farm population, which gets 9% of the nation's income. Comparing the country school with the city school, we find this:

	<u>City</u>	<u>Country</u>
School term in days	182	143
School property per pupil enrolled	\$146.69	\$ 60.81
School expenditure per pupil enrolled	\$ 40.59	\$ 23.91
Average annual salary of teachers	\$854.00	\$ 479.00

The teachers' salary in either case is not by far what a good teacher is worth.

We can afford to provide adequate education if we want to. In 1926 our national income was \$84,150,000,000. We spent only \$2,000,000,000 of this, or 2.68% on education. The same year we spent 12,000,000 dollars for automobiles. (8) Even our tobacco bill was higher than our school bill. So was our movie bill and candy bill. Do these figures show how much we care for our democracy?

Our lack of library facilities in rural districts is as amazing as our lack of other educational facilities. Seventy-four percent of rural people are without any

library service. Only 18.5% of the 8,000,000 negroes in the South are allowed libraries. Of the 3,065 rural counties in the United States, only 300 have permanent county wide library circulation. (17)

These figures speak for themselves. The only sensible conclusion is that our country needs more than just lip service to democracy. We need action. We need to take stock, look around us. Maybe we are sitting in a pig-sty smelling a rose.

T. J. Coates in a Circular Letter of the U. S. Bureau of Education made this statement: A rural school is a "little house, on a little ground, with a little equipment, where a little teacher at a little salary, for a little while, teaches little children little things," and "Rural schools are, on the average, less adequate for their use than prisons, asylums, almshouses, stables, dairy-barns, pig-pens, chicken-houses, and dog-kennels are for their use."

THE PSYCHOLOGY OF EXPANSION VERSUS  
THE PSYCHOLOGY OF MATURITY

The psychology of expansion, that of a young nation in a new world, is one of an expanding population, moving, exploitation, mechanization, independence, wastefulness, optimistic outlook (booster spirit), and wastefulness of child life.

Another way of stating this is the advancement of technology and capital at the expense of the natural resources and the human resources. The last two are burned up to produce the first two.

At the cessation of expansion a new psychology begins to appear. The population becomes stable and people begin to think in terms of conservation, to appreciate child life. Social control and communication are increased. The rural areas become the "biological seedbed of the nation". The trend is toward cooperation and internationalism.

Our old policies of land-use had their "roots buried deep in agricultural policies, attitudes, and practices bred and nourished in a day when land was plentiful, cheap and easily obtained". (22)

Then something happened to create a new situation. The frontier disappeared. Nationalism appeared throughout the world and we lost much of our foreign market.

The nations of Europe began to produce more in an attempt to become self-sufficient. Canada, Australia, and South America entered into competition with us for the sale of farm products. During the last war we plowed up the grassland and expanded our cultivated crops to the extent of 40 million new acres. The United States changed from a debtor to a creditor nation without adequate revision of our trade policy. The machine replaced the horse. Coupled with this was an improvement in cultural methods and use of machinery. With markets restricted, our capacity to produce increased. On top of that, the 35 million acres of land used to raise feed for horses was released to grow crops for human consumption. Simultaneous with the release of men on the farms, there was a sudden shrinkage of opportunities in the cities for the surplus population that formerly flowed away from the land. (22) (23) Here, indeed, was a changed situation.

As a result, "millions of people in the U. S. are unable to buy all of the agricultural products they need for good diet and good health". (23) Soil depletion increased. Farm income dropped out of sight. Tenancy increased.

## THE WORLD BACKGROUND

How shall we look at this problem? What is the best way to face it?

Science has given us the way to do the job but we still have not done it. Religion worries too much about the future world and that does not help us now. A patient chewing-the-cud cowlike attitude hoping that the grass will hold out will not help us.

But let's look at Philosophy. It is based upon three principles. The first is skepticism. We must approach any problem with humility, frankly confess ignorance, question all preconceptions, and admit facts and ideas only on evidence. The second is tolerance. All possibilities should be taken into consideration. "Why don't you go back where you came from?" "The only ism we want is Americanism", and "Where can you find a better country?" have no place here. The third is evaluation. After we have admitted ignorance and considered all possibilities fairly, then, and only then, can we place the first thing first and the others in their proper position. (5) (20)

You know we call ourselves modern. We aren't. We are the last generation of cave-dwellers as Van Loon so aptly puts it. (24) We but yesterday laid the foundation for the truly civilized world. It happened when we began to question all things and to make knowledge and under-

standing the basis for society.

Van Loon (24) says, "A human being with the mind of a 16th century tradesman driving a 1941 Buick is still a human being with the mind of a 16th century tradesman." Let's analyze this. In the first place people have always fought and died for traditions kept in the mind and only in the mind. The traditions were dead otherwise.

What about our present philosophy of life? It began with Adam Smith. Smith's economic theories were a reaction against mercantilism "which was a system of public and private regulation that had come down from the guild system of the late mediaeval period". (20) Restrictive legislation in our time? They are nothing compared to the restrictions of that time. This is the basic concept of Smith's theories, "Remove these restrictions from business, and let the economic system take its own course". (20) The mechanism of free enterprise, especially the law of supply and demand, will govern the course.

The idea of the law of supply and demand was originated when thinking was governed by Newtonian principles--the law of gravitation for instance. But today scientific and popular thinking has changed to that of the theories of Einstein. Adam Smith proposed another theory--that of the control factor of a Deism. This control factor would keep the laws from becoming a tooth and nail proposition.

The law of supply and demand does not really explain the actual economic conditions. There are so many exceptions and they are so far away from everyday life that they mean little. They do not even always hold true for a given market at a given time. (6) People sometimes like to pay high prices for things. An extreme example of this is the certain cold cream which is sold for a dime in the ten-cent stores, and in a slightly larger jar brings six dollars in the beauty parlor. A drop in price does not always increase demand. (6) How many times have you heard the saying, "I don't believe in going in for cheap goods." And that means price. Advertising has much to do with this. Gild a product with advertising and people will think they want it whether they do or not. A competitive price is all you can get. The lower you sell your goods the better off you are. But we also have monopolistic, factory controlled, specialty, or standardized prices. An illustration of the first is that of the food, leather, and textile industries. The price in 1940 was 47% of that of 1929. Production was 82%. In the auto, steel, and cement industries--factory controlled--the 1940 price was 83.4% of 1929 but the production was 24.4% of 1929. Certainly the products could be produced in the last case. The supply was there. The demand was not, but only because of price.

What had happened to upset this law--if it ever needed upsetting? In the days of Adam Smith the ownership of property was a symbol of freedom. When we set up our government we wanted to guarantee freedom, so we established the principle of private property. Then came the Industrial Revolution. Factories increased and the owners, by then the rulers of the land, needed raw materials, especially coal. The people still held the notion of the state as a political organization. No control was necessary nor desirable.

And what of Adam Smith's control factor of Deism? It weakened into the idea of morality and lately has gone into the, as Carl Taesch says, anemic notion that we call 'business ethics'. (20) This is an inadequate point of view and is as good as no control at all. Even Adam Smith recognized some outside control. We continue to operate in terms of the past. Perhaps we should again consider Lincoln's statement which expresses the situation so well.

"The dogmas of a quiet past are inadequate to the stormy present. The occasion is piled high with difficulty, and we must rise with the occasion. As our case is new, so we must think anew and act anew. We must disenthrall ourselves, and then we shall save the Republic." (12)

The changed situation, then, calls for a changed attitude. What shall be our attitude? Land is vital to the whole nation. As has been shown, the very existence

of the nation and its people depend upon it. The old attitude sufficed for its time. We had a nation to build and we built it. Perhaps we were ruthless and wasteful but that is water under the bridge, and we have a new problem before us now. Private property has a different meaning than it did a hundred years ago. Natural resources are more vital today because of their scarcity. Their management carries with it a social significance. Some cry out that private owners cannot and will not manage their land properly. For proof they point back to the plundering era. See what they did to the land? But everyone did. That was the attitude--the psychology of the time. It was the result of too much of everything.

Today the situation has changed. True, we still have land-mining going on. But along with this we have companies who are practicing good use, or at least trying and experimenting. The leaders have appeared. They are the modern American pioneers. Their problems are many and what they are trying to do is not understood or in many cases not even known by the public. It must be admitted that the majority of the average citizens have not as yet grasped the problem.

Clearly, then, our job is a job of education. We should try to help solve the problems confronting private forestry that make it difficult or even impossible

for them to practice the forestry they now want. Ours is the problem of creating a favorable attitude, a constructive attitude toward forestry. This attitude should be one of cooperation, a working together of all for the common good.

## COOPERATION--NATURAL OR LEARNED?

Very often the opponents of cooperation express the view that individual competition is the fundamental part of man that drives him to economic action. They say that it is a natural characteristic. Advocates of cooperation offer evidence to refute this. They say that cutthroat tactics are learned.

Cooperation among animals has been observed and recorded. M. P. Crawford (7) tells of training young chimpanzees to secure food in problem situations and then arranging the conditions so that cooperation was necessary in order for them to obtain food. The experiment worked. When the chimpanzees found that they must cooperate to exist, they cooperated.

Dr. Julian Huxley goes so far as to say that the lesson of biology teaches "the conservative's resistance to change is not only useless, but immoral". (7)

Dr. Mark May of the Yale Institute of Human Relations (7) made a study of the existing knowledge on cooperation and competitive behavior. He reached two interesting conclusions: 1. In a rapidly changing culture, and especially in one that is moving from a competitive to a cooperative economy, the rate of change is a function of the speed with which the resocialization (this word does not admit that competition is inherent in man) of the adult generation and the new socializations of the

young generation can take place; 2. The future cooperative and competitive behavior of a given individual can be most reliably predicted from a knowledge of his life-history, of those of other individuals who are involved in the situation and of the situation itself.

Oliver La Farge (11) recently wrote a book on the Indian problem with which he is very familiar. The book shows well how the Indian Nations have used the idea of cooperation to solve their problems. It should be noted here that the Indians had, before the coming of the white man, held their lands in common. When the white man fostered his ideas upon the Indian, especially "get what you can get"--and the white man got it all--it confused him. Now, the Indian under a friendly administration has returned to the cooperative idea, and his living and self-respect has risen. This new spirit is shown in this quotation from La Farge's book:

"Real education begins and grows logically out of the Mother Earth whom the Indians have never ceased loving. . . They learned how to save their land thru the Indian Division of the C.C.C. . . . What they were doing had vivid reality to them, affecting as it did their own futures, . . . Towards the end of one year, a sizable group of Navajo C.C.C. workers petitioned to have their wages stopped and to be paid only subsistence, since the appropriation was running low, and they wanted it to last until they could finish the jobs they were then doing."

Surely this is the placement of the many over that of the one, because only thru the advancement of the many can the advancement of the one become a reality.

## FREEDOM AND COOPERATION

Daniel Webster once said, "The freest government would not long be acceptable if the tendency of the laws were to create a rapid accumulation of property in a few hands and render the great mass of the population dependent and penniless." (18)

An attempt to wreck the cooperative spirit by saying that it will take away the liberty or freedom of the individual has been made. Usually they say it's Socialism, and Socialism destroys freedom.

No man was ever free. He is imposed upon by the earth itself, by nature, and by his social environment. The wage earner is not free for his is a continually struggle against poverty. The stockholders of corporations are subject to the fluctuations of their stocks. Business men are subject to markets and laws of economics. Neither capitalism, "socialism, nor communism involves any interference with freedom and liberty outside of economic relationships." (6) Freedom is relative. We must give up one freedom to have another.

What about freedom of speech and worship in this country? To be perfectly frank, we can say what everybody else is saying and worship in freedom if we do not take our religion too seriously. Teachers and educators who do not teach exactly what they are wanted to teach

lose their jobs. In present times a good teacher is a parrott--"Intellectual rabbits" one Professor called them. So-called radicals have a hard time--Norman Thomas in Jersey City, prevented from speaking by a man whose only conception of the word freedom is its use in a speech to make men shout. Mr. Thomas about eight years ago was refused the opportunity to speak at Corvallis, Oregon, because Oregon State College was situated there. Students must be protected. The meaning of protection here is that they must not think, but only devour bits of memorization fed by "educators". Marian Anderson, because she was a negro, was refused by the D.A.R. the right to sing in Constitution Hall. "All men are created equal."

Certainly the natives of India, China, and Egypt are not free. The condition of their land does not allow them to be. We cannot expect to be free if we keep up the destruction of our natural resources.

"Maybe the liberty we thought we had  
 Was room to be left to ourselves to have liberty..  
 We wonder if that liberty is done ..  
 Or if there's liberty a man can mean that's  
 Men: not land ..  
 We wonder  
 We don't know  
 We're asking." (14)

## EDUCATION FOR COOPERATION

Herbert Hoover once said, "We shall safeguard to every individual an equality of opportunity to take that position in the community to which his intelligence, character, ability, and ambition entitle him." (18)

Education is the only way in which this nation can instill the ideas and aspirations that we so enthusiastically shout about now. We have not yet begun to understand or practice our ideals.

Here is a quotation by Edward O. Sisson of Reed College: (18)

"Our Education has been too much European, Old World, certainly non-American, and I fear actually anti-American. Our children in our schools have been fed too much Old World pabulum and not enough of our own American Culture. The Declaration and the Constitution set up a new flag of liberty and announced a social and political revolution. Our school masters have not yet, after 150 years, wakened to the inexorable demand for an educational revolution to accord with and to make possible the social and political principles of our national tradition. Out of a boundless mass of material let me cite one rather amusing specimen of this: our high school students are required to study Tennyson's Idylls of the King, which has no smell of democracy in it, is rather aristocratic, full of the panoply of feudalism. It happened also to be un-historical, unreal, pseudo-sentimental. Why not read Mark Twain's Connecticut Yankee at The Court of King Arthur, far more historical, sound in sentiment, keen in logic, and chuck full of good honest American democracy? Laugh if you like, but think it over."

First of all we must take the students into the world, out of the classroom, and show them human and physical nature at first hand. The student today is sheltered. He has no understanding of life. How can he apply

democracy and freedom or get the right slant on understanding and improvement of social and economic conditions if he does not know life.

In 1934 the Commission on Social Studies of the American Historical Association recommended this educational program: (7)

- (1) knowledge and understanding concerning the earth as the physical home of man.
- (2) relations of geographic factors to the evolution of human culture.
- (3) the distribution of natural resources.
- (4) the struggle of individuals, groups, and nations for possession of lands, mines, and forests.
- (5) concerning the whole question of the rational use of the material endowment of the country in planning of the economy and in the general enrichment of the common life.

#### A BIRDS-EYE VIEW

1. The problem is that of creating a new attitude toward forestry, toward the relationship of forestry and life, and towards life itself.

2. The satisfying civilization rests upon an adequate economic base and this in turn upon wealth. To produce wealth, four factors are involved: Natural Resources, Human Resources, Capital, and Technology.

3. The lesson of the ages taught us that a country cannot ignore her natural resources without inviting destruction. Poor land--Poor people.

4. In our march westward we have created physical and economic deserts. In parts of our country the destruct-

ion of natural resources has resulted in the decadence of the other three factors of an adequate economic base and consequently the destruction of the economic base itself. Again, poor land--poor people.

5. Our educational facilities are totally inadequate to handle the job they were designed to do. The foundation of our ideals is education.

6. At the present time we are passing from the psychology of expansion to the psychology of maturity. A new situation has been created.

7. The approach to the problem will be thru Philosophy employing its three principles: skepticism, tolerance, and evaluation.

8. Looking back we find we are facing the problems of today with the tools of yesterday. Altho the new leaders have appeared, the majority have not accepted their teachings.

9. The new attitude is the attitude of cooperation.

10. Cooperation can be learned.

11. Cooperation will not restrict freedom outside of economic relationships.

12. Education facilities must be geared for the job. How fast we approach a new social order depends upon how fast the education of the coming generation and the education of our contemporaries progresses.

## THE FORESTER'S POSITION

The forester is entrusted with one of the most vital of natural resources. What he does with it will determine our future standard of living. It is his job to manage forests lands under sustained yield for the benefit of society.

The creation of good forestry practices results in stable and prosperous communities. The forester of today must of necessity be social as well as economic minded. He must be willing, ready, and able to inform the public of his work and the significance of it. Due to the importance of forests, the forester must assume a leadership in the establishment of a national policy on resources. He must see and understand the whole of the problem and not just this field. In order for him to assume his position in the life of the nation, I have listed five broad social obligations that the forester must undertake.

### THE SOCIAL OBLIGATIONS OF THE FORESTER

1. The correlation of the field of Forestry with all other fields. We must look at the part in terms of the whole. The method will be the practice of tolerance, skepticism, and evaluation. We must understand others and they must understand us. The base for understanding

should be what we, as a people, need and the ability of the nation to produce it.

2. The inauguration of an educational program for both the coming generation and our contemporaries. Here we can build an active interest for the nation in the people. How fast we approach a new social order depends upon how fast education progresses in both these fields.

3. Foresters must become active politically. How can a man make laws for a nation when he does not understand the base of civilization? The nation has need of effective leadership.

4. Understanding of sociology and psychology. These are needed in order to carry out the other three-- and understand them.

5. A knowledge of esthetics and its relationship to forestry. The preservation of the beauty of the forest is a necessary thing for public good will.

As long as one child is hungry; as long as one acre of land is mismanaged, we have work to do. True, we will never reach paradise. Human frailty will prevent that. But we will shoot as close as we can to it.

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