

Your Living Environment

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PARASITES UPON THE EARTH

"After every two or three years of work in the undeveloped world I return home to my native Iowa. Each time I am amazed at the incredible richness of the landscape there. No place in all the world matches the agricultural wealth of the Middle West, a thousand miles and more of deep rich soil, level terrain and stable climate. In contrast, the areas I know in Asia, Latin America and Africa usually contain only a few square miles of fruitful soil for every hundred square miles of useless land, plus a climate that is a gamble, and sometimes a nation has no good land anywhere at all" (Famine 1975, Preface, W.& P.Paddock).

Without realizing it, the authors of this book have made a graphic contrast that agrees with Bible prophecy. The above quote contrasts the environment of Gentile nations with Manasseh. But this contrast can be extended to include the modern Ephraimites and in fact all the descendants of Jacob. To the Israelites of old, God said He would -- "set thee on high above all nations of the earth" (Deut. 28:1). The same basic promises He made to Abraham and Isaac.

Our modern generations have done nothing to merit these superior and fantastic physical blessings. Our Creator has fulfilled His promise and simply allowed us to inherit most of the productive temperate zones of the earth. He was quite specific about it:

"When the most High divided to the nations their inheritance, He set the bounds of the people according to the number of the children of Israel" (Deut. 32:8).

The richness that men like William Paddock see is largely based upon TWO factors -- rain in due season, (Lev. 26:4) and FERTILE SOIL, (e.g. Ex. 3:8). In this issue of Your Living Environment we want to show that mankind is playing a dangerous game with that appleskin thin layer on the earth's crust we call SOIL! The resources of that shallow layer are all that separates us from oblivion! But what are the problems, how do they arise and what steps can be taken to overcome them?

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WHO SAID SOIL FERTILITY IS A PROBLEM?

Perhaps we should first make sure that we are not taking too much for granted. Is the problem of declining soil fertility as serious as some people would have us believe? At least one "eminent" authority would have us believe that it does not exist at all, at least in England!

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"Modern Farming And The Soil" is a recent British Government report in which the authors gave their findings on the effects of grain monoculture and continuous, (or near continuous) arable farming, on soil structure. These enquiries were headed by The Chief Advisor to The Ministry of Agriculture, Dr. Emery Jones. And the considered opinion of these men is that there has been an alarming deterioration in the soil structure of much of Britain's arable land.

It was reported that this group of experts said that grain production should be abandoned on much of the formerly rich Midland soil. And that these areas would have to be turned over to pasture to allow them to recover. Furthermore it was claimed that these soils were so depleted in organic residues that they would be at least THREE YEARS recovering.

Everyone appeared to digest this startling report in complete silence. A few months have passed, the "dust" has settled and some of the "scared rabbits" are emerging from their burrows! Rothamsted Experimental Station, (the centre which pioneered the worldwide use of artificial fertilizers in food production) is now said to have brought out a counter-report. It states in part:

"If the notions ['notions' hardly does the Ministry's experts justice] in the report about the importance of organic matter, soil structure and drainage were conceived during the inquiry, they matured rapidly, for they dominate the report almost to the exclusion of other factors that affect soil fertility and crop yields" (Quoted in U.K. Farmers' Weekly, P.48, June 25, 1971).

Rothamsted now blames soil structure problems in British Agriculture on, of all things, -- "THE WEATHER". That which follows shows these "experts" blowing the gaff on their own counter-report:

"Similarly, a few years back we had no explanation for poor growth of sugar beet in some fields, though bad soil structure and lack of organic matter were widely assumed to be responsible.

"With the main cause identified as attack on the seedlings by free-living nematodes, not only are the reasons now understood but also it can be prevented" (ibid).

"Prevention" would of course be by chemical means. This group of experts seized on the nematodes as the "CAUSE". Any old Organic Gardener would tell them that nematode attacks are merely the "SYMPTOM" of the problem! Now comes the real irony in the above report. The nematode problem, Instead of being the

"cause" is actually a sure sign of the condition Rothamsted denies.

Nematode damage occurs in crops grown on land that is low in organic residues! And the recognized biological control is to increase the soil's microbial population by the addition of compost or farmyard manure. First it was nematodes, now it's the weather, but never US!!

CROP YIELDS A POOR GUIDE TO FERTILITY

In this green land of England, it is not easy to recognize an environmental landslide -- especially when we are standing on it!
"Green-ness" of the landscape may in some cases be indicative of the blessings God has bestowed on certain peoples. But on the other hand it has never been decreed as a measure of their obedience to His laws of environmental management.

Crop yields are no guide these days to the fertility of most soils in modern agriculture. We must therefore be careful not to conclude that all must be well if the landscape is green and yields are higher than they were fifty years ago. Disease incidence is a good guide though! They are the curse we are under for environmental lawlessness.

ANY "CURSES" -- IN THE CITY OR THE FIELD?

Notice some of the penalties God said would come, upon His chosen people Israel:

"Cursed shalt thou be in the city and cursed shalt thou be in the field. Cursed shall be thy basket and thy store. Cursed shall be the fruit of thy body, and the fruit of thy land, the increase of thy kine, and the flocks of thy sheep.

"The Lord shall smite thee...with blasting and mildew, ...thy heaven ...shall be brass, and the earth ...shall be iron. The Lord shall make the rain of thy land powder and dust: ...it shall come down upon thee, until thou be destroyed" (Deut. 28: 16-24).

Physical sickness and disease is a multi-million pound "curse" affecting the cities of $\underline{\text{every}}$ nation and results largely from our mismanaged food industry.

Do we have any "curses" in the "field"? What about Corn Blight, Potato Blight, Clubroot, Nematodes, Aphids, Red Spider, Cabbage Moth, Codling Moth, Fruit-fly, Bollworm, Mildew, Yellow Rust and every other "new" kind of Rust that comes along! Foot-and-mouth disease, Mastitis, Bovine Tuberculosis, Contagious Abortion, Footrot, Liver-fluke and Fowl-pest -- these are but a few of the best known.

Dr. Emery Jones and his men apparently think that some of our most productive land is like "iron". What about our heavens? Do

they ever become "like brass"? Yes they do indeed! There never seems to be a time that severe drought is not going on somewhere.

Need it be asked -- Do we have any deserts, (especially man-made ones) that alternatively rain dust or clouds of locusts on the more productive areas?

We have the lot!

The potential of the Earth's land-mass falls basically into three divisions: Pastures, Crops and Forests. Accelerating timber usage continues to outstrip re-afforestation. Economic pressures and/or ignorance denudes billions of acres of the world's pasture lands, pushing them ever closer to desert. While intensive 20th Century agriculture and even nomadic crop production is pounding once fertile soils to death!

SOIL RECLAMATION -- WHOSE JOB IS IT?

"For generations, the conquest of Nature has been accepted as man's prerogative. But man is a part of Nature, it being his essential environment and unless he can find his rightful place in it he has poor hope of survival. Man's present behaviour often resembles that of an oversuccessful parasite which, in killing its host, accomplishes also its own death" (C.L. Boyle, <u>Journal of the Soil Association</u>, VIII, 1954).

Man has traditionally refused to face the facts of life relative to soil management, but it is obvious that we ultimately have no alternative! It's <u>OUR</u> environment! It was created for US! WE degrade it! WE are the one species with "intelligence" and WE have the tools for the job, so -- should we not <u>GET ON WITH IT</u>?

THE ORIGINAL SOIL-BUILDER

The next point is HOW should we go about it? Men have come up with all kinds of ideas. But we would suggest that God gives the clue to land reclamation! He shows us in the Bible that at certain times He has had the biggest soil-building programmes in history!

He must have made fantastic redistributions of soil and soiltypes during the Flood in Noah's time. And so post-Noation man was presented with a ready-made array of soils -- ranging from "pure" sand to "impervious" clay. In between these extremities are what we might generally term "loams". These are admixtures and innumerable combinations of sand, clay and organic matter. God was responsible for those.

It was God who was responsible for those unbelievably rich soils in the American Mid-west, (referred to by the Paddock brothers). And it should be noted that He pre-mixed their organic content with the mineral particles millenniums before making them available to the modern Manassites.

Notice examples from later times in man's history:

"To fulfil the word of the Lord by the mouth of Jeremiah, until the land had enjoyed her sabbaths: for as long as she lay desolate she kept sabbath, to fulfil threescore and ten years" (II Chr. 36:21).

Unless man begins to "shape-up", God is going to do it again: "I will scatter you {modern Israel} among the heathen ... and your land shall be desolate, and your cities waste. Then shall your land enjoy her sabbaths, as long as it lieth desolate... (Lev. 26:33,34).

What happens when land lies "desolate" and cities are "waste"? THREE things basically: 1. The multitudes from the cities cease their clamour for food. 2. Farmers stop forcing production from their soil. 3. And virtually all plant growth, (that the climate permits) is returned to the soil. These three effects produce a slow, but natural regeneration, just as happened in England when farming has been abandoned on really sick soil.

Under these "desolate" conditions, (not to be confused with desert conditions, they are two different Hebrew words) a build-up of organic residues takes place! Plant matter is produced each growing season, according to local conditions, providing God supplies "rain in due season" (Lev. 26:4, Psa. 65:9-13).

MAN CAN BUILD OR DESTROY

Once man moves into an area, the prospects for its future change dramatically. Why? Simply because God has given MAN the <u>power</u> and the <u>intellect</u> to <u>choose</u> how much food he will take from his soil and how <u>much organic</u> matter he will put back into it.

This is a perfectly free choice which has come up before every man in history if he has been responsible for managing anything from a window-box to a million acres! Traditionally, (as has been pointed out many times) the soil has lost out, through exploitation. Many secretly realize they are not doing the best by their soil and that somewhere along the line a future generation will have to do something about it, or pay a penalty.

The truth is that both present and future generations pay a penalty, but in most instances today, man thinks \underline{he} is " $\underline{getting-away-with-it}$ "!

Need we be so blind over this fundamental problem of soil management? And are the principles of soil reclamation all that difficult? Generations of men have treated SOIL as an eternally productive milch cow, requiring little or no input but always yielding a high output! It seems to be the nature of man to act like a greedy, spoilt child — taking all he can get and giving nothing in return.

In nomadic crop and animal production this process goes on to the point of soil exhaustion. Modern intensive methods differ in one point only -- "science" has made it possible to extend high levels of production beyond the point of soil exhaustion! The nomad ends up with a desert and "science" ends up with a form of hydroponics, (growing crops on chemical solutions) and nutritional chaos!

At the other extreme some see abundant and healthy production of a tomato or pumpkin vine growing wild on a dunghill. And something like this leads them to a fanaticism over compost-grown food! If only we would take up a balanced position between these two extremes. We can, and all it requires is obedience to the principles behind God's commanded Sabbatical Year (Lev. 25:1-7).

HUMUS, LEGUMES AND LIFE

We can and we must be delivered from the science fiction of Chemical Agriculture and at the same time avoid the stigma of Health Cranks Inc. Every acre does not have to be transformed into a veritable dung-pile before reaching a naturally productive and balanced state.

Let's centre the pendulum on this matter once and for all. The "Chemical Captive" maintains that we can abuse our soil with impunity, while the "Compost Convert" flinches visibly at the thought of burning even the most monstrous piece of garbage. God, on the other hand was not above commanding that offal and garbage be taken out and burned or buried (Lev. 8:17, Deut. 23:13, Jer. 7:20)!!

At the same time He gave us a regular reminder of what is involved in building and/or maintaining a balanced level of soil fertility. Man focuses on that grossly incomplete formula, "N.P.K." (Nitrogen, Phosphate and Potash) as the source of life. But "H.L.L." (Humus, Legumes and LIFE) would better summarize the basis of God's right system of soil management. And it is centred around livestock, rather than crop production.

God knows human nature, seeing He created man. And to block our natural tendency toward environmental suicide, He decreed a special year of rest every seven years. This does not remove the element of "free-choice", because we still decide for or against keeping God's Sabbatical Year! Faithfully kept, it is a regular exercise in THE CONSERVATION OF SOIL FERTILITY!

Walking in this "statute" changes a man's whole outlook and attitude toward his environment. Following the principles of the Sabbatical Year is not just something he does every SEVEN years. It totally dominates his approach to and his thinking on agriculture and environmental management, EVERY year!!

Much more will be written on this important subject -- God's Sabbatical Year, but it has been at least partially covered in an earlier issue. The point to be emphasized here is this: Soil maintenance and reclamation is not difficult to understand for the man who keeps God's Sabbatical Year. He can truly be a blessing to any environment, instead of a "parasite upon the earth".