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Against Foreign Pests.

THE history of agricultural pests suggests that there is a strong tendency for any creature imported from a foreign country, so long as conditions of food and climate favour its survival, to outlive native pests and to become a real burden in the land of its adoption. So often has this happened that many nations have taken the warning to heart and have adopted laws forbidding, without permit from the proper authorities, the importation of foreign creatures. Great Britain, always a little slow in admitting that science can teach it, has been content to place a ban upon certain insect pests which are liable to come unawares with food materials or other vegetation, but has made no provision against the open and deliberate importation of animals which harbour the possibility of much damage.

Such is the case of the musk-rat or musquash, to the importation and breeding of which in Scotland, for the sake of its fur, attention has already been directed in these pages. Indeed, we believe that the appearance of several notes in NATURE discussing the inordinate spread and the damage caused by the musk-rat in central and southern Europe, led to the investigation which has resulted in the first attempt in Great Britain to control the importation of the larger potential pests.

The musk-rat (*Fiber zibethicus* or *Ondatra zibethica*) is an American rodent somewhat resembling a small beaver, which, imported to Europe to be bred for its fur, has within the last twenty years spread enormously along the valley of the Upper Danube and has penetrated and colonised adjacent river systems, causing damage to flood-embankments and river-banks by burrowing, and to agricultural produce, especially green crops and roots. Bavaria and other States employ men trained and specially detailed to trap musquash, and in Bavaria alone as many as 33,000 have been destroyed in a year. Much controversy has arisen in Europe concerning the need or otherwise of prohibiting the musk-rat from countries yet free from its presence; for although central Europe has suffered heavily and has made many unsuccessful attempts to rid itself of the pest, in other parts—Finland is an example—breeding has been carried on successfully without, it is said, any untoward results. The difference seems to depend upon modifications in the rate of breeding and increase of numbers due to climatic

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differences; but it cannot be forgotten that success in the breeding of fur animals depends upon rapid multiplication, and that the very countries which claim the musk-rat to be harmless are by that indicating that its commercial exploitation there is less likely to be an outstanding success.

In Scotland, musquash were imported for breeding purposes only in 1927, and at first all were bred in captivity. But by accident or otherwise various pairs have escaped, so that in three areas they are known to be at large, and in one Scottish district in 1929 as many as sixteen musquash 'huts' were seen at a time, an indication that conditions there seemed to favour that rapid multiplication of the animal which leads to plague conditions.

A few months ago, the Ministry of Agriculture and Fisheries, following upon an investigation made regarding the presence of musk-rats in wild conditions in Scotland, issued a notice requesting any person keeping and breeding musk-rats to inform the Ministry of the fact and of the number of the animals. Speedy action has followed the issue of that notice, for the Parliamentary Secretary to the Ministry, Earl de la Warr, has now introduced a "Destructive Foreign Animals Bill" to the House of Lords, where it was given a first reading. The text of the Bill, issued on June 24, indicates that power would be given to the Minister of Agriculture and the Secretary of State for Scotland, acting jointly, to prohibit by order, either absolutely or except under a licence, the importation into and the keeping within Great Britain of any animal of the species.

The occupier of any land who knows that musk-rats not kept by him under licence are to be found upon it, is required to give notice to the appropriate department, which may take all the steps necessary for their destruction. Anyone importing or attempting to import musk-rats without a licence at a time when this is prohibited, or failing to comply with the terms of his licence, or who turns loose or wilfully allows a musk-rat to escape, would be liable to various penalties. On the other hand, compensation would be paid to persons keeping musk-rats for profit in respect of loss caused by their being compelled to destroy the animals under an order. Special licences may be granted to persons wishing to keep musk-rats for exhibition or scientific research; but the granting of such special licences would have to be accompanied by special precautions, since musk-rats kept for exhibition or research which have

escaped, are just as dangerous fellows as escapes from breeding-pens.

The Bill contains a section which adds enormously to its significance: power is given to extend its provisions to other destructive animals "of any foreign mammalian species".

We trust that this Bill, to which the House of Lords has granted a first reading, will make rapid progress through both Houses. Whether the musk-rat would ever become such a plague in Great Britain as the alien rabbit has turned out to be, none can tell; but where there is so great a risk it is wise to err on the safe side. Moreover, we should be but following the examples of Norway and Germany, both of which have deemed it necessary to prohibit the importation of this foreign pest.

As an Act, the new measure would signify an important progressive step in the laws relating to animals in Great Britain—a tardy recognition of the fact, from which we as well as other nations are suffering, that more may be involved in the thoughtless importation of strange animals than the importer can possibly conceive.

#### Anthropology and Native Administration.

IN a review entitled "The Anthropology of Africa" in *NATURE* of May 2, p. 655, Prof. B. Malinowski pleaded for a fuller acknowledgment of the science of man as a force in colonial affairs, as well as for its academic recognition in the more important universities of Great Britain. The subject, as a matter of fact, is only taught at three universities—Oxford, Cambridge, and London—and neither of the older universities has an established chair of anthropology, in spite of the glorious tradition of Tylor at Oxford and of Haddon and Rivers at Cambridge. The present organisation of the anthropological departments, with such teachers as Dr. R. R. Marett, Mr. Henry Balfour, and Mr. Dudley Buxton at Oxford and Col. T. C. Hodson at Cambridge, would well warrant a full chair at each university.

We are informed that at Oxford the amount of teaching in social anthropology exceeds the twenty hours mentioned by Prof. Malinowski. The course includes lectures in social anthropology by the Rector of Exeter (Dr. Marett), in colonial history by Prof. Coupland, in African economics by Mr. Henry Balfour, and in racial problems by Mr. Buxton—all subjects which come within the range of anthropological studies.

Col. Hodson writes that, so far as Cambridge is concerned, "Prof. Malinowski's statement that the