

WILDLIFE IN 2038.

The wildlife of the world, including its game, big and small, has been diminishing with such alarming speed that speculative minds may wonder whether by the year 2038 an exhibition of various species would be possible save as a museum record of the past. Some species have already gone, such as the dodo and the quagga, the aurochs, the moa, the passenger pigeon, and the great auk. They are total losses; man can destroy a species, but he cannot restore it.

Perhaps one should say he cannot in most cases restore it, for the Germans have in the last decade produced a "synthetic" aurochs, a form reconstituted by crossing the most primitive breeds of domestic cattle and selecting those types whose conformation most nearly resembles that of the original wild species. Such re-synthesis, however, is possible only with a wild species which has left domestic descendants.

Other species now exist only in captivity. Such are the beautiful and fantastic white-tailed gnu or the wild horse. Then there are the numerous creatures which would have become extinct but for rigorous protection, and in most cases exist only in special reserves—such as the American and European bison, the white rhinoceros, the Tuatara "lizard" or Sphenodon, sole survivor of a whole order of reptiles, the kiwi, the platypus, the pronghorn, the Alaska fur seal, or the giant tortoises of the Galapagos. The gorilla, the orang-outang, the Komodo dragon, and other creatures are on the margin of this category.

In certain ways more serious than the loss of a few species is the general decrease of wildlife all over the globe. Partly this is a mere quantitative decrease in numbers. The game in South Africa a century ago was more abundant than in the most famous reserves of Central Africa to-day. Early settlers in America found an abundance of bison, deer, duck, and wild mammals and birds of every kind, which does not exist to-day in any part of the United States. And partly the decrease is a decrease of range due to local extermination. Britain originally harboured as breeding species bears, wolves, beavers, spoonbills, ospreys, ruffs, avocets. The kite was the chief scavenger of medieval London; now there are less than a dozen specimens in Britain.

Some of the destruction is direct, some indirect. Direct destruction may be for commercial gain, as with whales, egrets, or fur-bearers; or for sport, as of game; or for the protection of crops or other assets, as of bull-finches by fruit-growers, or elephants by the governments of African colonies. Indirect destruction may occur as the result of the extension of agriculture; by the draining of marches for reclaiming land.

Two types of measures are of vital importance for the saving of the wildlife of the world. One is the framing and ratification of international conventions for the protection of the fauna of large areas. The other is the establishment of sanctuaries.—From the *London Times*.

SEEDS SOWN BY BIRDS.

(By L. W. McCaskill.)

Result of an experiment on seed dispersal by Wax-eyes at the Teachers' Training College, Christchurch, winter, 1937.

Wax-eyes were fed on a bird table with raised edges so that the droppings could be collected. The birds were fed on sugar and water or old honey and water during June, July and August. At the end of August the droppings were collected and sown in a pot of sterilised soil. As the seedlings germinated they were pricked out into boxes at the Christchurch Botanic Gardens. The list of seedlings was as follows:—

Native—

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|---|----|
| <i>Coprosma robusta</i> (karamu) | 7 |
| <i>Coprosma linariifolia</i> (yellow-wood) .. | 20 |
| <i>Pittosporum tenuifolium</i> (kohuhu) .. | 16 |

Introduced—

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| <i>Lonicera</i> (shrubby honeysuckle) | 1 |
| <i>Asparagus</i> | 2 |
| <i>Berberis</i> (barberry) | 5 |
| <i>Cottoneaster serotina</i> | 30 |
| — | — |

Total 81