



Overworking Our Mother

PRESENT-DAY America is becoming soil-conscious, as the America of a generation ago became forest-conscious under the drive of the first Roosevelt and Gifford Pinchot. Our vision and feelings have most been shocked with pictures of erosion, the spectacular punishment that water and wind bring when Earth's children, in the shamelessness of their greed, strip off their mother's natural green garments and expose her naked to the scorn and buffetings of the elements.

But our abuse of the good earth threatens us with a retribution that is even more severe than the sight of these furrowings of a premature and unnatural old age. Our mother may become so tired, under our too-avid demands for too much food right now, that she will presently be unable to feed us at all.

The invisible but deadly exhaustion of the soil's fertility has been brought anew to the attention of agricultural America by Secretary Wallace. He asked organized farmers to consider, as a factor in their plans for the rebuilding of the American export trade in agricultural products, whether we might not let ourselves in for full cropping at the expense of irreplaceable losses in soil fertility.

"Can we afford to let our richest soil go the way of our virgin timber?" he asked. "Shouldn't our agricultural policy be such as to enable farmers to maintain the fertility of the land?"

This, like a number of other things Americans have had to listen to during the present national examination of conscience, is a "hard saying." It goes clean against all our past habits in agricultural practice. The whole history of American agriculture has been one of breaking new soil, farming it hard, and then when yield began to fall off, moving west to repeat the cycle.

We have been soil exploiters, soil miners, sucking natural riches of a new continent dry and shipping the best of our soil resources into the cities and away to Europe, invisibly wrapped up in wheat and lard and cotton. We suddenly realize that we are scooping closer to the bottom of the barrel, and the realization carries a decided scare with it.

But disaster, though possible, is not unavoidable. The long-settled lands of Europe continue to yield, because men there have perforce learned to use, yet to stop short of abuse. The vineyards on the Rhine have been there since the time of Augustus, the wheatfields of Tuscany since the days of Romulus. Farming of that kind of course requires more labor, and especially more thought. Nevertheless, that is what we must come to. There is no more West, to receive us when we would run away from our own mistakes in overtasking the land.

We must learn to work our mother within her strength, and to refresh her when she becomes tired, lest she die and leave us hungry, with no more food in the house.

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AGRICULTURE-ARCHAEOLOGY

## To Improve Mayan Farming Used Thousands of Years

ODERN agricultural science has just taken a look at Mayan corn growing, down in central Yucatan, with a view to aiding these Indians to increase the amount of corn they produce.

The preliminary study, just completed, was made by Prof. R. A. Emerson of Cornell University at the invitation of the Carnegie Institution of Washington. J. H. Kempton of the U S. Department of Agriculture accompanied Prof. Emerson to the region of Pisti, Yucatan.

Prof. Emerson investigated the possibility that ancient ancestors of Mayan Indians had a more intensive type of farming than primitive methods in Yucatan today. Mayan cities, now abandoned ruins, might have been deserted, it was thought, because of inadequate agriculture.

Prof. Emerson concludes that the simple modern methods of corn growing are similar to those of the Mayan civilization long ago. No other general method, he finds, would be feasible under conditions existent then and now. Even with these methods it is possible to grow corn

enough to support 15 to 20 times as many Mayas as now inhabit Yucatan.

Weeds keep the Mayan farmers moving on, from one field to another.

"The Mayas almost never grow more than two crops of corn on the same land," Prof. Emerson says. "They move over and start again, not because the land is depleted in fertility, but because the second season crop of weeds have seeded themselves and grown luxuriantly. The average land use is about a 12-year rotation."

Four acres of land now produce about 15 to 20 bushels of corn to the acre, and supply an average family with a little left over to sell, so that they can buy cloth and other supplies.

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Ostriches traditionally can digest anything, but the New York zoo lost a Darwin cassowary, ostrich-like bird, which tried to digest seven pop bottle tops, a metal doll, a wooden spool and a vanity case top.

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