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Our plundered planet, 1952.

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"OUR PLUNDERED PLANET"

April 27, 1952

My dear friends, we have recently witnessed one of the most disastrous floods in the history of our country, and the most disastrous flood in the history of our Missouri Valley. More than two million acres of farm land were under flood. The raging waters swept into towns and cities. Many lives were lost; nearly 150,000 of our people were rendered homeless; and the damage to property ran into the hundreds of millions of dollars.

In the same area, the Missouri River Basin, a similar disastrous flood occurred last year, and the total losses to crops and property, to highways, railroad lines and bridges and industry generally were well over a billion dollars. And there have been other floods in the same area in previous years. Now, all these floods could have been prevented if the dams and reservoirs which had been planned for this area had been constructed, but unfortunately, politics and bungling and inter-departmental rivalries permitted this precious land, an area comprising nearly one-sixth of continental United States, an area which is the bread-basket of our country, to be severely damaged time and again.

A few years ago you will recall, we were witnesses to a terrifying sight which has come to be known as the Dust Bowl, a prolonged drought in the states of Texas, Oklahoma, and the neighboring states, which lasted for some six or seven years. It finally resulted in dust storms which swept over this vast area of our country and swept away the top soil of countless farms and left a sand desert in their place. That Dust Bowl was largely man-made. The land had been over-graced; too much prairie had been plowed up for wheat; man abused the land; and nature reacted with vast and punishing violence.

The chief of the United States Soil Conservation Service, Dr. Bennett, describes the situation which confronts our people in the following manner:

One-fifth of the original area of tillable land in the United States is now ruined for further practical cultivation chiefly because of erosion. About one-third of the present remaining tillable land is already damaged by erosion, and more than one half of the remainder is subject to erosion. All but about seventy-two and one half million of the four hundred and sixty million acres of good crop land in the United States is subject to erosion, if it is not protected. It has been estimated that the average depth of topsoil throughout the country originally was nine inches. The dept of the topsoil now remaining is between six and and seven inches. In noting that we have lost approximately one third of our topsoil since the country was settled, the significance of these conditions can be easily realized.

Up until the time of our great western migration, which got into full swing about a hundred years ago, the creeks and rivers of the land usually ran clear. Rains were absorbed by the humus-laden forest floors and the open fields covered by tall hardy grasses with their matted roots protecting the soil. More moisture was held in the ground, and the rivers did not rise the way they do today. Even when they did, they generally remained clear.

The little topsoil that was washed away was negligible, representing on the average, perhaps, about the amount of new topsoil being manufactured by nature.

So it has not been natural erosion that has made the trouble. It has been ourselves. We have cut down the forests that absorbed the rains, and grazed much of the remaining woodland. We have overgrazed and overcropped the millions of acres of open fields and ranges once so well protected by the thick grass cover that functioned as nature's blotting paper. Lack of fertilization, lime, crop rotation, and other replenishing procedures have also played their parts,

As a result of this unfortunate policy, the kindly blanket covering the land has been so thoroughly removed down through the years that rain water now runs off the bare fields and hills in a matter of minutes, taking the topsoil with it and creating floods and disaster undreamed of just a few decades ago."

We seem to be going, friends, the fatal way of many other countries in ancient and modern times, which were plundered and laid waste and desolate by man's own improvidence, his squandering, his wastefulness, his neglect.

The earth which should have been man's chief concern and its proper husbandry his principal care, for his very life depends upon the productivity and the fertility of the soil - that earth has been abused by man, deforested, permitted to be eroded, and turned into wasteland and desert. Far more destructible to civilization

than earthquakes, than violent changes in climate, than wars, than epidemics, has been man's own molestation of the land - the land which was to sustain him in life. Man's own ill treatment of the good earth which God gave him. Man is the most destructive animal on the face of the earth - a mass destroyer and a mass killer.

One need but look on the map of the earth and see the areas of desolation upon it, areas which were once fruitful and prosperous countries. Take the valleys of the Tigres and the Euphrates, Mesopotamia, present-day Iraq, traditionally the site of the Garden of Eden. Those valleys once supported rich and powerful empires. Four thousand years ago these lands were covered by a veritable net-work of irrigation, ditches and canals, and a prosperous farming population thrived in that territory, and opulent cities were built there, and one of the great civilizations of antiquity, civilizations of Babylonia and Assyria. Today that great area is largely covered by shifting sand-dunes and a starved and impoverished and disease-riddled population ekes out a miserable existence in that vast land, because through the centuries the forests of that country were cut down, the land was exposed to erosion, the ditches and canals were blocked and choked and destroyed, and then wars and invasions completed man's work of devastation.

And when you move from the valleys of the Tigres and Euphrates westward to Syria, you have the same story all over again. Dr. Lowdermilk, one of the great authorities on soil conservation in the United States, describes this area in the following words:

An area in north Syria lying between Aleppo, Antioch and Hama exhibits soil erosion at its worst. Here are the ruins of villages and market towns resting on the skeleton rock of limestone hills, from which 3 to 6 feet of soil have been swept off. Here soil erosion has done its worst and spread a ghastly destruction over a formerly prosperous landscape, as judged by the ruins of splendid houses in villages and cities. In reality, these cities are dead, with no hope of resurrection; for the basis of their prosperity is gone.

And, of course, that was also the case with Palestine. Palestine was in Biblical days, "a land flowing with milk and honey", but through the centuries the soil was washed down from the slopes of its hillsides, the terraced walls which supported olive groves and vineyards were allowed to break down, and sheep and goats were permitted to over-graze the land and to destroy the grasslands.

The Jews, when they lived in Palestine before their expulsion, took loving care of the land. They were a good and proud agricultural people. Their religion admonished them to treat reverently the land, "for the earth is the Lord's and the fullness therefore, the world and they that dwell in it." The earth belonged to God, and God gave the earth to man to be its kindly steward and caretaker, to derive from it food for his sustenance.

Cutting down fruit trees and other useful trees was expressly forbidden by the law of the Torah. Even in wartime fruit trees were not to be injured or used to build defenses. War must never be waged against the life-preserving works of God and nature. And so we read in the Book of Deuteronomy: "When thou shalt besiege a city a long time in making war against it to take it, then thou shalt not destroy the trees thereof by wielding an axe against them, for thou must eat of them, for man's life depends on it."

It was God who ordained in the primal days of creation, "Let the earth put forth grass and herb-yielding seed and fruit-bearing trees, wherein is the seed thereof. And God saw that it was good. And God placed man upon the earth in a well-watered garden, full of trees, pleasant to the sight and good for food, to work the land and to tend it."

One of the Rabbis of later times declared: "He who goes out during the days of spring and sees the trees budding should pray: Blessed be God who has caused nothing to be wanting in His universe and created in it beautiful creatures and beautiful trees wherefrom men may derive pleasure."

There was a tenderness and a care and a love in their devotion to, their attitude to nature, the earth, and all that is upon it. Our people was admonished against all kinds of wanton waste, willful destruction of natural resources. There was a definite prohibition, "Do not destroy anything which man may need for his life sustenance."

It is inspiring to see - and this, the 4th anniversary of Israel's independence, which is celebrated this week, reminds us - with what love and devotion and toil and sacrifice the present-day pioneers and the rebuilders of Palestine are reclaiming the soil from the waste and the abuse and the neglect of the centuries, with what consecration and eagerness they are irrigating wastelands, bringing water again to lands which had been parched through centuries, draining the marshes, rebuilding the broken down terraces, reforesting the land, clearing the rock-strewn valleys for plowing and sowing. There is an epic of reconstruction, reclamation, rehabilitation of land and soil that is going on in Israel today, comparable only to the epic of the rehabilitation of human beings, that is going on in that marvelous little country.

I was there a few years ago and near the Dead Sea, where the whole area is drenched in salt and not a blade of grass and not a plant has grown there, I suppose, since the beginning of time. But so great is the love of these new settlers and pioneers, so great is their hunger for land, for soil which in other parts of the world is being so ruthlessly and thoughtlessly wasted and squandered, that they have taken parts of that salt-soaked soil and have washed it and restored it so that it makes plants again and grass again and flowers again grow in that land of Sodom and Gemorra.

Now, the same fate which has overtaken Mesopotamis and Syria and up to recently Palestine, has overtaken also other vast stretches of the earth - Egypt and Greece and Turkey and Spain and North Africa. Greece was once a land of plenty wherein flourished one of the noblest civilizations of mankind. The soil was productive, the hills were covered with forests, the water supply was abundant. And so Greece was able to give

to the world Pericles and Socrates and Aristotle and Sophacles - arts, science and literature - a good land produced a good people and a great civilizations. Well, today that land is a starved, a poor land, poor soil, bare hill-sides, a deteriorated land and a deteriorated civilization.

Dr. Osborn who wrote this book, "Our Plundered Planet" which I took as the subject of my sermon this morning, says that the soil of Egypt is steadily deteriorating and even its cotton yields, for which the soil was deteriorated, are falling. "Great portions of North Africa, bordering on the Mediterranean which used to be fertile, are now desert. Here great cities lie buried under sand in an area which was once the garden of the Roman Empire. And the plight of Spain today is exactly what one might suppose it would be considering the plight of the land itself. The desperate and degraded conditions of the country-side came about through greed and not through need." The desire to become quickly enriched through the profits of the wool industry encouraged sheep-herding to a point where they over-grazed the land; forests were burned off to provide extra pasturage; young trees were cut down for fodder and fire wood; and this desperate cycle of greed and over-use and erosion of the land was set into motion.

And the same thing is happening in Australia today and in New Zealand. The land is being wasted to yield greater and quicker returns and profits in terms of wool. Central and South America are caught up in a similar tragic cycle wherein lumbermen and cattlemen are bringing upon these lands the visitations of deforestation, erosion, disastrous floods and the steady wasting away of the productive land.

And as far as our own country is concerned, Doctor Osborn has this to say:

The story of our nation in the last century as regards the use of forests, grasslands, wildlife and water sources is the most violent and the most destructive of any written in the long history of civilization. The velocity of events is unparalleled and we today are still so near to it that it is almost impossible to realize what has happened, or, far more important, what is still happening. Actually it is the story of human energy unthinking and uncontrolled.

In the attempt to gain at least some perspective let us review a little. Our people came to a country of unique natural advantages, of varying yet favorable climates, where the earth's resources were apparently limitless. Incredible energy marked the effort marked the energy of a young nation to hack new homes for freedom-loving people out of the vast wilderness of forests that extended interminably to the grassland areas of the Midwest. Inevitably the quickest methods were used in putting the land to cultivation, not the desirable methods. Great areas of forest were completely denuded by ax or file, without thought of the relationship of forests to water sources, or to the soil itself. Constantly there was the rising pressure for cultivable land caused by the rapid inpouring of new settlers. By about 1830 most of the better land east of the Mississippi was occupied. In that year there were approximately 13,000,000 people in this country, or less than one tenth of the present population. In the meanwhile the land in the South, long occupied and part of the original colonies, was being devoted more and more extensively to cotton, highly profitable as export to the looms of England, and tobacco, for which there was a growing world market. These are known as clean-tilled crops, meaning that the earth is left completely bare except for the plantings and is a type of land use most susceptible to loss of topsoil by erosion. Today a large proportion, in many areas from one third to one half, of the land originally put to productive use for the growing of cotton and tobacco has become wasteland and has had to be abandoned. It is not unusual for Southerners to blame the Civil War and its aftereffects for their impoverishment. There are other reasons.

There is no particular point in tracing the westward surge of settlers over the great grass plains that lay beyond the Mississippi and on to the vast forested slopes bordering the Pacific. Everyone knows the story. It is significant, however, that the movement, dramatic as any incident in human history, was symbolized by the phrases "subjugating the land" and "conquering the continent". It was a positive conquest in terms of human fortitude and energy. It was a destructive conquest, and still continues to be one, in terms of human understanding that nature is an ally and not an enemy.

And in further describing what man has done to the land of this country, Dr.

Osborn concludes by asking the question:

Are we to continue on the same dusty, perilous road once traveled to its dead end by other mighty and splendid nations? Or, in our wisdom, are we going to take the only route that does not lead to disaster, that has already befallen so many other peoples in the earth?

Now, much can be done and much is being done today by individuals to pasture the soil and by government to correct this dangerous abuse of our richest and thoroughly indispensable asset of our people - land. Our people has been aroused, but not sufficiently. Farmers are increasingly learning the simple techniques which scientific agriculture has made available to them, whereby they can save their land from soil erosion and make them more productive, more profitable. Our government is devoting much thought and considerable funds to irrigation and reclamation projects and to flood controls by building of dams and reservoirs, but not enough. It is significant that only 1% of our national budget is spent upon all these conservation projects. Think how much more is spent upon our military establishment!

Man has plundered this planet, to his own hurt. Man must now learn to replenish it. He must learn not to dessicate it. He must not put his hope for the future in new lands that can be opened up which he can use quickly and be-spoil, as he had other lands. Fresh lands are practically no longer available to man. There is a grave warning in the admonition of scientists that "the tide of the earth's population is rising, and the reservoirs of the earth's living resources are falling." The population of our globe is increasing amazingly. Since the 17th century the population of the earth has multiplied five-fold. It has doubled within the last century. The population of the United States is increasing enormously every year. The area of the earth is static, and the tillable area of the earth has been unfortunately reduced catastrophically by man's neglect.

We are very much absorbed today in political questions, in international questions. We are very much concerned today with the problem of resisting this type or that type of economic system for the world. The basic problem of man is food, and to meet that basic problem is the other problem of land. Overcrowded countries and reduced productive land inevitably lead to tensions, to strife, to war! Our greatest problem today is the increasing of the productivity of land so that man will have enough to eat - all men - upon the face of this earth.

It, therefore, means that man must become again aware of his role upon the earth which is not that of a predatory animal, to destroy, but that of a steward, to care for the land, to tend it lovingly, to increase its fertility. If man once becomes aware of his role as a steward, as a faithful steward, perhaps many of the great problems which today seem so insoluble, may approximate a just and permanent solution.



1). We have recently witnessed the most disastrous flood in the history, ~~the~~ ^{our} Mission Valley. 2 million acres of farmland were under flood. The raging waters swept into towns and cities. Many lives were lost. 130,000 were rendered homeless and the damage to property ran into hundreds of millions.
Mission River Basin

In the same mid-west area, ^{the Mississippi River Basin} ~~this~~ similar destruction
floods occurred last year, and total flood losses to
crops, property, highways, railroads, lines, bridges
and in many other ways was over 1 billion dollars.
There have been regular floods here that supercede the damage

The floods could have been prevented if the dunes
and reserves which had been planned for this area
had been constructed; but politics and bureaucracy and
inter-departmental rivalries ~~both~~ have permitted this
premises land, which is ^{an area - comprising} $\frac{1}{6}$ of the broad-based V.
to be severely damaged time and again.

Dust Bowl

premier land, which is the most fertile
to be severely damaged time and again.

A few years ago - we were witnesses of the great
dust storm which hit the seven states 1935-1942 and other states
brought in dust storms from Texas and other states
which swept away the top soil from the farms and
left a sand-dune where once there was their place. The
Dust-Bowl was largely man-made. The
land had been

left a sand-drift ~~where once~~ ^{the} ~~the~~ ^{man} ~~made~~ ^{made}. The
That Dust-Bowl was largely man-made. The
land had been mis-used. Too much grain had been
planted up in wheat. Man abused the land and water
worked with art and science to destroy

3/ Dr. H. H. Bennett, Chief, the U.S. Soil Conservation
Service writes: (Just).

(2) So Westerners to Egypt and the story is the same. (3)
Dr. Lundermann, the well-known authority on Soil
writes (quite)

(3) And there is also Law, Palestine - "Land flowing with
milk and honey" - Soil worked down from its slopes
and hillsides, terrace walls were allowed to break down,
and sheep and goats were permitted to destroy the terraces.

(a) The Jews when they lived in Palestine before their
exile in Babylon loving can, the land. Their was a poor
and poor agricultural people. Their religion admonished
them to love the land. "For the earth is the
Lord's and the inhabitants thereof, the world and they that
dwell in it."

(b) Cutting down fruit-bearing trees and useful
trees was forbidden by the law, the Deuteronomy. Even in war-
time fruit-trees were not to be impaired or used to
build defences. War must not be waged against the
life-preserving fruit-bearing trees. "When thou shalt besiege
a city for a long time, in making war against it to take it,
thou shalt not destroy the trees thereof by wielding an axe
against them, for thou must eat them, for man's life
depends on it"

(c) It was God who ordained "Let the earth put forth
grass, and herb-yielding seed, and fruit-trees heavy fruit

Whence is the seed that upon the earth. And God saw that it was good. And God placed man upon earth in a well-watered garden, full of vines pleasant to the sight and good for food - to work the land and to keep it.

(d) Rab Judah declared: "He who goes out during the days of spring and sees the trees budding should pray: Blessed be He who has caused nothing to be wanting in His universe and created in it beautiful creatures and beautiful trees wherefrom men may derive pleasure."

(e) The Jews were admonished against all kinds of waste and waste destruction of natural resources. There was a definite prohibition against - Do not destroy what man needs for life.

(f) It is inspiring to see that and this 4th anniversary of Israel Independence Day remind us of with what love and devotion and toil and sacrifice - the present-day pioneers and rebuilders, Palestine - are reclaiming the soil given the world, the earth, the above and the right, the ancient - with what energy and cooperation, irrigating water lands, draining the marshes, reclaiming the broken-down terraces, rafferting the houses - clearing the rock- then valleys for plowing & sowing.

(g) Then Dead Sea - salt

(6) The fate of Mesopotamia & Syria + up to recently Persia (5)
modern ^{Turkey} Egypt, Greece, Spain, North Africa -

(a) Greece was once a land of plenty where flourished the
wealthiest civilization of mankind. The soil was productive the hills
were covered with forests, the water supply was abundant. That Greece
gave us Pericles, and Socrates, and Aristotle and Sophocles.
To-day it is a poor land, poor soil, low hill-tops, unable to
and its people suffering from a very low standard, a demoralized
land and a demoralized civilization.

(b) The soil of Egypt, with Dr. Osborn, in his book "The
Plundered Planet" is headily demoralizing. Even the
cotton yields are falling.

"Great portions of North Africa, bordering the Mediterranean
used to be fertile, but are now desert. Here great cities
lie buried under sand in an area which was once the
Garden of the Roman Empire."

"The plight of Spain to-day is exactly what one might
suppose it would be considering the plight the land itself. The
desperate and degraded condition, the country-side can
scarcely ^{now} feed than they need". ~~migratory sheep~~
~~herds~~ The desire to become enriched through the
wool industry encouraged sheep-herding ~~which~~ ^{which} ~~the~~ overgrazed
the land, "forests were burned off to provide extra pasturage,
young trees were cut down for fodder or fire-wood and
the desperate cycle of need and overuse and erosion was set
into motion."

The same thing is happening today in Australia and New Zealand. The land is worked to yield more and more returns in wool. (6)

Central & South America are caught up in a ruinous drought cycle, wherein bumper crops and settlements are bringing upon these lands the visitations of depredation, erosion, disastrous floods and the steady deterioration and wasting away of their productive land.

7/. As far as our country is concerned - Dr. Olson writes (Jarts) and concludes (193) (175)

8/ Much can be done by individual effort to correct this dangerous abuse of our richest and most indispensable asset as a people - land. The people have been aroused - but not enough!

Farmers are increasingly learning the simple techniques, which they can save their land from soil erosion, and make their men productive -

Our last Federal State - the devastating mud that and considerable forces to irrigation and reclamation and flood control, the building of Dams & Reservoirs, But not enough! only 1% of our Nat. budget

Trans. Valley
Authority
- was used
for this

is spent on Conservation - How much more on an
Military establishment -

6

9/ Man has plundered this planet. ^{not to despoil it -}
He must learn to replenish it - ^{a desecrate it}
Then is ^{move to new land - not have to burn the barren waste & uninhabitable}
There is grave warning in the statistics, the revelation:
"The tide, the Earth's population is rising - the
resources, the Earth's living resources is falling!"

The Earth's population in 12 c. was 1/5 of what it
is to-day. It has doubled in the last century

Man is stressed -

AMERICAN JEWISH
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WHAT IS Soil EROSION?



Maps drawn to scale. Shaded portion represents one-fifth of original area of U. S. tillable land now ruined for further practical cultivation, chiefly by erosion.



The shaded portion represents five-sixths of the present 460 million acres of good cropland in the U. S. that is subject to erosion if it's not protected.

THE WORD "erosion" is defined as "The act of wearing away; gradual destruction or eating away; as, for instance, the action of water on rock or soil." Most everyone, of course, understands in a general way what erosion is, but a moment's reflection on this definition may help us grasp the full import of the word when it is referred to the soil—"gradual destruction or eating away."

Here we are dealing with a treacherous, ceaseless force, which, unless controlled, relentlessly wears away our priceless topsoil when we are awake and when we are asleep. We see signs of this erosion all about us every day and to such an extent that probably most of us have long ago been lulled into a state where we no longer connect cause and result.

A little trickle of muddy water running down a raw bank represents erosion. The muddy creek down in the bottomland represents erosion. The tons of mud moving forever away in our great rivers—even at low water levels—is largely topsoil from your land and mine. The dust that sweeps across the fields and roads is topsoil except in cases where it comes from denuded areas where nothing is left for the winds to attack but the sterile, parched subsoil.

It does not take long for wind or rain, or both, to ruin a patch of ground, and the sum total of lost productive capacity is staggering.

According to Dr. H. H. Bennett, Chief of the U. S. Soil Conservation Service, one fifth of the original area of tillable land in the United States is now ruined for further practical cultivation chiefly because of erosion. About one-third of the present remaining tillable land is already damaged by erosion, and more than one half of the remainder is subject to erosion. All but about seventy-two and one half million of the four hundred and sixty million acres of good crop land in the United States is subject to erosion, if it is not protected. It has been estimated that the average depth of topsoil throughout the country originally was nine inches. The depth of the topsoil now remaining is between six and seven inches. In noting that we have lost approximately one third of our topsoil since the country was settled, the significance of these conditions can be easily realized.



Our ancestors did not know about soil conservation. Strip cropping and contouring would have spelled a different story.

✓ **U**P UNTIL the time of our great western migration, which got into full swing about a hundred years ago, the creeks and rivers of the land usually ran clear. Rains were absorbed by the humus-laden forest floors and the open fields covered by tall hardy grasses with their matted roots protecting the soil. More moisture was held in the ground, and the rivers did not rise the way they do today. Even when they did, they generally remained clear.

The little topsoil that was washed away was negligible, representing on the average, perhaps, about the amount of new topsoil being manufactured by nature.

So it has not been natural erosion that has made the trouble. It has been ourselves. We have cut down the forests that absorbed the rains, and grazed much of the remaining woodland. We have overgrazed and overcropped the millions of acres of open fields and ranges once so well protected by the thick grass cover that functioned as nature's blotting paper. Lack of fertilization, lime, crop rotation, and other replenishing procedures have also played their parts, as will be mentioned later.

As a result of this unfortunate policy, the kindly blanket covering the land has been so thoroughly removed down through the years that rain water now runs off the bare fields and hills in a matter of minutes, taking the topsoil with it and creating floods and disaster undreamed of just a few decades ago.



COVERED DEEP . . . Ruins of the famous stables of Nebuchadnezzar over which passed Procession Street. This has been excavated—as can be seen by the accumulation of soil in the background.

we passed through to spy it out is an exceeding good land—a land which floweth with milk and honey.” This was the minority report submitted by Joshua and Caleb to Moses, who had sent these two and ten other men to spy out the land of Canaan.

Dr. Lowdermilk writes that “The Promised Land,” which three thousand years ago was “flowing with milk and honey,” has been so devastated by soil erosion that the soils have been swept off fully half the area of the hill lands. A survey of ancient village sites abandoned and now occupied discloses how the lands of Pales-

tine have been depopulated since the seventh century. The watershed of Wadi Musrara of 312 square miles draining the western slope from Jerusalem to Tel-Aviv was divided into three altitudinal zones. They were: (1) the plain which was from 0 to 100 meters in elevation; (2) the foothills from 100 to 300 meters and (3) the hills which consisted of the area over 300 meters in elevation.

In the level plains outside the marshy areas, 32 sites are now occupied and 4 are abandoned; in the foothills 31 are occupied and 65 are abandoned; and in the hills 37 are occupied and



GONE—MAN AND CITY . . . The once magnificent and wonderful city of Timgad, North Africa, is today a deserted ruin, surrounded by a desolate and eroded countryside.

127 are abandoned. The break-down of ancient terrace walls and the erosion of soils to bed-rock on the upper slopes is sufficient reason to account for the reduction in population. Erosion in the hills, as well as marshes with malaria in the coastal plain, has reduced the population of "The Promised Land" to one-third of the Roman and Byzantine period.

Dr. Lowdermilk goes on to point out the extent of some of the soil exploitation in the ancient world: "An area in north Syria lying between Aleppo, Antioch, and Hama exhibits soil erosion at its worst. Here are the ruins of

villages and market towns resting on the skeleton rock of limestone hills, from which 3 to 6 feet of soil have been swept off. Evidence of the depth of soil eroded from these slopes is found in door sills of stone houses now 6 feet above the bare rock.

"Here soil erosion has done its worst and spread a ghastly destruction over a formerly prosperous landscape, as judged by the ruins of splendid houses in villages and cities such as El Bare. In reality, these cities are dead, with no hope of resurrection; for the basis of their prosperity is gone. The same waste of land can be