

out applying racing tests is bound to lead to deterioration. For this reason the continuance of such racing as may be required to test the value of the stallions and mares now at stud is essential.

J. C. EWART.

#### THE DESTRUCTION OF HOUSE-SPARROWS.

THE question whether or not a particular species of wild bird is injurious or beneficial is one that is difficult to answer, but it is manifestly unfair to complicate the matter further by raising issues that are foreign to the subject, or by the publication of random statements which are not substantiated by actual facts.

Recently in the *Times* a correspondent recorded "a plague of caterpillars such as are taken by the sparrows to feed their young," and deplors the action of the Board of Agriculture in issuing an Order for the destruction of the house-sparrow. Unfortunately, the correspondent does not mention the species to which this caterpillar belongs; presumably it is the larva of the Winter Moth (*Cheimatobia brumata*, L.), upon which the house-sparrow feeds its young during the nestling period, but only to a limited extent. For years past we have had plagues of caterpillars when house-sparrows were free to breed and multiply, and careful inquiry has shown that such outbreaks are almost universally due to the omission of grease-banding of the fruit trees, or, in the case of other species, to the absence of the spraying machine. Owing to the present scarcity of labour, either of these reasons may account for the plague of caterpillars, so that the demand for "the immediate reversal of the orders given" by the Board of Agriculture is unjustifiable. In view of the above and similar statements now appearing in the Press, it may be well once more to state the economic position of the house-sparrow as related to agriculture and horticulture.

First, the writer would like to state that he is in full agreement with the action of the Board of Agriculture, believing from long experience and close study of the food and feeding habits of the house-sparrow that, as a result of its recommendation, great benefit will accrue to both the agriculturist and the horticulturist.

Gurney, who investigated the food of this species in 1885, stated that "fully 75 per cent. of an adult sparrow's food during its life is corn of some kind. In young sparrows not more than 40 per cent. is corn, while about 40 per cent. consists of caterpillars and 10 per cent. of small beetles. This is up to the age of sixteen days." This statement was founded upon an examination of 694 dissections. In 1910 the writer commenced to work upon this species, and by June, 1914, had examined 404 adults and 329 nestlings, obtained from fruit-growing, agricultural, and suburban districts. Since then the work has been continued, so that up to the present time upwards of 750 adults and 470 nestlings have been investigated, and the results clearly show:—

(i) That the house-sparrow is far too plentiful,

and in agricultural and suburban districts it still requires very drastic reduction.

(ii) That, to a less extent, perhaps, it requires reducing in number in fruit-growing districts, and were this carefully carried out annually, after the nesting period, the good done during that season might probably compensate for the harm occasioned during the remainder of the year.

(iii) That in agricultural districts the food of 75 per cent. of the sparrow consists of corn.

(iv) That, apart from the nesting season, the house-sparrow does far more harm than good; indeed, its depredations on cereal crops alone entail a most serious loss to the farmer and the country in general.

As a result of the numbers of house-sparrows that are now, very wisely, being destroyed, we shall, in all probability, see a marked increase in the number of truly insectivorous birds, which are invaluable to the fruit-grower.

As to the continuance of the present Order, all must depend upon the number of birds destroyed in fruit-growing districts; but there is little fear, in the writer's opinion, of their extermination in agricultural or suburban districts, and there the Order might be wisely continued.

From the above recorded observations and those previously published, no unprejudiced mind will doubt the wisdom of a drastic reduction of this species. Enthusiasts and humanitarians may continue to write upon the value of this bird to the farmer, etc.; but the futility of such statements must be apparent to the most casual observer, unless they are supported by trustworthy and carefully obtained facts as to the precise nature and quantity of the food, while such investigations as have been conducted entirely fail to support the popular view that the insects destroyed during the nesting season compensate for the wide destruction occasioned by the species generally during the remainder of the year.

There is a very general, but entirely mistaken, opinion that the house-sparrow feeds largely upon insects. During the nesting season the food fed to the young birds, and in all probability most of that taken by the parents, consists mainly of insects, worms, and slugs; but during the remainder of the year it is mainly grain of some kind.

No thinking individual wishes or advocates the destruction of truly beneficial species of wild birds; on the contrary, every encouragement should be offered them, provided that they are not permitted to increase to such an extent that a change in their feeding habits is forced upon them by reason of their numbers.

Whilst the majority of species of wild birds are undoubtedly beneficial, no increase in their numbers will ever lead to the extermination of any of our common orchard pests. That they aid in the control of such pests is perfectly true, but so long as artificial conditions prevail—*i.e.* the association in a given area of a large number of trees of a particular species—so long will it be necessary to spray, grease-band, and carry out clean cultivation. If the house-sparrow is the

potent factor that some writers claim, then with the countless hordes that have devastated the country during the past ten or fifteen years there should be scarcely a caterpillar left; but, as I stated in 1913, this bird "has been allowed to increase to such an extent that it has become one of the worst pests we have," and "at present the attitude of all farmers must be one of extermination." Finally, I think we may leave the reputation of the Board of Agriculture to take care of itself, for it is a gross exaggeration, unsupported by facts, to say that "it is clear to every naturalist and observer that a great mistake has been made."

WALTER E. COLLINGE.

#### THE PUBLICATION OF THE "KEW BULLETIN."

WE are glad to see that the order suspending the publication of the *Kew Bulletin*, to which reference was made in NATURE of May 24, is likely to be withdrawn. Replying to a question asked by Mr. Peto in the House of Commons on June 18, Sir R. Winfrey said: "The *Kew Bulletin* was suspended by the Stationery Office in consultation with the Board of Agriculture and Fisheries. The whole matter is, however, at present under reconsideration, and I hope it will be found possible to arrange for the continuation of the publication."

After the appearance of the article in NATURE deploring the action of the Controller of H.M. Stationery Office in suspending the publication of the *Kew Bulletin*, the subject was taken up by the *Times*, which, in an article entitled "False Economy," also regretted the Controller's decision. The British Science Guild took prompt steps to direct attention to the matter; and in the House of Commons on June 11 Sir William Phipson Beale, a member of the Executive Committee, asked the Secretary to the Treasury

on whose advice the decision of the Controller of H.M. Stationery Office was taken to suspend the printing and publication of the *Kew Bulletin*; whether his attention was called to the importance of that publication for the spread of valuable information throughout the Empire relating to plant culture and the supply of fibre, timber, and plant products; if he can give the names of any experts concerned in the scientific and commercial development of Colonial industries connected with plant culture who were consulted in the matter; whether the editor was consulted; and whether any estimate was made of the consumption of paper involved in the continuance of the *Kew Bulletin* as compared with the consumption of paper for dramatic, sporting, pictorial, and other fashionable papers which have no practical value for the development of the resources of the Empire either during or after the war.

The reply given by Mr. Stanley Baldwin was as follows:—

In reply to the first part of the hon. member's question, it is understood that the Secretary of the Board of Agriculture and the chairman of the Select Committee on Publications were consulted by the Controller of the Stationery Office prior to the suspension of the *Bulletin*; and that the Controller's decision was acquiesced in by the Director of the Royal Botanic Gardens. The editor of the paper was, I am informed, consulted by the Controller before any

action was taken. The answer to the second part of the question is in the affirmative, and that to the third part in the negative. The consumption of paper for dramatic, sporting, pictorial, and other fashionable papers is not within the jurisdiction of the Controller of the Stationery Office.

It will be noticed that this reply does not cover the points raised by Sir William Beale, and we believe that Mr. Baldwin was not in the possession of the full facts when he suggested that suspension was decided upon after consultation with suitable advisers and with the consent of the Director of the Royal Botanic Gardens, who is the editor of the *Bulletin*. We are confident that everyone who is competent to pass a judgment upon the case would express the opinion that the discontinuance of the *Kew Bulletin* upon the ground that it was "not essential" could not be justified for a moment. The subjoined memorandum, signed by members of the Executive Committee of the British Science Guild and sent to the Secretary of the Treasury on June 9, affords in itself sufficient reason for the continuance of the publication of the *Bulletin*, which Sir R. Winfrey hopes will be possible. If that end is attained, the Guild is to be congratulated upon the part it has played in bringing about the abrogation of an unfortunate and ill-considered decision.

The British Science Guild learns with much astonishment that the Controller, H.M. Stationery Office, has decided that the *Kew Bulletin of Miscellaneous Information* is not essential, and has therefore suspended its publication until more normal times are reached. The Guild is strongly of opinion that such action should not have been taken without referring the question of the value of the *Bulletin* to competent scientific authorities; and it protests against the suspension of publication at a time when every effort should be made to promote the development of the plant resources of the Empire. The part which Kew has played in the collection and distribution of cinchona, india-rubber, and many other plant products, including timbers, should have preserved the *Bulletin* from any restriction on account of the great benefits it has been the means of conferring, not only upon the Empire, but also upon humanity at large.

The *Kew Bulletin* was first issued in January, 1887, in response to the demand for the prompt publication for general use of any information likely to be of service to those engaged in science, cultivation, or commerce connected with the plant and agricultural resources of the Overseas Dominions. The prefatory note to the first number says:—

"It is hoped that while these notes will serve the purpose of an expeditious mode of communication to the numerous correspondents of Kew in distant parts of the Empire, they may also be of service to members of the general public interested in planting or agricultural business in India and the Colonies."

The *Bulletin* was started at the desire of Parliament, upon the recommendation of the First Commissioner of H.M. Works and Public Buildings (Mr. Plunket). It has been the vehicle for the publication of a vast amount of information of various kinds, some on purely scientific, but mostly on economic, subjects. The "miscellaneous information" supplied by the *Bulletin* has ever been welcome to botanists and to those concerned with the utilisation of vegetable products; and it has provided a valuable record of Kew work in all its varying aspects.