



### HAVOC OF CARELESSNESS

More graphic than a thousand pages of print or a thousand hours of preachment, is the conservation lesson brought home by these three scenes recently unveiled at the Buffalo Museum of Science.

spread, feeding first on dead leaves, then on branches and brush, finally killing the trees and destroying or driving out all birds and other animals. Appropriate labels point the moral.

Other exhibits in the new hall include an autumn group and a bog group, each showing wildflowers and animal life appropriate to place and season. There is also a "behind-the-scenes" exhibit which shows all the stages in the difficult and intricate technique of making lifelike wax models of flowers.

The new hall was made possible through a gift of \$10,000 from Mr. and Mrs. Harry B. Spaulding of Buffalo. The art work was executed by Paul and George Marchand, under the supervision of Director Carlos E. Cummings.

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### PUBLIC HEALTH

## 1938 Birth Rate Up, Death Rate Is Down

AMERICA'S rate of population increase is up to six per 1,000 people. More babies were born in the United States last year than there were in 1937, and fewer of them died. Fewer of all of us died, as a matter of fact. There is a pretty good chance that, in spite of the "little depression," American health figures for the year will set a record.

A survey for the first half of 1938, recently published by the U. S. Public Health Service, indicates that:

"Another outstanding feature of the mortality record for the first six months of 1938 was the widespread decline in the infant mortality rate. Only five states reported a higher rate than for 1937, and the current rate is nearly nine per cent. less than that for last year.

"The birth rate for 1938 has continued slightly above that for 1937. This increase, combined with a lower death rate, has resulted in a crude rate of natural increase of 6.0 per 1,000 population, compared with the corresponding rate of 4.3 per 1,000 population for 1937.

For the population generally, the same six-month trend, if carried through the remainder of the year, will place the country's mortality rate at the lowest point on record, with the possible single exception of 1933. The rate for the first six months of 1938, 10.8 per 1,000 population, is only slightly higher than the

low rate for 1933 and represents a decrease of 8.5 per cent. from the rate for 1937.

The drop in the influenza-pneumonia death rate is an important factor in this decline; but almost all diseases show similar steep declines in the numbers of their victims. Improvements in the tuberculosis and maternity mortality situations are cited as most encouraging. The campaigns for greater traffic safety seem to be succeeding.

Cancer, however, continues its ominous creep; mortality from this disease increased three per cent. over that for the same months in 1937.

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### AGRICULTURE

## Early Crop Improvement Held Mostly Unconscious

HOW did the first agricultural and pastoral peoples improve their crops and flocks? It is frequently assumed that primitive man showed a good deal of shrewdness, even wisdom, in selecting the foundation of next year's crop, of next generation's sheep and cattle. But Prof. J. B. S. Haldane, noted English biologist, thinks quite otherwise. Selection can be quite unconscious, he holds, and he thinks that in primitive times it was so, for the most part.

Writing in *The Modern Quarterly*, he points out, among other considerations, that "if one plant in a field produces twice as many grains as its neighbors it will, on the average, contribute twice as many individuals to next year's crop. Further, since most cereals and most leguminous plants are predominantly self-fertilized, high yield is strongly inherited, and thus unconscious selection is highly effective."

Automatic improvement of this kind occurs, however, only if the reproductive part of the plant is the thing it is grown for—seed in the case of grains, the tuber in the case of the potato. Conscious selection has to be exercised in picking out seeds or other propagules, if we are after thickness in stem, juiciness in leaves, or qualities of that kind. And it is notable that improvement in that class of crops has come later than in the grains and root-propagated vegetables.

With animals, the story is much the same. Our forefathers tended to keep for breeding purposes the earliest-maturing and most fertile of the animals they had domesticated. Indeed, those are prized qualities still. But in the wild state they may be even partial handicaps: "a female producing too large a litter, or too many eggs in a clutch, will be unable to rear most of her family."

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