situated in an uninhabited area between the two districts of Tonj and Yambio. It does not contain the same stocks of game as does the Dinder, but it in its turn will become most valuable as a last stronghold of game when civilization advances. The work done in selecting and mapping out this vast area must have been immense.

Besides the national parks Major Barker created ten game reserves, all of which fulfilled a useful purpose in protecting areas where game was in danger, or in protecting individual rare species.

Only those who have followed Major Barker in the work of game preservation can fully realize what he achieved singlehanded with so few facilities, and we are anxious that the value of his work shall be fully realized.

RED DEER IN SCOTLAND

THE PROBLEM OF PROTECTIVE LEGISLATION

By R. E. F.

The serious situation of the Red Deer in Scotland is at last becoming known to the public and, with legislation for the protection of the decr now being drafted, it is an opportune moment to consider what aspects such legislation should cover.

First there is the illegal poacher. There are now widespread gangs of commercial poachers in the Highlands who, from lorries and cars, shoot deer when they come down close to the roads between the end of October and the end of May. Since the maximum fine for poaching a stag in Scotland is only £2, approximately one-fifth of the value of a stag to the poacher, increased penalties are obviously necessary to stop this practice which involves considerable cruelty to wounded beasts as well as law-breaking on a wide scale. The new legislation should provide for penalties similar to those which are now in force for salmon poaching, including forfeiture of vehicles, weapons, etc., and heavy fines. These penalties should effectively stamp out this type of deer killer.

Secondly there is the commercial deer killer. With stags at present selling for anything up to $\pounds 12$ each to butchers and restaurants, there has grown up on a considerable scale commercial exploitation of deer by those who are not interested

in deer either as sportsmen or as naturalists. These people, among whom are included certain proprietors of deer forests, are not prepared to undertake the expense and labour of shooting selected animals at the proper time of year, i.e. August to October, when the deer are high up and considerable effort is needed to approach them. They prefer to wait until the end of the rutting season when the deer have been driven by hard weather to the low ground; from then through the winter they organize drives and kill the deer, regardless of age, sex, or condition, in considerable numbers. This practice, apart from the cruelty involved, is extremely wasteful, since the meat of stags shot from mid-October onwards is extremely rank, and the animals themselves are mere skin and bone compared with the height of their condition during the summer and early autumn. At present such shooting is entirely legal, and is resulting in a steady diminution in the deer population of the Highlands.

The Report of the Scott Henderson Committee on Cruelty to Wild Animals advocated the imposition of separate close seasons for hinds and stags in order to stop this wholesale slaughter; but it is understood that the Government are not prepared to impose a close season, owing to opposition from agricultural interests.

Under the Agriculture Act, 1947, safeguards are provided for farmers against damage by deer, and they are empowered, if deer come into enclosed land and do damage, to have them destroyed. Many sheep farmers earn a considerable income from shooting and selling the deer which come on to their hill ground adjacent to deer forests in hard weather, and they are naturally reluctant to have the source of this income stopped. It has been suggested that agricultural interests can be adequately safeguarded by the provision of a Deer Committee in each Agricultural Executive Committee in Highland areas. To these Committees power would be given to allow farmers to shoot deer in extreme cases of damage to hill ground, e.g. in reseeded areas; and on these Committees representatives of deer forests would be included.

If a close season is not imposed, not only will the deer populaof the Highlands, which in winter is bound to wander between deer forests and sheep farms, be quickly reduced, but the quality of the deer will deteriorate even more rapidly, since the big stags are always the first to fall to the commercial shooter in winter time.

Apart from the value of the several hundred tons of venison which are derived from the deer forests annually, and the

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substantial contribution in employment and sporting rates to the Highland economy which the Red Deer make, it will surely be wrong if Great Britain is the only country in Europe and North America without a close season for the protection of its native Red Deer.

THE GREAT INDIAN ONE-HORNED RHINOCEROS

By E. P. GEE

The Great Indian One-horned Rhinoceros, probably India's rarest and most interesting animal, occupies a unique position in the world to-day. Listed by the survival service of the International Office for the Protection of Nature as one of the vanishing species which requires all possible steps to be taken for its protection, it has the eyes of scientists, naturalists and others in all parts of the world focussed on it and its habitat.

Formerly spread over most of the northern part of the Indian sub-continent, it is now confined to a few low-lying and thickly reeded tracts of Nepal and North-East India. It is estimated that there are some fifty head of rhino in Nepal, and it is to be hoped that the Government of that country can be persuaded to protect it fully—even from being shot by privileged persons.

Some 300 rhino are believed to exist in India: 2 in Bihar State (in Champaran District, probably wanderers from Nepal), 58 in Bengal, and 240 in Assam. The 58 in Bengal are accounted for as follows: 3 in the Garumara Sanctuary of Jalpaiguri District, 30 in the Jaldapara Sanctuary of Buxa District, and 25 in Cooch Behar.

The main stronghold for India's rhino is the State of Assam. Her 240 rhino are distributed thus: 45 in the North Kamrup (Manas) Wild Life Sanctuary, 150 in the Kaziranga Wild Life Sanctuary, 5 in the Sona Rupa Reserve, 10 in the Orang Reserve, 20 in the Laokhowa Reserve, and 10 elsewhere. All the figures given are approximate, based on conservative estimates made by the most experienced persons concerned with the preservation of this rare animal.

CENSUS NOT POSSIBLE

A proper census of rhino is not humanly possible. Even in Kaziranga attempts to hold a census from the air have failed, owing to the extensive patches of 15-feet-tall elephant grass

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