

## ROE FAWNS

By HENRY TEGNER

Roe-deer frequently bear twin fawns. My own observations in Northumberland during the past twenty years, however, led me at first to believe that single fawns were more usual in this part of the country. I was rather surprised, therefore, to learn that the Hancock Museum in Newcastle upon Tyne had received a number of roe fœtuses, during the early months of the past three years, all of which proved to be twins, in each case a male and a female.

I have been privileged to examine this material. There was a remarkable difference in the development of the embryos, although the does had all been killed during February and March, the sizes varied from that of a mouse to that of a half-grown rabbit. Both the rabbit-sized embryos were well developed, and were clothed in the spotted coat of the fawn, with their hooves perfectly formed though white in colour. This doe was killed on 10th March.

The most interesting twins were taken from a doe killed on 31st March, and differed appreciably in size, one being four inches in length, the other nine inches.

If we can accept this incidence of twins as normal then, at least here in the north of England, the mortality amongst living twins must be considerable. This is quite possible as foxes are extremely numerous and, apart from humans they are probably the roe's greatest enemy. Fraser Darling, in *A Herd of Red Deer*, states "A roe deer doe may have twins at the beginning of June, but in the following spring she has only one fawn with her. In north-western Scotland death for one of them is almost inevitable."

On this question I asked the opinion of John MacDonald, who lives in fine roe country at Lethendry in central Inverness-shire. He said that twin fawns are the exception on Lethendry, singles being the rule.

I also asked William Marshall of Nethybridge, also in Inverness-shire, but on the other side of the river Spey to Lethendry. He sent me the following interesting figures:—

<i>Fœtuses in Uterus.</i>				<i>Fawns at foot with doe.</i>			
			%				%
Single Fawns	.	.	73	Single Fawns	.	.	78
Twins	.	.	27	Twins	.	.	22
Triplets	.	.	Nil	Triplets.	Once reported but not		
					seen.		

The prevalence of single fawns over twins in both cases should

be noted. He considers that dissection gives the more reliable figures, as the factor of mortality *after* birth also enters into the picture when fawns are observed in natural conditions. Mr. Marshall has, over a period of nearly 50 years, been able to make an extensive survey of foetal roe. He believes that condition and vigour at the time of the rut is an important factor as regards fertility. Wet, cold, weather, from May until the mating time in late July and early August, can severely tax the strength of does which have dropped fawns in May. Unless the weather is favourable, there is only a brief time for them to recover from the fawning. There is little doubt that both weather and quality of food do have their influence on the fertility of roe does.

I also got in touch with Professor Harry von Eckermann of Edeby, near Stockholm, who probably knows more about Swedish roe than any man living. On his private estate he has a good stock of wild roe, as well as a number of both wild and tame roe kept in an enclosure of sixty acres.

Professor van Eckermann has this to say on the subject of fertility. "Most young does in my enclosure have started with triplets, whilst the older ones have twins. A single fawn is a rare exception". It should be noted that these roe are fed during the winter with clover, hay, or lucerne. They also have access to crushed silurian limestone, which contains phosphate. During the winter of 1950-51, for example, the feeding racks in the adjoining forest outside the enclosure, where there are a number of roe, were filled once a week for a two-month period while snow lay on the ground. During the winter of 1951-52, as it was a milder winter, the racks were only filled three times. Professor van Eckermann states that during the recent war, when the Swedish State authorities requisitioned all fodder, so that the roe had no supplementary rations, triplets were seen after the mild winters of 1943-44 and 1944-45, but after the very hard winters of 1940-41 and 1941-42, single fawns were the rule, with occasional twins and no triplets. The mortality risk with triplets is greater than with twins or single fawns. The doe cannot conceal or defend the larger family.

Discussing sex differences among fawns, von Eckermann says that, within his enclosure, he has had two lots of triplets, all of which were does, two further lots of triplets with a buck and two does and one lot of triplets with two bucks and a doe.

Among twins he gives the following figures :

Pair A—Male and female.

Pair B—Male and female.

Pair C—Both male.

So the experience of the Hancock Museum, in having all three of its pairs of twins a male and a female, does not necessarily indicate that this sex ratio is the rule. Professor von Eckermann mentions that, when he has dissected does killed in October or November, he has almost always found *three* eggs in the "blastosphere" stage. He considers that the amount of food available at the beginning of the northern winter, plus the subsequent severity of the winter weather, will decide how many of these eggs are developed.

Records of living roe triplets in this country are rare. In addition to Mr. Marshall's Inverness-shire triplets, there are the triplets mentioned by Mr. Richard Perry, an observant naturalist, at Alt na Tulaich, where a doe was frequently seen with three fawns of the same age with her. I do not know of any other authentic records of roe triplets in Britain, but this does not, of course, mean that there have not been other instances.

It would appear from the little evidence available on this subject that there is a considerable disparity between the incidence of twin and single fawns at birth in different parts of the country and possibly in different years. I should imagine that with the better feed normally available in the south of England that Hampshire, Sussex and Dorset roe would bear a greater proportion of twins than some of our northern roe. However, it would not seem to be correct to state, as is so frequently done, that roe does *usually* give birth to twin fawns.

*Ed. Note.*—A letter in *The Field* of 17.2.55 stated that on 17th January, 1955, a roe deer containing three embryos, each about three inches long, was shot in Stirlingshire.

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