

Mar., 1945

We Can Feed a Billion

SOIL A NEW FRONTIER

Birt Darling

THAT'S the bunk!" snaps Williams J. Berry, balding professor of geology and geography, as he consigns to the wastebasket another learned treatise which points with alarm to "over-population" and "land poverty" in our country. He has much in common with the men who drove westward a century ago in the Conestoga wagons. To them the new frontier seemed limitless.

And it's the same with Berry. His blood pressure notches upward every time the morning mail at Western State Teachers' College in Kalamazoo, Mich., brings him a treatise by one of the pessimists who proclaim that, from the standpoint of arable land, this country is "all washed up."

Berry has written a treatise of his own on this subject, which, to say the least, is at odds with the conclusions of those "prophets of doom" who foresee only a shrinking population and lowered standard of living—twin evils, they say, of dwindling tillable areas and natural resources.

"The idea seems to have taken root in this country that there just aren't any more frontiers," frowns Berry. "Physically, that's a fairly accurate idea if we think in terms of the old-time frontier. But some one should take time out to refute the calamity

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howlers who proclaim that any population increase will inevitably result in over-crowding, curtailment of production and markets, business failures, and a string of 'ghost towns' across the continent."

Rejecting these "lugubrious prospects," as he humorously terms the prophecies of the gloomy, Berry counters by reminding us that "persons familiar with American geography and American resources," when they peep into the future, see in effect no limit to the well-being attainable by an increasing population.

"These persons—and I hope I may be included as one of them—see our nation as still in its youth, with a great future still ahead of it, and thanks to increasing scientific knowledge, capable of a greatness not even now possible."

Professor Berry firmly believes that the United States could support a population of 550,000,000, provided we undertook "intensive farming" of the land already under cultivation.

"Expand this acreage, fertilize, terrace hill slopes, and increase the use of scientific farming methods," he adds solemnly, "and this country could take care of many more millions of souls."

His figures, admittedly, add up to a great deal of humanity. In fact, in his more optimistic moments he maintains that our country could support half the present population of the planet.

How the geologist and geographer arrive at the population potential of America is interesting. They begin by dividing the nation into what are called "regions of population potential," computing their areas in square miles. Then from areas on other continents possessing similar soil and climate or "physical complex," they select the one having the greatest population density.

The population potential of any given area in the United States is then arrived at simply by multiplying its area by the population density per square mile of the specific foreign area chosen.

"Take the flood plain and delta of the lower Mississippi Valley, for instance," Berry points out. "It's a great deal like the lower Yangtze Valley in China in many respects, particularly in its humid sub-tropical climate and alluvial soil. Now compare the populations of these areas. The lower Mississippi supports about 40 persons per square mile, while the lower Yangtze supports over 1000."

At this juncture, some one is likely

to raise the cry that American and Chinese standards of living are vastly divergent. But Professor Berry has considered this point:

"Contrary to popular opinion, there's no direct relationship between density of population and standards of living except in instances of definite over-population where the necessities of life draw keen competition or, in cases of under-population, where even necessities are difficult to obtain." Berry clinches his point by comparing England, The Netherlands and the United States. England's population is 750 per square mile, The Netherlands', 600, and the United States, only 43. The Netherlands, in normal times, boasts one of the highest educational and health standards on earth. England's standards are only slightly lower and ours are certainly not much higher.

If we are to permit the population of our country to increase, Berry holds we may have to put more of our arable land to work. He waxes indignant over the fact that much of the arable land east of the Mississippi is not being used, and that even in productive Iowa less than two-thirds of the soil is planted to crops.

And we may have to terrace and contour-plow, and stop allowing our soil to wash away into the oceans.

"If our population declines, if we lose our position in world markets, if we become a third-rate power—well," sighs Professor Berry, "it won't be because we didn't have the means of supporting enough people."