

BOOK REVIEWS

ROAD TO SURVIVAL. By WILLIAM VOGT. *William Sloane Associates, New York. 335 Pages. 1948. \$4.00.*

One can imagine that we conservationists are sailing a storm-battered sloop across a windy channel. The sheets are jammed and the luff is in ribbons. We have set the helm while we try to set up a jury rig to keep us under way. In the midst of the patching job some far-sighted sailor takes a look at the horizon to see where our land-fall will be.

William Vogt, as busy as any of us on the jury rigging, stops long enough to look forward. His report on this look is his *Road to Survival*.

Vogt did not invent the idea of population pressure. He has, however, spread it out for examination; we find it shocking. Though we are making some progress toward conservative land use, on all sides of us the demand for agricultural products rises at an accelerating rate as a result of geometric increases in population.

Only a few of the most highly developed countries are achieving a more or less steady population. Even in some of these, advances in farming technology have no more than matched the emergence of new pests, new diseases, new problems washed to the front by the tide of improved transportation and increased efficiency in the process of soil mining.

This is the situation in the countries where at least some progress is afoot. But in India, China, Central and South America and many others, the reservoir of soil resource goes down and the population curve shoots skyward.

Vogt surveys country by country the relation of soil and water resources to the agricultural demand, a function of population. Soil erosion, ground water storage depletion, deforestation, surface water pollution, channel sedimentation are pulling downward the curves of available resources, just as Bennett, Jacks and Whyte, and many others have previously reported. But Vogt discusses the mirrored image of this downward trend, the "parabola of misery," the population curve.

The recent emergence of the United States as the most powerful nation lends great significance to these resource-population ratios in the other countries of the world. Lend-lease, E.R.P., and more to come indicate the direction we move: the agricultural resources of the United States are filling the sand bags which we throw into the ever-larger gap between resource and demand, of the less dowered countries of the world. Vogt does not disparage this sand bagging. He uses it as cogent argument for getting on with our own job of conservation.

The initial statement of the erosion problem Vogt

presents dramatically by sketches of the homely effects of resource wastage on different individuals of the world. Some readers may find this introduction somewhat labored. I found it much more palatable than the "facts-and-figures" presentation of the world erosion problem. My personal reaction to the propagandizing of the faith may not be representative but I find most surveys of world erosion problems somewhat laborious reading. This is true in some portions of Vogt's book, until he gets on Central and South America. Suddenly the fire of his agile pen lights again. The discussion of conservation problems in Latin America—probably better known by Vogt than by any other conservationist—is completely absorbing.

The concluding chapter of *Road to Survival* is an essay as dramatic and impelling as any statement in the literature of conservation.

The significance of Vogt's book is many pronged. He shows that resource levels and conservation gains must be viewed in terms of population pressures and the resultant changing demands. Moreover, he put the problem in terms of ecological relationships. Only Graham and a few others had stressed the ecologic importance of a balanced soil economy.

His discussion of the population problem is fearless and frank. The rising curves of population in most countries of the world must be stemmed or else we face continually lowered living standards throughout the world.

Population stabilization must be attacked on every front, with leadership provided by the great countries, particularly the United States. For example, lend-lease or other forms of help from this country should require, as a prerequisite, assurance that the beneficiary will initiate programs aimed at population stabilization.

Vogt points out that the social benefits of public health are counter-balanced by the increased drain on soil-derived resources, and, therefore, are accompanied by diminution of the total resource base. Fearful as are famine, disease and other forms of mass slaughter, they have in the past helped to maintain a population in balance with the ability of the world's soils to produce necessary food. Increased food production which has been achieved through science has not met the increased demand incurred by population rises. This increased food production has unquestionably tended toward decreasing the total available land productivity. The decreased productivity and abandonment of worn-out land has merely been masked by opening of new lands and increased production per acre in a few of the richest countries.

The various professions, including medicine and engi-

neering, are urged by Vogt to achieve an awareness of this population problem. As in the case in most conservation problems, each group at present disclaims responsibility for the end result.

There will be many critics of the ideas Vogt delineates. Yet every reader will finish the book with some disturbance of his basic optimism. This shaking of our inherent optimism must be the first step toward action.

Vogt derides the U. S. engineers and the Bureau of Reclamation as "incompetent." He is wrong. These engineers are extremely competent, but the Bureaus for which they work proceed only on single track policies.

Reclamation is guided by the premise that the addition of new arable land is, in all cases, good if it pays. Refurbishing of marginal lands for increased production is good, if it pays. But "if it pays" is a formula which takes no cognizance of many another aspect of a good life. There is no inconsistency to Reclamation engineers, in claiming "benefits to wildlife" to justify construction of a dam, though the reservoir's muddy flats in a dry year mock recreation, wilderness, and wildlife.

"If it pays" will build a dam now for the general benefit of the citizens. Whether the next generation (also citizens) consider that dam to their general benefit is a question not asked.

It is only political roadblocks, not scientific ones, which prevent the Bureau of Reclamation from saying, "We will build a multiple purpose dam *only* if we are assured that soil conservation practices are adopted in the headwaters of the drainage basin."

Present land administering bureaus of government divide responsibilities. That the trees and the soil cannot also divide their respective jobs and operate *en vacuo* does not occur to the government. The present government policies essentially divide flood control from upstream conservation. These policies "reclaim" or put under cultivation new acreage while existing acres go down hill into the reservoirs. We poison predators with one hand while we feed deer and release pheasants with the other.

We deplete the nesting and feeding habits of birds while we claim "wildlife benefits" for the same species to justify the engineering which depleted the habitat.

This Janus-headed approach to land is the keynote of *Road to Survival*. While each of us works at setting up the jury rig to keep the boat afloat, the vessel gradually gets so far off course that our intended landfall can never be gained, and we all drown anyhow.

Vogt suggests that we continue with the jury rig but let's also man the tiller.

—LUNA B. LEOPOLD, *Honolulu, Hawaii.*