statements based on insufficient evidence. Little work has been done on the mammals of the county and in general they are only noticed and reported when they advertise themselves by their depredations. Where anybody takes or can be persuaded to take the trouble to look or trap, there will be found, for example, voles, water shrews and probably yellow-necked mice, but no grey squirrels or dormice; one can only assume that the same is true of the rest of the county and hope for more workers in this field to fill the many gaps in our knowledge.

SHORT NOTE

Roe Deer and Ergot

The suggestion put forward by Major Anthony Buxton that roe deer are attracted to their ringed areas in Scotland by the presence of ergotised grasses, seems to ignore the fact that rings have frequently been found in areas elsewhere where it has been shown quite conclusively that such infection does not exist.

I have been assured by competent Cambridge botanists that *Claviceps purpurea* is a rare plant in the Brecklands of Norfolk. Specimens of vegetation which I collected there from roe deer rings, and which were examined by the same skilled botanist at the Norwich Castle Museum to whom Major Buxton submitted his plants, were all reported free of the infestation. Since the disease is, however, very widespread in Scotland, it is exceedingly likely that any roe deer ring would encircle grasses parasitized in this fashion. It is improbable therefore that the deer would need to demarcate areas of this fungus by their rings.

Roe failed to establish themselves in Epping Forest after their introduction in 1884. Ergot exists in abundance in the Forest according to the Essex Field Club. One would have thought that were it a primary requirement in their lives, roe would have settled there more effectively than they did.

I have frequently found roe rings in areas where grasses are entirely absent—in heather, and under trees in pine woods, for example. Many of these rings were used as play rings by the doe and her kids. The one shown in *Oryx*, Vol. III, No. 4, most certainly was. Wild chases took place there in late June and early July. Some observers have witnessed these play activities even earlier than I.

Ring making is not necessarily confined to roe deer. A form of courtship ritual involving circling activity has been observed in hares, the rose-coloured starling, even some species of spider. Ringed areas have been found around tree stumps where only fallow deer abound. One of the best descriptions of pursuit in a circle is given by the old naturalist and traveller, Schweinfurth. His observations are absolutely reliable. He describes how he encountered a herd of hartebeest running round in couples like horses in a circus, using a clump of trees as a pivot. Others in groups of three or four stood by and then in turn took their places and ran round two at a time in their own circuits and in similar fashion.

Again in *The Heart of Africa* he mentions having seen the same sort of thing on a plain of short grass, where two little hegolehbocks (*Antilope madoqua*) were noticed chasing round in a circle, keeping up a characteristic grunting. This animal is sometimes called the Bush Antelope. It is found right through Africa from Abyssinia to Gambia. It roams in pairs and is very similar in size and appearance to the Roe.

It is probable that all ring-making activity has some form of erotic background. Attraction to the rings could thus be explained as satisfying a sexual urge rather than reliance upon the uncertain existence of a parasitic fungus. It remains nevertheless true that in places where they are undisturbed, the deer return year after year to the same sites. In Breckland they are still using the sites of the old forests of the area, even though these forests have long ago been cut down and replanted. At Rothiemurchus in Scotland the terrain was probably much the same a hundred years ago as it is to-day, and the ring sites continue to be used in exactly the same places.—F. J. Taylor Page.