## MARCH, 1938]

increase the economic strain and popular discontent within Japan and so make the position of the military dictatorship more precarious. Second, through the Red Cross and other agencies we can give to the relief of the millions in China who are suffering because of war and indirectly help the Chinese people to maintain their morale until victory is won. Third, we can continue to support and to strengthen missionary work in both Japan and China; a world-wide church and universal Christian fellowship will furnish those spiritual bonds between nations and peoples which, together with more material bonds, will some day bring about a true world community.

FRANK W. PRICE

## MAN'S DESTRUCTION OF HIS ENVIRONMENT

THE Germans say that he who knows the Fatherland best loves it best, that patriotism is based on knowledge. This is true only as circumstances permit. We speak of Mother Earth with affection because it nourishes us, and we love our native land for that reason; of we admire the beauty of the vales, the hills, and streams, and we love it for that reason. The sentiment of some toward their country is determined by the opportunities for sportsmanship and recreation that it offers. It thrills them to outwit the sly fox, the elusive trout, the wary turkey, the fleet deer and antelope. But it so happens that wherever the demands of biologic necessity have been solved properly, there is no complaint from the other two groups, because beauty and the essential wildlife of field, stream and forest are inevitable consequences.

Therefore it is obvious that the three groups cannot divorce their interests from each other and serve the demands of the

state, the nation, and future generations. The hunter, the husbandman, and the nature lover must become partners in a fundamental common cause—the preservation of man's necessary organic environment, the crowning glory of which is its wildlife. This involves many profound and complicated considerations. There is no form of life on the earth that is not linked intimately with all other forms, and no single form of it can be destroyed without important, if not disastrous, consequences.

Man could not exist on the earth if all bacteria were destroyed, any more than he could exist if all bird life were destroyed, or tree life.

The interdependence of the various types of life is universal, and the individual thrives best where there is the greatest variety. Whether the variety is large or small is contingent on the habitat, the character of which has come to be determined largely by the practices of man himself.

Man has always sought out those places where other life—or wildlife, if you please —was plentiful and varied. The presence of these things attracted him because he instinctively, and without effort, recognized that the companionship of other creatures was not only essential to his higher purposes, but here awaited him the greatest comfort and happiness. The longer he kept his wild friends about him, the longer he remained in that place.

We seldom stop to consider the matter of man's permanency on the earth, or in other words the length of his expected tenure. Will he ever become extinct? And if he does, for what reason? The trilobite, which dominated the seas for hundreds of millions of years, finally passed out of the picture, either because of some superior or insidious form that came into being and destroyed it, or because of some profound geologic, or cosmic change, which resulted in a new environment entirely unfit for its continued existence. This same thing is true of all forms of life that lived and became

A paper presented to students of the State Teachers College at Harrisonburg on March 4, 1938.

extinct prior to the age of man. These forms may have been destroyed by the appearance of some superior form or by deadly bacteria or insects with which it was unable to combat. In the balanced economy of nature no form of life on the earth in the past has been permitted to destroy its own environment and become extinct, probably carrying with it all other forms. Only man has been granted that high authority over his surroundings and destiny, as well as the destiny of the organic world.

Now let us see how he has used this authority. A study of the changing geography of the human race informs us that man has seldom remained in one place very long. The length of his tenure has varied, depending on the character of his husbandry. In his past experience the first to leave him were his wildlife neighbors, both plant and animal, then his domesticated forms. His springs and wells dried up. Vegetable life that had blossomed and bore fruit ceased to respond to his husbandry. He had converted his environment into a habitat entirely unfit for his sustenance or that of his necessary neighbors. For this reason the history of the human race is the story of "hungry men in search of food."

We do not know where the Garden of Eden was. It is not necessary, however, to read the Mosaic story to know the surroundings amid which man first found himself. But now we cannot find the spot not a vestige of its beauty, fruitfulness, or comforts remains. Man destroyed it—the very source of his life.

Many times this has happened in human history. It made no difference how many towers of Babel he had built, how many hanging gardens, great cities, and magnificent temples to his gods, or how richly he had bedecked the wives of his harem with jewels, he went, nevertheless, and he went hungry; because no product of man's art, however skilful, can substitute for a destroyed organic environment.

Man moved from Gobi to Persia, from

Persia to Mesopatamia, to Arabia, Palestine, Greece, Rome, Carthage and the desert of Sahara, to Yucatan, where long before Smith landed at Jamestown a mighty civilization had sprung up and ended, as all the rest, amid cries of hunger from the mouths of men and women and children in a desolated land, and their civilization is now only a very indistinct memory.

When our ancestors first came to Virginia, they found just such a land as men have always sought. The early descriptions of her bounties are thrilling; and with great speed there arose an astounding civilization. Never before had the world seen such progress. Her social order became magnificent in splendor within a short time.

On the Great Seal of Virginia note the conqueror's heel on the neck of a despot. Is that the picture of a fugitive from the hunger and tyranny of western Europe that landed at Jamestown Island in 1607, or is it the picture of one bred and born in this new Eden? The answer to that question is obvious. How many Washingtons, Jeffersons, Marshalls and Lees landed at Jamestown? Our ancestors brought with them only the hope and desire for such posterity. The soil of Virginia supplied the opportunity. Five thousand years hence will the sons and daughters of Virginia still stand triumphant in the face of the foes of freedom? Not if we repeat the past history of the race and convert Virginia into a Sahara where brave and free men cannot thrive. Look now at the land of Cyrus, of Nebuchadnezzer and Daniel, of David and Solomon, of Hannibal. Who rules today where the might of Cæsar was unassailable? Why does Mussolini cast his eyes toward Africa and Japan hers toward eastern Asia?

But what has all this to do with wild-life? If you will but look around you, or read the story of human history, you will find that wildlife, vegetable and animal, constitutes an accurate barometer as to the direction in which men have ever been headed. These things go first, taking with them the beauty

Las pan tall pra 家 had gi Ш 30 Th 200 cap ch eđ but

## THE VIRGINIA TEACHER

## MARCH, 1938]

ŵ

ni) mi: the The

and hant ot if and

6178

ad mi-

i na

ithe that

565

atty

of the landscape, the nurturing food and cover of all life. Hunger and suffering, despair and extinction, follow. Wildlife and human life are inseparable. It is necessary to conserve one to save the other. Patriotism, confidence, freedom, morality, manly vigor are foreign to hungry men, cities vanish, gold is worthless when plains become windswept, hills denuded of their soils, and forests and wildlife are no more.

I wish I could paint for you a picture of primeval Virginia. It was a richer land than the original Canaan that flowed with milk and honey. Briefly it was a great expanse of verdant hills, plains and mountains, abundantly but not completely forested. Immense areas, where forest and grassy prairie alternated, gave a picture of balanced nature and matchless beauty. Where agile deer played and nipped the tender buds, where the buffalo and elk roamed the savannas and fed on the succulent grasses. It was a perfect habitat both for these wild creatures and for man. Why was man unwilling to share his existence with at least a reasonable number of these lovely creatures, when man himself has never employed for his own use as much as one half of the land area of Virginia at any time? This is one of the puzzling questions of the ages. We have in Virginia eleven acres per capita, and only three acres are required for our needs. What have we done with the other eight acres? We have largely converted it into a biologic and economic deserta diseased canker, not only useless in itself, but threatening disaster to all the rest.

It was not necessary in the beginning for the pioneer Virginian to blaze his way through a boundless forest. Many grassy fields awaited his plow, more than he needed, and forested areas actually increased during the first hundred years or so after the white man came. Virginia in the beginning was a balanced biologic unit, and the limited descriptions of it that remain to us are profoundly fascinating. It was unreas-

onable that the mere addition of just one more species, man, should have so greatly upset its balance. It did not need to do so, since man's essentials have only required such a small part of it—less than one third, but whether he had use for it or not, he exploited it just the same.

We are today the victims of that exploitation and misuse. Of course we cannot restore primeval Virginia on the whole, and it would not be desirable. Certain artificial aids, not found in nature, have come to be essential to man's comfort and existence. Man's art can carry him just so far and no farther. Our arts may consume all our coal, our oil and iron ores and many other materials that we have inherited from past geologic times, and yet it is easy to conceive of man's destiny not very greatly affected, provided the streams continue to flow to the sea and the living organic world about us is permitted to yield its annual harvest of food, raiment, and shelter. Man's art can survive only in its essential natural setting, and it will survive if that setting is conserved.

Were the great cities of the ancients in the Near East built in the hearts of the deserts in which we find their ruins today? Man destroyed the original organic background, hence the desolation we see now. Preachers, teachers, and politicians have long been calling upon us to thank God because our lot had been cast in a land of inexhaustible resources, and there never has been any such thing. A very large percent of our original natural resources are already gone. Some of them we can restore. Just as human art has caused their destruction, so human art must bring about their restoration; and I am convinced that the American people are equal to the task and will meet it before it is too late, although immense areas of our country have already been rendered unfit for human life and in those areas man has become extinct.

JUSTUS H. CLINE