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An illustration of a fox lying down in a field of tall grass and reeds. Several birds are shown in flight above the fox. The scene is rendered in a detailed, hand-drawn style with fine lines and cross-hatching for shading.

The
Fox



JOHN A. SEAVERN

FUR, FEATHER, & FIN SERIES

edited by

ALFRED E. T. WATSON

THE FOX

FUR, FEATHER, AND FIN SERIES.

EDITED BY A. E. T. WATSON.

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GLEANNING AFTER THE SHOOTERS

THE FOX

BY

THOMAS F. DALE

JOINT AUTHOR OF 'POLO' IN THE BADMINTON LIBRARY



WITH EIGHT ILLUSTRATIONS BY ARCHIBALD THORBURN
AND G. D. GILES

LONGMANS, GREEN, AND CO.

39 PATERNOSTER ROW, LONDON

NEW YORK AND BOMBAY

1906

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PREFACE

THE design of the *Fur, Feather, and Fin Series* is to present monographs, as complete as they can possibly be made, on the various English birds, beasts and fishes which are generally included under the head of Game.

Books on Natural History cover such a vast number of subjects that their writers necessarily find it impossible to deal with each in a really comprehensive manner ; and it is not within the scope of such works exhaustively to discuss the animals described in the light of objects of sport. Books on sport, again, seldom treat at length of the Natural History of the creatures which are shot or otherwise taken ; and, so far as the Editor is aware, in no book hitherto published on Natural History or Sport has information been given as to the best methods of turning the contents of the bag to account.

Each volume of the present Series is, therefore, devoted to a bird, beast, or fish. The creature's origin is traced, its birth and breeding described, and all the sportsman's methods of dealing with it are set forth. In previous books of the series the subjects have only been left when on the table in the most appetising forms which the delicate science of cookery has discovered, but the culinary chapter does not come into the scope of this book : the fox is devoured *au naturel*.

ALFRED E. T. WATSON.

PREFACE TO 'THE FOX'



MUCH has been written about the fox, but his varied history has never been told. A book on the fox might easily have been expanded into a history of foxhunting. But my plan has been to write the story of the animal from his own point of view. Even where foxhunting is touched upon, the object has been to illustrate the manners and intelligence of the creature rather than to dwell on the skill and courage of his pursuers.

It will be seen that the fox has been of importance to man, not only since the rise of foxhunting, but at all periods of history. The naturalist, the sportsman, the moralist, and the student of animal psychology have each and all found the beast an interesting subject of thought and study. But when we begin to study the

fox in life and literature we find that he is so surrounded by a cloud of myths and legends, ancient and modern, that, like other heroes, his true nature is obscured. It is sometimes difficult to distinguish between the real and the legendary fox. The latter is one of the objects of this book. The stories about the animal told here have been sifted and tested. I have tried not to include anything of which the truth was not probable. The anecdotes which have survived the winnowing process are nevertheless still notable enough to give the fox a high place among animals for his adaptability and intelligence. I have found, as all students of natural history must, the natural history columns of the 'Field' most instructive and suggestive. After searching through a long series of years of that paper, I desire to express once for all my obligations both to the facts recorded and to the editorial remarks on them. In disputed points, as that of the existence of the hybrid between the fox and the dog, I have found that my own observations and enquiries confirm the conclusions arrived at by the natural history editor of the 'Field.' So far as I know this book is the first which has collected together the facts

known about the natural history of the fox, his intelligence, and his place as a beast of chase. The standard natural history books always say that the 'habits of the fox are too well known to need description.' 'The Life of a Fox,' though full of interest and keen observation, deals chiefly with the creature from the point of view of the huntsman. Thus I am not without hope that both naturalists and sportsmen may find these pages worth reading.

The latter class cannot but find more interest in their sport when they have some idea of the habits and intelligence of the very remarkable little animal they are hunting. My own experience is that natural history and sport are allies, and that the naturalist and sportsman add to their pleasure by some knowledge of each other's pursuits. Besides the above sources of information I must acknowledge the sympathy and assistance I have received during the progress of this book from Miss Alys Serrell, of Haddon Lodge, Dorset. In her knowledge of hunting and in the keenness and accuracy of her observation she is equalled by few writers on sport.

It is perhaps needless to say that to write

this little book has been to me a labour of love and a constant pleasure from beginning to end. I have undertaken the task with the more confidence because I feel that a book illustrated by Mr. Thorburn and my old friend Mr. G. D. Giles could not in any case lack attractions for the public. I have added a chapter on the jackal because he is to the East both in literature and life what the fox is to the West. I think too that this chapter may increase the usefulness of the book since it contains the practical experiences of one who for some time whipped-in to and then hunted foxhounds after jackal in the East. In addition to my own experience this chapter includes the lessons taught me by Major Henry Clerk, late of the Queen's Bays, under whom I learned the work of a whipper-in and huntsman as well as how to manage hounds in kennel in a hot country.

Such as the book is I send it out in hopes that it may interest my fellow sportsmen and field naturalists and be found not unworthy of the admirable series of which it forms a part.

T. F. DALE.

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BY

A. THORBURN AND G. D. GILES.

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THE FOX

CHAPTER I

THE NATURAL HISTORY OF THE FOX

THE survival of the fox is the most notable fact in his natural history. This he owes to his adaptability to changes of food, climate, and surroundings. For, of all the carnivora, he has, with the exception of the otter, the widest geographical distribution. The fox is at home in Europe, Asia, including India, a great part of Africa, the whole of North America, and a distinct but allied species, *Canis Virginianus*—known as the grey fox in the United States—is found in South America.

The fox has few friends and many enemies, and yet is probably as numerous as ever he was. Everything turns to his advantage. The plans of his enemies are often discomfited, and as in fable, so in real life

the fox not only escapes but benefits by the efforts made for his destruction. Even the fox's worst enemy, man, helps him by killing down the wolf, the strongest, swiftest, most persevering foe he has. The fox-chase, which began as a genuine vermin-hunt, is now the best protection the race has in England. During the last hundred years the number of foxes has increased enormously in this country.

But, indeed, wherever the fox has come in contact with man he has been of importance in the literature and life of his most subtle enemy. The truth about the audacity, cunning, and intelligence of the fox is so marvellous that it is no wonder that he has become a popular hero of fable and folklore.

At one time I thought the fox was fairly well known to me, but the observations and inquiries on which the following chapters are based have shown how much there is still to know. After many years' study of the fox we shall find that he is most difficult to dogmatise about. His intelligence is a most profitable study in animal psychology, of which it has only been possible to skim the surface here. I have tried to verify my facts and anecdotes and to avoid reading into them my own preconceived ideas and theories ; and I hope they may be accepted as

a contribution to the history of an animal which is interesting alike to naturalists, historians, and literary folk. The story of the fox touches that of mankind at innumerable points.

The common fox has, we have seen, a wide geographical distribution, and thrives in many countries, under various skies, and among widely different surroundings. But he is very much the same in internal and external conformation, and in the shape of his skull and his teeth, wherever he is found. These last two distinguishing points, indeed, are so much alike that it is difficult to distinguish species among foxes. Seven are acknowledged besides the common fox. The majority of foxes are varieties of our English fox, and will be touched on in these pages very lightly, our main concern being with *Canis Vulpes*, the little red rover of sportsmen, the Reynard of fabulists, poets, and mythologists. Wherever we travel we meet him. He may vary much, but the Himalayan fox, the red and cross foxes of America, the silver fox of the North, the khaki-coloured fox of the Nile, the slate-coloured fox of Thibet, are all specifically identical. In the same way there is but one fox in England, the 'greyhound,' 'mountain,' and 'cur' foxes being quite imaginary distinctions.

But having made clear that the fox is the same wherever we find him, we see that he is subject to great variations in colour, size, and weight. This tendency to modification in minor particulars may be perceived by examining carefully any collection of foxes' masks. It will be noted that the size of the heads differs, that some are rounder in the face and shorter in the snout than others. The differences are so great that it would be easy to believe the animals are of distinct species.

Again, a fox varies in colouring according to the country he lives in. Since concealment alike from his prey and his enemies is an immense advantage to him, we are prepared to find that his coat harmonises with his surroundings in such a way as to make him invisible at a short distance. Thus the woodland foxes of England and the foxes of the Himalaya are red in colour; the Scotch fox is of a grey that matches with the heath and rocks of his native haunts; the Asiatic variety of *Canis Vulpes* known as *V. flavescens* is a sort of yellowish-khaki colour. Nor is this all: foxes vary in colour in the same district, but always, I think, in such a way as to assist their concealment. I have also noted how foxes when hunted, as the fur loses its brightness, become more and more difficult to see, so that in a plough

country a fox travelling up a furrow is almost indistinguishable from the surrounding earth. Another variation of colouring is in the white tag to the tail or brush. Some foxes have it, others are without it. It was believed, and perhaps some people still think, that only dog foxes have the white tag. As a matter of fact I do not know that it is more common in one sex than the other. But these old beliefs are not as a rule without foundation, and I should not wonder if there proved to be a majority of dog foxes among the white-tagged ones although we have no figures to go upon.

It is not surprising to find many abnormal colours in a race so variable. White foxes are not indeed common but are fairly frequent. In 1898 a white fox was seen in the Roborough Woods, a covert belonging to the Stevenstone (Hon. Mark Rolle's) country. There has been one white fox killed in Essex, and two in Somersetshire, one of the latter being preserved at Cothelestone Hall,¹ near Taunton. There was also an instance in Kincardineshire; but this fox is believed to have come ashore from the wreck of a Norwegian vessel and was probably an Arctic fox (*C. lagopus*) which is one of a species distinct from our common fox. Black foxes also are reported from

¹ Mr. C. J. Esdaile, of Cothelestone Hall, tells me that he knew this fox from the time when it was a cub.

time to time. Those in the Midlands are probably descendants of some Sardinian foxes turned down, it is said, in the Belvoir country, or of the long-legged variety, often imported, known as *V. Melanogaster* from the dark colour of its under parts. This variety is also found in Italy, the Ardennes, and Scandinavia.

The fox is a member of the family *Canidæ*, a notable and ancient race of which the foxes at all events belong to the old world, no fossil remains having been found in America up to the present time. Although the *Canidæ* are remarkable among the families of the animal kingdom for their similarity in structure and habits, yet the fox diverges from the rest of the dog family to such a degree, that the late Professor St. George Mivart considered it possible that the wolf and the fox may be among the instances of animals much resembling each other in structure and habits which are yet developed from widely differing originals. The dog, the wolf, and the jackal will interbreed, and in some cases the hybrids are fertile. But the fact of a cross between the dog and the fox still remains to be proved.

Although, however, the existence of the cross has not yet been proved, many competent observers believe that it occurs. Mr. T. Smith, the author of 'The Life of a Fox,' certainly thought that such

crosses exist. Miss Serrell, the author of 'With Hound and Terrier in the Field,' assures me that she knows of an undoubted instance, and while I was writing this chapter a most interesting article appeared in the Natural History column of 'The Field' (September 30, 1905), entitled 'Wild Dogs in Spain.' Mr. J. G. Haggard, the British Consul at Malaga, communicated to the 'Field' some notes respecting these animals. He remarks their resemblance to the fox, and we cannot but be struck with the similarity in the measurements he gives to those of our foxes. Mr. Haggard writes: 'In colour, the animal is yellowish-grey with long grey hairs interspersed' (this might stand for a description of many fox-skins I have examined), 'and it is very long in the leg for its size, like all the Spanish foxes. The dimensions roughly taken are as follows: From nose to tail, 30 inches; ear, $3\frac{1}{2}$ inches; foreleg, $7\frac{1}{2}$ inches; hind leg, 9 inches; tail, 11 inches. Of course, I cannot tell the age of the animal, but it seems to me much larger than the English fox.' A comparison of these measurements with those of the typical skin given on p. 203 of this book will show that the animal measured by Mr. Haggard was shorter in the body, but higher on the leg, than the average of English foxes. The above was referred to Mr. Abel

Chapman, and he notes the likeness to a small breed of Spanish sporting dog, which is popularly believed to be a cross between a fox and a dog. Mr. Busk confirms this, and writes that the animal was probably a Podenco or Andalusian rabbit dog of the variety known as the 'Caleva or Paterna breed.' This strain is popularly thought to have originated in a cross between a fox and a dog (bitch). I have often heard of such dogs taking to the hills and living wild, preying on sheep and goats and exhibiting much of the astuteness and cunning of the fox and wolf in keeping out of the way of human beings. The editor of the 'Field' remarks on the likeness of the animal, of which a careful drawing illustrated the article, to the Spanish fox (*Melanogaster*), and, he goes on, its general aspect 'appears to lend some support to the popular belief in Spain, that when domesticated dogs run wild, as they sometimes do, and take to preying for themselves, they occasionally mingle with the fox of the country and produce a litter of hybrids.' These facts could not be passed over, but they hardly amount to a proof; and it is equally possible that the Podenco may be a descendant of a dog-and-wolf cross, degenerate in size through selection for many generations by Spanish sportsmen.

The protective colouring of the fox, and the advantage this must be to an animal which is both hunter and hunted, have already been noticed. If we examine a number of the skins of the fox, we shall find that scarcely two are exactly alike. Protective colouring in animals is a most interesting topic, but it leads to puzzles which we cannot solve. Perhaps the will of the animal has something to do with it, and I seem to trace a faint clue to the connection between the protective colouring and the mind in the intense desire of the fox to remain concealed and unseen. This is one of the dominant motives of the fox's life. That this is a possible theory we infer from the fact that a blind animal does not change colour. Put a dozen minnows into an ordinary white wash-hand basin and they will in a very short time be of a pale colour. If over one no change passes we may be tolerably certain that it is blind. There is probably some connection between the animal's sense of incongruity with the surroundings and this change.

Foxes are the smallest of the dog family. The biggest fox is but a small animal, no larger on the average than a wire-haired fox terrier. I have collected as many instances as I could of the various weights of full-grown foxes, and I can find none so

light as 10 lb., and no authenticated weight over 26 lb. Scotch, Welsh, and Lake-country foxes are rather above the average of English. Joe Bowman, of the Ullswater Hunt, whose hounds, in common with other Fell-country packs, never break up a fox, has weighed many hundreds of foxes, and gives the average weight of a dog fox as 15 lb. and of a vixen as 13½ lb. He has never, he writes to the 'Field,' killed so small a fox as one of 11 lb., nor one that weighed over 23 lb. His heaviest fox was killed on Cross Fell, where they average rather more than in the rest of the district. Hill foxes are very tough and wiry, and often stand up before hounds for a long time. Strong and active though a fox is, a really good terrier is more than a match for the biggest fox. A little fox terrier named Corby, belonging to Lord Decies, was put to ground to bolt a fox in the Ullswater country. She was underground for twenty-four hours, and killed three large dog foxes which were in the earth, one behind the other. Their total weight was 62 lbs.

Even the characteristic odour of the fox is variable. It is much less in some individuals than others. The pretty little fox of Bengal and the swift, graceful desert fox of Scinde, leave little or no scent, but they will give a capital gallop with a

couple of not too fast greyhounds. Their turns and twists are very rapid, and the dogs are easily unsighted by them. More often than not, the fox escapes by going to ground, and my recollection of our courses is that the kills were few. I have more than once found them in the Punjab when drawing for jackal with foxhounds, but the pack could seldom run them farther than they could see them. Major Clerk, who was Master of the Queen's Bays' Hounds, told me, however, that he had a few good gallops after foxes in the Punjab.

It occurs to me that individuals may vary in leaving a scent, more or less strong, and that the fact of some members of the fox family being deficient in scenting qualities may be a confirmation of this theory, which is held by many hunting men. If closely allied species differ in this respect, why not individuals, since all general variations probably arise from the inheritance of individual peculiarities? It is easy to see that the Asiatic foxes gain greatly by the absence of scent, for with it their presence would be made more evident to wolves and leopards, both of which animals destroy them. The advantage of scenting powers to the English fox, a widely scattered, solitary species, is obvious. It need not surprise us to find intermediate variations, and it is noteworthy

that the foxes which have no scent are more social in their habits than those which leave a trail behind them.

Our English fox lives alone the greater part of its life. For a short time in the breeding season foxes pair, and just before and after the cubs are born the old fox feeds or helps to feed the vixen and her young. In the breeding season the dog foxes fight fiercely, and I have very little doubt that a good many of the weaker ones are killed by the old dog foxes in these contests. How fierce these fights are the following instances will show. On one occasion two foxes were fighting so savagely that a man and a dog were able, unnoticed, to approach quite close to them. The man watched them for some time before they parted and crawled away wounded and blood-stained. On another occasion a man saw two foxes fighting and intervened to save the life of the smaller fox. He had to hit them several times with a stick before they would separate. This throws light on the boldness of the fox at certain seasons, and helps to show that foxes pair after having fought and won the lady of their desire. It is at such times that foxes lose some of their cunning and caution and often fall victims to their enemies. That foxes pair is also shown by the fact that while in the spring hounds

sometimes find a dog fox alone, the vixen is seldom or never seen by herself. At such times if there are two foxes in covert the first that goes away is always the dog, and he is possibly endeavouring to lead the pack away from his mate. If left to themselves the fox will feed his vixen, and if the vixen is killed he will bring up the family by himself. The wants of a fox family are large, but they have some ingenious labour-saving devices.

Some years ago my attention was drawn to a story in the 'Field' of a woodcock left outside an earth in which was a vixen. The earth was stopped, so that it must have been in the hunting season just before or just after the cubs were born. No doubt a dog fox had brought it for the vixen within. The fact excited notice, for woodcocks are not common in the neighbourhood. Under the woodcock's wing were packed neatly two young rabbits. This curious method of packing the food is common, for not very long after this a vixen that laid up near my father's house made a raid on our poultry, and as she selected some rather choice game fowls there was great lamentation. One morning early the vixen was caught in the act of making off with a hen. A stable-boy saw the robber and hurled a stick. The old vixen dropped the hen. When we came to examine

it there were four chicks neatly packed under the wing.

Pictures and a once familiar nursery song represent the fox as catching birds by the neck and swinging them over his shoulder. I have never seen a fox do this. A fox carries its prey in its mouth exactly as a retriever does, and the habit I am describing accounts for this. Since then I have heard of a grey hen found in Norway with eleven small capercailzie and a mouse under its wing, and no doubt this is a common habit, for again the advantage of it is so obvious where a vixen has herself and four or five hungry cubs to feed.

Nearly all the *Canidæ* lay up their young in burrows, and the fox generally, but not invariably, does this. Looking at the animal's limbs, made as they are for activity and speed, we should naturally conclude that it was not an accomplished excavator. The fox either takes advantage of natural caves and crevices, which it enlarges if necessary, or he enters on the labours of the badger or the rabbit. In some cases where the soil is unsuitable—also I think in districts where the earths are much disturbed—the vixen fox makes a nest for her cubs above ground. Stub-bred foxes are not uncommon in the Oakley and Fitzwilliam and in parts of the Craven countries.

There is no suitable place that a fox will not use for the purpose, and I have known cubs to be found in a hayrick, under the floor of a barn, and once actually underneath a house, the master of which was supposed not to be too friendly to foxes. Possibly the vixen selected this as being the place where her enemy was least likely to look for her. When, however, cubs are found in these unusual places, it is probably true that they have been laid up elsewhere and have been removed, as the custom of the fox is, to a new resting-place.

An interesting question meets us here: what are the relations between the fox and the badger? Exactly what these are is by no means clear. At first we should be inclined to think that the badger and fox would never get on together. The badger is the most cleanly of animals: his earth is always kept sweet, and he removes all droppings to little pits at some distance away which he digs for the purpose. The fox is far from fastidious in his habits: he leaves loose feathers and bits of wool about in a way which must be highly disconcerting to the orderly instincts of the badger. Besides this, the fox sometimes buries what he cannot eat, and leaves it until it becomes high. The badger, like other tidy people, is rather short in its temper, especially Mrs. Badger when she

has cubs. The fox and the badger probably lay up their litters about the same time. But two things are clear, and these are that the foxes and badgers do sometimes live in the same earths, and even lay up their cubs in them, though always in different chambers. You may, for example, open an earth and to the left of the entrance find badgers, and to the right foxes. I think, however, that in most of these cases the fox has laid up her cubs elsewhere and has removed them, finding the badger's earth a convenient place, and possibly the badger, which is an excellent fighter under covert, something of a protection against invading terriers. From the Exmoor, West Somerset, Fitzwilliam, Belvoir and Blackmore Vale hunts, I have collected instances of foxes and badgers living in the same burrow ; but that all is not peace is clear from the instances of vixens and cubs killed by badgers given by the late Tom Firr, huntsman of the Quorn, and by Mr. Pease. On the other hand the badgers not seldom desert the earth when occupied by foxes, perhaps disgusted by the dirty habits of the latter. But another point is clear : that the occupation by the fox must be by the permission of the badger, which has might as well as right on his side. It is probable, therefore, that such commensalism must bring some advantage to the

badger, though what that is it is difficult to see. One solution suggests itself to me, that the badger, which cannot be much of a hunter, obtains animal food by robbing the fox on its return from hunting. May not the badgers at certain seasons require more nourishment than they are able to catch for themselves? If it be contended that the badger is not a carnivorous animal, we reply with the question of the old keeper, What are his teeth and jaw for then, and why is he so often caught in traps baited with wild rabbits? Possibly the rabbit is the key to the mystery, and the alliance between the fox and the badger is strictly on the *do ut des* principle of the late Prince Bismarck.

Fox cubs are born, as we have seen, towards the end of March, and probably Mr. Tom Smith was right when he wrote that most of them are born within a week or two before or after Lady Day. There are, however, many instances of early and late cubs, for the fox is constant only in one thing—its variability. Foxes are born blind and remain so for eight days. The cubs are pretty little fluffy, snub-nosed things, rather dark in colour like young Irish terriers. They are suckled by the vixen for about a month, and it is at the end of this time that the mother moves them if she means to do so.

The fox cub is born into the world at the season when food is plentiful, and especially rabbits, rats and birds are young and tender. It is then, as we shall see, that the old vixen is most dangerous to young broods.

Nothing comes amiss to foxes, young and old, and their bill of fare is very varied, including insects, particularly beetles, some fruits and berries. But nevertheless vixens are often hard put to it to find food. Probably insufficient nourishment of the vixen before and after her cubs are born is one of the contributory causes of mange. At such times, no doubt, the vixen is more likely to rob a hen-roost or raid a partridge's or pheasant's nest, than at others ; for I believe that under ordinary conditions the vixen does not plunder the farmyard or the coverts in her immediate neighbourhood when, as is sometimes the case, she lays up her cubs near the dwellings of man.

I find, as the result of many inquiries, a very general opinion prevails that the vixen does not as a rule seek her prey immediately round her earth. Not indeed because the fox would have any objection to violate the laws of hospitality or the rules of neighbourly conduct, but that she has a great desire to conceal her cubs while they are still helpless. She

is anxious to avoid betraying their hiding-place, and for this she has good reason. Foxes had, and have still, a pecuniary value, and the dangers to the young family are many. First there are the fox-stealers, and the methods of these men are often ingenious. The most effectual plan is to send a small terrier, trained to the work, into the earth, to bring out the cubs uninjured, one by one, in its mouth. The Hunt servants often have orders to move cubs from places where they are not safe, to others where they are more welcome. The farm labourer sometimes, and the keeper often, digs out and destroys what he considers to be a superfluous litter. Thus the vixen has many dangers to fear. Like all animals of prey, the fox instinctively conceals itself, and it requires no effort to believe that the vixen will not betray the whereabouts of her earth if she can by any means conceal it. But hunger is the supreme law of the wild animal, and the creature left entirely to her own resources, and less strong and active than usual, may, and doubtless often does, forget her caution.

At other times the vixen simply places the cubs in a nest above ground ; and this I think depends a good deal on the age at which the cubs are moved. Foxes are said to travel long distances carrying a cub. If we consider that a litter may consist of four

or five, and that the fox can only carry one at a time, the courage and endurance displayed are very great, and a comparatively short distance between the new refuge and the original earth would add up into a considerable journey. But the vixen is a most courageous and devoted mother, and instances are not at all uncommon of one having been seen in front of hounds carrying a cub in her mouth. There is an objection to stub-bred foxes and to the plan so often advocated of closing all earths permanently, since litters laid up above ground must be in considerable danger of being snapped up as unconsidered trifles by the hounds during the latter weeks of hunting.

A varied diet is necessary to the fox's health, and I have no doubt that when foxes are fed artificially, the want of insect food, and perhaps of the fruits and berries with which they vary their diet, is injurious to their health and is another contributory cause of mange. I am of opinion, judging by the quantity of beetle-cases and other similar remains which may be discovered in or about a fox's earth, that insect food plays a very considerable part in the economy of the fox family and has much to do with the rearing of healthy cubs.

Miss Serrell has told me the following anecdote: 'For several years in succession a vixen

came regularly to the back of my kennels to search for bones on the rubbish-heap at the bottom of the orchard in which they were situated. I often saw her and suggested to the keeper to put a dead rabbit for her. The first night she did not touch it. It was then lightly buried ; she immediately dug it up and afterwards came regularly for her meal. One evening, going down to feed the terriers rather later than usual, after flinging open the kennel doors to let the dogs have their run, to my dismay I spied the vixen on the top of the straw hunting for her meal. Walking backwards and whistling softly to the dogs, I drew their attention the other way, while the fox crouched down quite still ; had she attempted to run, they would have seen her, and then alas ! 'poor fox !' The same careful and accurate observer goes on to say : 'A vixen will fight courageously in defence of her cubs, and I have several times known a vixen to attack and drive out a terrier from the earth.'

It is strange, but a dog which will attack and kill a fox under ordinary circumstances will not always fight when the tables are turned on him. On one occasion a terrier accustomed to bolting foxes followed a rabbit into an earth where a vixen had laid up her cubs. Very quickly he

came flying out followed by the vixen. She chased him right across a field, and knocked him over twice before he gained the shelter of the cart in which his owner was. When the man shouted the vixen reluctantly abandoned the pursuit and trotted slowly back, whisking her brush in the way foxes do when angry or when stalking their prey. There was another vixen that lived in the shrubbery of a house where foxes were much respected, and she was frequently seen to dash out and attack any passing dog. The dogs invariably ran away, leaving her mistress of the situation.

The fox comes to maturity at from eighteen months to two years, and lives about twelve to fourteen years. Probably very few fulfil their natural span of life. But a certain number do, and these learn so much by experience that it is very difficult to kill or trap an old fox.

No doubt the animal's habit of killing and burying the food that is not wanted for immediate consumption is a survival. Moreover, the fox, like the dog, buries his food lightly so that he may the more readily remove it when it becomes a little high, in which condition he certainly enjoys it none the less. When the animal buried is a rat, he leaves the tail above ground, whether as a sort of help to finding it I do not know. At all events all the dog family bury their food and generally leave something sticking out,

A retriever that used to kill chickens had two fox-like habits : she always went some distance for her victims, and buried them near her kennel. But she invariably left their tails sticking up out of the earth, thus leading to detection and punishment.

The fox has the worst possible character as a robber of hen-roosts, but this is rather a vice than a habit. The creature is credited with many more depredations than he commits. All the destruction wrought by stray dogs, by prowling cats, by rats, stoats, and above all by human thieves, is put down to the fox. The mischief worked by the fox is often compensated for, that of the others is not, therefore the fox has the blame of misdeeds not his own. A friend of mine who lives near a famous fox-covert tells me she has never lost a bird. The fowls are let out late and shut up early in the winter. Thus as the fox comes out late and returns early they never get in his way. More than half the losses in poultry are occasioned by carelessness, and insufficient fastenings or rotten buildings. It may be noted that more chickens are lost through bad management and unhealthy dwellings than by any depredations of the fox. Nevertheless no one can doubt that foxes do in one way or another destroy much poultry in the course of a year. It is all the more reason why they should not have the credit of mischief they have not done.

CHAPTER II

THE EDUCATION OF THE FOX

THE life of the fox is, and always has been, that of both hunter and hunted. He has been an object of pursuit by other animals and (at all periods since they have existed on the earth together) by man. Thus a fox is continually either seeking for and pursuing his prey, or endeavouring to evade his enemies. Of these the first probably occupies by far the larger part of his time. Hunting is his life ; being hunted, but an episode. For these two ends a fox is educated by three teachers : Nature, his mother, and his enemies.

The foundations of his training are the instincts of his race. There have been many theories put forward, but the problem of instinct remains to be solved. It is possible that what we call instincts, so far as they are capable of adaptation by intelligence, are a kind of tribal memory. The life of the lower animals is short, and they have not the time to store up all the



'HUNTING IS HIS LIFE'

experience they need. So, just as we have glimmerings of some past existence which perhaps is not individual but that of the race, so young animals inherit a store of experience as much greater than that of the child as their time is shorter.

The method by which this stored-up experience from the past history of the race is made available is their play. Those who have watched fox cubs must have noted how complete a rehearsal of the whole drama of the fox's life—love, war, hunting, and escape from his enemies—is the play of the young foxes. In those first months their muscles are made supple, their senses keen, by practice and exercise, and the experience of the race is called out of the past and made of service for the present. The fox's liking for secluded situations for its earth often renders it possible to observe the life of the cubs. In many cases the earth is under a rock or rough cluster of roots, on the side of a southern slope. The fresh-drawn earth catches the eye among the many-tinted undergrowth. The fox-earth in some coverts is not hard to find, and many of them have been used for a long time. An established burrow may be drawn by the vixens and used for a century, and there are some well-known earths in hunting countries which must have been occupied every spring for quite that time.

While watching cubs at play it is well to remember that if a vixen suspects the presence of man she will move her offspring. One of the earliest lessons the cubs learn is to fly at the first thought of danger. They learn this partly from their mother and partly because it is one of their race experiences. If the cubs are ever so eagerly engaged in play, when the vixen utters a warning note they are gone. The idea that the earth is a place of safety when danger threatens remains with them, and although foxes spend most of their active life above ground, yet the earth is always a refuge to be sought in the moment of danger. I have known a litter bred in a small spinny to return thither when hard pressed from coverts many miles away.

A litter of healthy young foxes scatters widely over the country, and its members occupy suitable quiet spots. I know a covert of no very great extent which is kept quiet and where there are always foxes. This covert has been drawn forty times in succession and never once blank. There is no earth at all in it, yet the supply of foxes never fails.

As soon as the young ones can move about they come to the mouth of the earth when all is quiet. The first game is hide-and-seek, at which cubs display great activity and cunning. In almost every litter I have watched, there is one cub larger



WHEN ALL IS QUIET

Illustrated by
Amelia T. H.
1900

than the rest. He is, it must be confessed, something of a bully. But I think that it is distinctly an advantage for the race that one of each litter should be bolder, stronger, and cleverer than the others. In the event of the mother being killed, which often happens, this cub, I believe, acts as a kind of leader and tutor to the others. In one case a rather dark-furred cub with a white tag to his brush was considerably in advance of his brethren, whom, however, he led a sad life, yet greatly, I have no doubt, to their benefit. He would go some distance away and then carefully stalk them, creeping, crouching, crawling stealthily onwards till he would pounce suddenly upon them, apparently to their great terror. Thereupon a great fighting and snarling arose, which was sometimes quelled by the mother. On one occasion when the old vixen brought back a crippled rabbit (in this way does she teach the cubs to kill) the dark cub was the first to seize and worry it, the others being apparently half afraid until their stronger brother showed the way. Though cubs are of course all born at the same time, the privileges and duties of an elder brother always fall to one, and he is, I think, invariably the favourite of the mother. I can well imagine this stronger cub leading the way in forays, if the vixen should—as many do—lose her life early in the spring or summer. By example this

cub will teach the others to fend for themselves, for young foxes have to learn every detail of their craft. If you put a litter of foxes without a vixen into a strange covert, they must be confined and fed for a time, or they will wander away and starve in the midst of plenty, because they have not yet learned how to live without help. So in their play the cubs practise diligently, and every leaf that flutters in the wind, every insect that crawls, they stalk most scientifically.

It is very curious how cat-like in many ways a fox is: it has the canine structure but the feline strategy. The waving of the brush slowly backwards and forwards when food is in sight or expected, and when stalking, is very noteworthy. When the vixen is heard or winded returning to her cubs the little brushes begin to wave, not, I am convinced, as a dog wags its tail, but as a cat or a tiger sways its tail when meditating an attack. This curious slow movement may be of assistance to animals when stalking their prey. The movement in the grass behind the creeping foe may attract the eye and help to conceal the crouching danger. Like the devices of the conjurer to distract our gaze from what he does not want us to see, so the fox or the cat with gently waving brush or tail distracts the eye of the intended victim.

Before the young fox wanders far from home it has learned something of stalking and killing its food. It has kept its muscles lithe and supple by ceaseless play. It has learned caution, yet has not an old head on young shoulders, for no animal learns more by experience of life than the fox. Trappers tell us that old foxes learn to spring the trap and take the bait, and to avoid even the most tempting bait that has the least taint of man—whose odour is at least as unpleasant to the fox as his is to us. I have elsewhere given my reasons for thinking that after a long experience many old foxes seldom or never allow themselves to be hunted at all. But still the young fox has been taught much and remembers more, and when he leaves the earth and follows his mother on her hunting expeditions, the next lesson he has to learn is to know the country thoroughly. The foxes that have no mother never learn this. Vixens, and especially old ones, are for this reason necessary to sport. How few such there are in some countries we know. Even where the vixens are not shot as soon as the cubs can feed themselves, they are often young and thus know but little country—nor have they need to. The keeper, in perfect good faith that he is a true preserver, because he has killed no foxes, shoots

rabbits for the vixen and cubs, and practically keeps her so well supplied that she has no occasion to hunt.

Foxes learn a country, not as we know it, in a general way, but in the most minute and detailed manner. The places where is the best hunting are the points, and between these are many things useful for a fox to know. For instance: how a field can be crossed without his being seen, where a small lithe body can slip swiftly and easily through a hedge, where a drain gives a temporary hiding-place from sudden perils.

The range is varied by the fact that at different seasons of the year the fox finds his prey in different places. In the summer the hedgerows and ditches are excellent hunting-grounds, and nothing comes amiss to the fox. He catches a beetle, digs out a nest of field mice, snaps up a foolish young bird, stalks the rats in the hedgerow and the hares in the open field. In autumn and winter the fox gleans after the shooters and picks up the wounded birds and beasts. For he is, though a hard-working animal, ever ready to avail himself of anything that may save trouble. Where foxes are preserved they naturally haunt the shooters' footsteps, but it is not unlikely that shooting draws them to a covert.

I have certainly seen on several occasions two or three foxes in coverts where I believe there were, as a rule, none at all. When the shoot is over the keeper looks out for them, but they are gone. A fox always works back to his own lair, whether that be above ground or below. Thus many a covert-owner has the credit for foxes he has not, because one or two have turned up in the course of the day attracted by the firing. We know that the fox is very keen to interpret all scents and sounds that suggest food or danger, and various devices to protect nests of game birds, after being useful for a time as a deterrent, have in the end acted as a signpost to direct the fox to them.

When the vixen ceases to train her cubs, all nature combines to help on his education. Clever, active, and patient, the fox finds that other animals have these qualities. Life is not all play, though there is much pleasure. There is no doubt that in hunting there is keen pleasure which, in our case and in that of the hounds, has survived the necessity of seeking food. The fox unquestionably enjoys his hunting as well as the food it brings.

One of the first things a young fox learns for himself is the use of his nose. He is gifted with a very delicate sense of smell. I have thought

much on the nature of scenting power, and I think in the economy of an animal's life it fills somewhat of the same place as speech and reading do with us. A fox reads, as it were, with his nose the information he requires, and the older foxes gain more and more skill in interpreting the indications given by scent to their nostrils as time goes on. The sense of smell is in the animal so infinitely more effective than it is with man, that it is as difficult for us to conceive what scent can tell them as it is for the animal to understand our language. Scent to the animal is language spoken and written, and the nose fulfils part of the work which his eyes do for man ; and as we learn by degrees to interpret what we see, so does the fox what he smells. Nothing is more certain in animal psychology than that animals learn by experience, and that life and time are for them, as for us, teachers. Thus the young fox begins to learn to read Nature by her odours, a power of which we have only an adumbration when the scent of a flower recalls the past. The pictures called up to us by scents are but dim compared with the vivid images the fox's brain receives from them. We see how valuable this delicate sense of smell is to an animal of nocturnal habits. As the fox goes out on his nightly search

for food, his nose conveys to him a complete picture of his surroundings. Nature, as far as she interests him at all, has no secrets from him. He knows at once where the brood is by the scent of the egg-shells left by the chicks. He detects the young rabbits in their nest and digs down on them ; the way of the marauding rat in the hedgerow is plain to him. A whiff of a man or a dog is enough to make him alter his course. Every opportunity, every danger is clear to him, and he can seize the one and avoid the other. Animals have one advantage over men, that they have seldom a doubt as to the course to be pursued.

A fox is no doubt affected by the conditions of the atmosphere which make scent better or worse on particular days for the hounds. It is perhaps his own experience of the night before, which gives him the knowledge he seems to possess, of the strength or weakness of the scent he leaves behind him. It is an almost universal opinion among huntsmen that a fox regulates his pace and methods by the strength or weakness of the scent he leaves. This is probably correct in many cases, and so, too, is the opinion of 'Nimrod,' that a fox is affected by the cry of the hounds, and as that waxes or wanes so he goes faster or slower. A fox accommodates his

pace to that of the hounds, and as 'Nimrod' well puts it : 'The fox in front of the slow hound is, I should say, nine times in ten not a yard farther ahead than he would be before the quick ones.' This is true in most cases, though no doubt there are exceptions, as I shall presently show.

But to return to the education of the fox. When his mother and Nature have finished with him, and he has, as a well-grown cub, every equipment of knowledge necessary, and only lacks experience, man comes in and teaches him the next step, for in August and September the coverts are disturbed. Up to this time the cubs have hunted in concert, led by the vixen. One morning the cubs come home from their nightly prowls to find the earths stopped. They make a futile effort to scratch in, if they are not frightened away by the smell of man and dog in their familiar haunts. It is scarcely light, the pleasant misty gloom of a fine autumn morning hangs over the trees, the air is moist with a heavy dew, the faint chill of dying summer is in the air. Then the wood is full of sharp noises. If instinct is in part tribal memory serving where, owing to the shortness of life, personal experience is insufficient, the sounds of the hunt wake faint reminiscences, and the cubs are on the move. It may be, however, that the vixen, who warns

them of so many dangers and teaches them so many things, instructs her young as to the dangers of being hunted. But heredity and training have already made the young fox an evasive, elusive, and wary animal. The cubs avail themselves at once of the advantage of the thick undergrowth. They know every passage, and an animal which can at a pinch squeeze through a six-inch drain-pipe finds it easy to move about in the strongest covert. On the other hand the great blundering foxhound puppy, half wild with excitement, with the scent of the fox in his nostrils, the maddening cry of his fellows in his ears, and the hereditary joy of the chase thrilling his whole nature, crashes through the undergrowth and comes out at last, half smothered with heat and torn by brambles, into the grass ride for a breath of air, as a diver rises from the water. The scent at first is catchy, but as the air grows warmer it holds better. The young hounds grow steadier, and the advantage is less and less with the fox. The heat becomes overpowering in the wood, and it is possibly again a reminiscence of the experiences of his race when he realises that he must die or go away. Now we see an instance of a truth too often forgotten: that while what we call instincts are common to a whole race, they exist in very varying degrees in individuals.

There is as much tendency to variation in the strength of instincts as there is in intelligence and outward form. Thus we note that the instinct to evade, even among cubs of the same litter, takes a different form in different individuals. One, weary, frightened, and heated, thinks of some other covert. He has once gone there to hunt rabbits. It seems as if anything were better than this hideous turmoil of his native woods. He slips down the ditch, hits off a well-known smeuse in the hedge, and makes his way over the cool grass-field. The fresh morning air gives him new life and vigour. He has not departed unnoticed. Jim, the first whipper-in, has viewed a fine clean cub. He is ready as two promising puppies hit off the line and scramble through the hedge. Throwing their tongues frantically, they bring half the pack out into the field, crack goes the thong into their faces, 'Get awaay baick !' and at the same moment another chorus arises in the wood, the puzzled hounds dash off, and have soon forgotten their disappointment in the excitement and savage joy of a kill and a worry. They, like the men who follow the hunt, shed for the time the polish of domestication and civilisation and return gladly to the primitive state. It is interesting to note that those are the happiest moments of our lives when we can forget for a time an existence to which civilisa-

tion has brought slavery and suffering to man and dog alike. But the little fox three or four fields away, striding along in the full joy of his life free from the sounds of pursuit, has made a great step in his education. It is safer to fly than to stay, and when he returns, as he certainly will that night or the next day, to the covert he was born and bred in, the lesson will be enforced by the traces of dog and man, and perhaps by the taint of blood about the place. Nor will he forget it. If it is a large woodland our fox shifts his quarters ; if a small one he very likely leaves altogether for some less haunted spot. Thus the litter is scattered, and the young foxes are thrown on their own resources and adopt, until the next spring, a solitary life. Each hunts and kills for itself. Each has its own lair where it sleeps, though it always keeps the main earth where it was born in its memory as a possible refuge.

Although foxes return to their earths when pressed, I am inclined to think that few of them till after their first breeding-season have any regular underground habitation, going to ground in drains and rabbit-holes when necessary as occasion offers. Henceforward the fox, having escaped by flight, will most likely follow the methods of escape which he has found successful hitherto. In the same way, possibly,

one of his brothers or sisters, more likely the latter (for the vixen has probably a much stronger instinct for going to ground than the dog fox) has slipped into a drain or rabbit-hole, as his or her powers were failing, and thus escaped. Having done this once it will be tried again and again. Going to ground is a habit that grows on foxes. It is natural to adopt in times of danger a method of escape which has proved itself to be useful before.

Mr. Tom Smith, of Craven and Pytchley fame, had a theory that foxes knew when it was a good scenting day, and promptly went to ground to avoid danger. I do not doubt that foxes have an idea of the scenting properties of the day, but I do not think they go as far as this. Yet Mr. Tom Smith was a most careful observer, and no huntsman has ever understood the nature of the fox better. At all events, the fox who escapes by flight is a much more valuable animal to the hunt than one who goes to ground. Nevertheless it must not be too readily assumed that the fox who goes to ground is a bad one.

Foxes are not always judicious in the places they choose as refuges, and it would probably astonish us if we could know how many lose their lives in drains. I have seen as many as six foxes dislodged from a drain, out of which they could not have escaped.

I have heard of the remains of no fewer than thirteen foxes being found in one drain. A fox takes refuge in a drain: there is no outlet, he cannot work backwards; then behind him slips in another, this makes the matter more hopeless still, and both are suffocated or starved. Again, many foxes are drowned in sudden floods because they have taken refuge in drains or culverts.

There is another use besides a refuge that foxes make of short drains: they run through them, thus causing great delays to their enemies. In the season of 1904-5 I saw a very clever ruse of this kind with the West Somerset hounds. The fox had been driven hard for some distance up to a village; he slipped into a garden or yard, thence over a wall into the road, into and through a short drain, and, strange to say, must have passed quite unperceived up the village street. The pack hunted him over the wall and one or two old hounds marked him at the mouth of the drain-pipe; but as the drain was short and the other outlet was to be seen in the street down which the whole hunt had come, the huntsman, a well-known and clever one, was some time before he recognised the trick, and then the fox was a long way ahead and ran on out of scent.

This and much else the hunted fox learns if he survives, and many are his wiles. One common and very effectual trick is to run up and down the hedgerows. Hounds generally flash over the line at each fence and the fox gains a little time. The day is often far spent, the fox has been hard run, and his scent grows fainter. Time is all on his side. Hounds and men become a little unsteady and excited, and at last the fox runs his pursuers out of scent.

The fox has been known to evade the hounds in many ingenious ways: to swim off to a small island and lie concealed in the rushes, to climb a wall and hide in the ivy. Foxes are very often found in trees. One fox took refuge in an old magpie's nest, and probably escaped many times until, the ruse being discovered, he was turned out and killed. In the Duke of Beaufort's country, where many of the fields are divided by walls, foxes have often been known to run along the top of the walls. Still more ingenious was the fox who found a hole in a rock under an ornamental cascade in some pleasure-grounds where he hid, and was, of course, always lost in mysterious fashion, until at last a gardener discovered the place and it was stopped; but the fox escaped. In the end hounds

drew him out from some leaves in a park, under which he had buried himself. Both these places were well chosen, for the hole was unknown until the gardener discovered it, and a fox lying still under dead leaves would give little or no scent, decayed leaves being, as is well known, bad conductors.

A fox's mind is continually being sharpened as it is pitted against the wits of the animals he hunts and of those by whom he is pursued, until a mature fox sometimes manages never to be hunted at all, or if hunted nearly always escapes. Every hunt has stories of the 'old customer.' The fox that is generally found at home gives a good run, is never caught, and disappears at last. In the first place such foxes beat hounds because they never throw away a chance, and because they are in perfect health and condition. The 'fitness' to run far and fast of an animal that has to work for his food will always be superior to that of one who has his food brought to him as the hound has. I often watched one such fox go away. He was a standing dish in the hunt. If the day was bad we could redeem it by drawing for the 'New England' fox, as he was called, from the name of the covert. Through the gate, down the path, over the stream at the bottom (a tributary of Tennyson's brook, for I will never believe that Somerby brook

was not the original one), up the slope to the low stile behind the tree we gallop. The hounds are throwing their tongues on the far side of the wood. The fox will break soon, for I never knew him fail somehow to leave when hounds were at the farther side. There he goes, a hard-looking customer with an easy stride. He sits up for a minute or two, then glides swiftly on. A holloa brings hounds streaming out. We gallop for four miles hard and straight; then we lose him. Such foxes often disappear altogether. I believe that at last they become too clever to be hunted at all. The least sound is enough, the crack of a whip-thong, the clang of a gate, an unwonted whiff of tobacco, the dull sound of hoofs in the ride, and the old customer is off at once before hounds are in covert and ere the quickest whipper-in can go round to view him: to such perfection has he brought the art of using the ground to conceal his movements. Swift and untiring, he is far out of reach in some distant covert before the hunt has fairly begun. When at last he is overtaken by death, it is age that runs him to ground, or it may be the teeth of some younger rival; or occasionally at last the hounds do catch him when his prime is past—‘a very old fox,’ says the hunting diary; ‘not a tooth in his head.’

His life has not been an unhappy one, for he rejoices in his vitality, his resource and cunning. Whatever else is or is not true of animal intelligence, this at least is certain, that brutes have a pure joy in living unknown to men—except, perhaps, in the first spring of their youth.

But this joy they owe to their perfect training in Dame Nature's school, which fits them exactly for their life.

The fox is perhaps one of the happiest of animals, in being so perfectly adapted for the life he has to lead.

CHAPTER III

THE MIND OF THE FOX

THE fox offers one of the best possible subjects for the study of the mind of an animal. Our friend the dog is greatly affected and influenced by his association with ourselves. He is a leading case of variation produced by domestication. The fox, on the other hand, has always resisted all efforts to domesticate him. It is doubtful if a fox ever becomes really tame. The long enmity between the vulpine and human races cannot be wholly made up. The fox may be to a certain extent sophisticated by the artificial methods used to preserve the race, but he is never domesticated ; he is always at bottom the beast of prey. Yet in spite of his wildness and wariness, whether as friend or enemy, the creature is always under observation, and we know as much about him as it is possible to know about any wild animal. Of our other outlaws, the badger and the otter are still something of mysteries to us. Of their

lives we know little beyond the main facts, and in the case of the badger, even some of these are not quite clear. But the fox, as we have seen elsewhere, has always been accepted as a type of wisdom, cunning, and knavishness. He has always been observed, and has attracted the attention of many notable men. The fox owes something of his reputation, no doubt, to his position as a wild animal, at once familiar and not dangerous, and to his nocturnal habits, which cause a certain sense of suddenness and mystery to attend his thefts and depredations.

Then the fox has the advantage of his beauty and grace, which, as we know, are a set-off even to ordinary intelligence. It is not certain, however, that he is in reality more intelligent than other wild animals. What is clear is that we know more about him. The study of the mind of the fox helps to give us the key to the workings of the minds of other animals, less well known to us than he is.

It seems probable, however, that many things in the history of the race combine to stimulate the fox's mind. Animals who seek their prey by night are apparently among the most intelligent. The fact of working in the darkness stimulates to the utmost the acuteness of their senses, and their mental power is to some extent correlated with the senses of smell, hearing, and

sight. I place the senses in this order because I think it is that of their importance, and we may be greatly helped in understanding the mind of the fox by remembering this.

The intelligence of animals is doubtless limited, but it is most effective within its bounds. The average mental power of foxes is high. There is probably considerably less difference in proportion between the intelligence of the cleverest and the least clever fox, than between a clever and a stupid man. But, then, while our social system is framed for the express purpose of preserving stupidity and dullness, the whole tendency of life for the fox is to exterminate the foolish ones. I have before noted that the remarkable fact in the natural history of the fox is that he has survived. Not only does the creature thrive in those English counties where he is carefully preserved, but he holds his own in countries where he is not regarded with favour, and even where he is beset by the danger of being hunted for his skin. One chief reason for this survival is that the fox, as a race and as an individual, learns quickly and effectively by experience. That peculiar form of racial memory which we label instinct, places the past experience of the race at the service of the individual, and starts the young fox with an equip-

ment of caution, cunning, and wisdom that serves him well. Yet the individual has to use his own mind and add to his experience for his own benefit.

Next to acquiring this experience an important characteristic of the fox is his adaptability of body and mind. A fox can, under those circumstances which come within his circle of ideas, adapt his action to the needs and opportunities of the case with extraordinary quickness. The rapidity and precision with which the body and mind of an animal work together are most noteworthy, and are nowhere more easily observed than in two familiar animals, the fox and the cat.

In the fox the intelligence which is necessary for the survival of the race is very marked, and I think we may assume that if he had not possessed something of the wisdom and cunning with which poets and fabulists have endowed him, he would not have been the successful animal he is in the struggle for existence. We have seen that he is one of the oldest, the most widely distributed and successful, of the carnivora. He is also a small animal, and relatively not very strong : a resolute terrier is more than a match for a dog fox. On the other hand, the wits of an old fox are often more than a match for a clever huntsman and a pack of the best foxhounds in the world, for the late Duke of Rutland gave it as his opinion—and

who could know better?—that when hounds had a healthy mature fox in front of them, the odds were six to four on the hunted animal making his escape.

There was the famous Butterwick Jack, hunted by Mr. Farquharson's hounds in the Blackmore Vale country. The slightest sound was enough to start him. He never waited to be found, but went away at once. He always ran from Holnest to Dorchester, taking the same line. Jack was invariably lost in the water-meadows near Dorchester. Probably he took refuge in a drain, for he was found drowned in these meadows after a flood. Then there was Old Piebald at Ropsley Rise, in the Belvoir country, who was known to the Duke's woodmen for eleven years. He had a remarkably thick pelt, and was grey with age when at last Will Goodall and the Belvoir hounds killed him. Old Piebald never went away, but clung to the woods.

The fact that the fox invariably adopts the method of escape that he has once found effectual shows, in spite of his cunning, the limitation of his intelligence ; for if he be baulked of his accustomed trick he is generally killed. But although a fox has, as a rule, but one method of escape, the fox that climbs the tree, runs along the top of the hedge, lies crouched in the hedgerow or under the bank of the stream while

hounds dash over him, shows considerable intelligence in making use of these methods of escape on the spur of the moment, as a means of deceiving or evading his enemies. But I do not think he uses these for the first time when hunted. A fox often disturbed will make his lair in the ivy-covered tree for the sake of the quiet and seclusion he loves above all things. He has probably found that crawling along the top of the hedge or wall enables him to outwit the rabbits and rats. A sudden spring between his prey and its refuge confuses it and makes it an easy victim. We know from our hunting experience that a fox crouched gives no scent, and therefore he is not winded by the rats and rabbits. Thus the stratagems of the hunter are available for the safety of the hunted.

In many ways a fox is inferior in strategy to the red deer or the hare. When a fox turns short back on his tracks he does so, not in order to puzzle his enemies, but from two causes: first, when he is headed; secondly, when he has reached the limit of his knowledge of the country. If, however, a fox be driven out of his country he generally runs straight forward. Though he will often pass within sight of an open earth, he will turn neither to the right hand nor to the left for a drain or rabbit's hole, and die fairly exhausted almost within hail of safety. He cannot usually—I have

learnt not to say 'never' about the habits of animals—strike off a new idea on the spur of the moment. He has almost to run his head into a rabbit-hole before he will avail himself of it, if he is in a strange country. Thus we perceive that the fox, like many clever people, has his limitations. I should not like to say how much or how little he sees, but I think that by day his scent is much more useful than his sight. He knows, for example, the earth or tree in his own country and every path that leads to it. But he is probably not capable of the calculation: 'Here is a wood, foxes live in earths in woods, therefore very likely there is an earth in this wood.' The strange wood is to him absolutely dark, and presents no other idea than any other feature of the country. Foxes that are being hunted will skirt a wood and never enter it. They know that a heated fox is smothered in a wood; they do not grasp the probability of an earth or a hollow tree being within it. The mind of the fox, like those of other animals, never goes beyond a certainty and does not concern itself with probabilities.

Another limitation to the fox's mind I have noticed is that, although he often lies perfectly still while hounds are drawing a covert, and so escapes for the time, he nearly always moves too soon. In the Southwold country is a long, rather narrow, and open copse on

the side of a steep slope. From the lane beneath every part of the covert can be seen. I knew where a fox lay curled up under a bush, and watched the place: hounds were all round him, but he lay low and never moved; one hound actually sniffed at the bush, but he did not stir; another jumped over him, but he made no sign. Then the hounds were blown out of covert, and he sprang up just too soon: a laggard hound winded him or perhaps caught a view.

A similar instance of great but insufficient intelligence was shown by another fox. He generally lay in a small covert of some two or more acres. When he heard the hunt coming he would leave the covert and lie out in a ploughed field, returning as soon as the coast was clear. The keeper told me he had seen him do this several times, and offered to show me the fox, adding the unkeeper-like condition that I was 'not to holler' as being a 'meanlike thing' to do. Sure enough from a place of vantage I saw the fox steal out when hounds were still a great way off, and creep into a furrow where he lay lost to my eyes, but where the keeper could still see him. The hounds came, drew the covert blank and were called off. The fox jumped up and was trotting back when the second whipper-in, bringing along the last of the

pack, saw him, and of course holloaed, and back came the hounds. A very pretty gallop this fox gave us, which I enjoyed with a clear conscience, having resisted all temptation to holloa. The fox went away, was lost, came back in due time to his old haunts, and tried the same trick ; but the next time, of course, the huntsman knew of it, and bringing hounds round between the fox and the wood, started close to his victim and killed him in twenty-five minutes.

But if the fox cannot strike out a new line on the moment, he can and does learn certain things by his experience of being hunted. Everyone must have noticed that foxes nearly always manage to leave a covert when hounds are on the further side. The fox perhaps realises the advantage of going away with a start, more probably he chooses the quiet side from his desire to escape notice—how clever he is at this we all know. Mr. Fernie's famous Glooston Wood fox slipped away at the top end of the wood on his last journey—crept unseen past one of the most experienced hunting farmers of the Midlands and the first whipper-in. Hounds took a line up to the fence. 'Seen him?' said the huntsman. 'No,'—when an old bitch that never went wrong squeezed under the gate and promptly hit him off. There followed a famous gallop, and many of those out had to train back from

Melton. This is an instance of the persistence with which an old fox returns to his haunts. He had been hunted five times consecutively, and always came back to Glooston.

A fox, moreover, very soon knows whether hounds are on his line or not. Coming back from hunting one afternoon, I viewed a fox in the next field ; he was going his best pace, and I could hear hounds running. The cry stopped, and the fox slackened and sat up to listen. Then the music of the pack travelled down the wind again. The creature now sloped quietly away, and dwindling sounds showed that the hounds had changed foxes, of which he was as well aware as I.

It has been sometimes said that a fox can distinguish harriers or staghounds from his natural enemies. This, however, is not at all certain ; and a friend of mine, the Master of a West-country pack in a much-hunted district (he has two packs of staghounds and three packs of harriers in his country), told me he is sure that foxes in such a country live much underground. It may be that the foxes do distinguish, but they do not the less dislike the disturbance caused by the presence of hounds. I have not much doubt that those Masters are right who dislike harriers and beagles in their country : whether

they are wise is another matter. Foxes certainly find out the least disturbed places and the safest refuges.

The fox knows well when he is safe, and he knows too whether the scent is good or bad. It is also clear that he comprehends that he is being pursued by scent, for he has certain definite ideas of covering his trail. I have very little doubt that foxes recognise in some way the advantage of a flock of sheep, or herd of cattle, in destroying scent. Foxes often make use of those stretches of bad scenting-ground which exist in almost every hunting country. But this is easy to understand: animals never forget. The fox has found once or twice—but once is probably enough—that to cross that particular tract of country relieves him of the pressure of the chase, therefore he makes for the place again. Foxes, I think, do know that plough is bad for scent and grass is good. They will nearly always use roads if they have escaped that way before.

The fox certainly adopts the stratagem which is familiar in the case of the stag, and I suspect is common to all hunted animals, of rousing another to take his place before hounds. I know of one notable instance of this which was told me by a keeper—a shrewd observer. In his beat he had a well-known fox-covert in which was an old ivy-clad tree, which he

suspected to be frequented by foxes. One day, when hounds were in the neighbourhood, he determined to watch the tree ; he believed he would thus solve the problem of certain unaccountable disappearances of foxes in his coverts, and roll away from himself and his under-keeper the reproach of careless earth-stopping. After watching some time, a far-off note on the horn, and then the melody of hounds rising and falling, waxing and waning with the ground, the set of the wind and the fortunes of the chase, came down the breeze. Presently a fox trotted straight up the ride ; his arched back, his dragging brush clogged with mud, his weary gait, told beyond possibility of doubt that he had been hunted. He was too hot to seek the shelter of the covert, and was seen to be making for the tree. He scrambled up it, there was a smothered growl, a snarl, and a young fox—one of a litter of the same year, for the keeper recognised him by the fact that he had very light-coloured pads and a white patch of fur on the throat—leaped to the ground. The old fox had turned out the young one to run in his place. Five or six minutes later the hounds came up, hesitated, hovered for a moment near the tree, and then driving forward hit off the fresh scent and dashed on. This happens probably often enough, though it is only rarely possible to

observe the actual exchange. There was one fox I knew of that lived in a hedgerow. Though he was, as I believe, but a cub of the last spring, he was a precocious one, for when hounds came we never could find him. At last we brought a fox on a good scenting day from some distance. The pace had been very fast, hounds had started on good terms with their quarry and had been screaming at his brush for twenty minutes or more when we reached the hedgerow. There was never a pause or a halt, but the fox we rolled over six or seven minutes later was a light-coloured one, and quite fresh. The hedgerow cub—that young reprobate, the robber of hen-roosts, the stealer of scraps, a parasite of the pig-stye—was killed. The hunted fox was seen plodding wearily back to the woodlands whence he came the same afternoon. No doubt this one, the bigger, stronger, and older, came down on the hedgerow haunter sleeping the sleep of the selfish, and rousing him out, coiled down in his lair until hounds had gone on.

A fox knows, too, that he is at a disadvantage in a strange country, and most runs are limited in distance by the extent of country ordinarily travelled by the fox. This is about four or five miles as a rule. When the fox reaches the limits of his knowledge he generally

turns back. But some are much greater wanderers than others. One Master of Hounds tells me that he thinks that imported foxes—*i.e.* Scotch, Welsh, or foreign—knowing that they are ignorant of the country, remain below ground when hounds are out, for the first season at all events. But I am inclined to think that foxes that are turned down very often do not stay, but return, or endeavour to return, to their own haunts.

It may be asked how it is that animals find their way back to their homes from a considerable distance. I am inclined to think that they have a sense of direction. If we watch a blind dog in a field, we shall see that as long as we are going away from home he is puzzled, but if left to himself and he once gets his head in the right direction for home, he trots off without hesitation. I have an old terrier with whom I walk every day: he is nearly if not quite blind, but he can always find his way home if once his nose points in the right direction. This is the only theory to account for the wonderful way in which marked foxes return. A Duke of Grafton hunted bag foxes round Euston. These were captured for the purpose in Whittlebury Forest in Northamptonshire, and sent up. One fox is known to have returned no fewer than three times.

Turned down at Euston, he made his way home. Of course, having once done this he could easily do it again, for the memory of the lower animals is at once minute and retentive.

Another instance is that of a vixen who was marked and turned down before a pack of hounds. She went straight back to the earth from which she had been taken, was recaptured and brought back, and four times she returned. At last she was killed by the hounds near her earth.

There is another matter connected with the mind of the fox which is of considerable interest. What does a fox feel while he is being hunted? There are two views about this. One is reached by an exaggeration of the perfectly sound principle that the minds of the lower animals and of our own are made of the same stuff—the same in kind but differing in degree.

Therefore many people think they have but to imagine what their own sensations would be if they were hunted by fierce and untiring foes. But this is a mistake. It is quite true the mind-stuff of all sentient beings is probably the same, but the quality and quantity vary enormously. To assume that there is a sameness between the mind of man and that of the lower animals is the only possible theory by which

we can know anything about them. But we must not forget the differences.

To begin with, animals have not language. Thought itself can only go a certain way without words. Animals can probably distinguish colours; for example, they may recognise the difference between one colouring and another; but they can have no abstract ideas of colour. Therefore we must cut out all abstract ideas in interpreting the mind of the lower animals. Then we have to recollect three facts which must affect the fox's mind greatly: First, that he lives so near the ground (the world probably appears very different at six inches from what it does at six feet from the earth); that his sight is not extraordinarily keen, and his nose is.

On the other hand, the fox has a power of concentrating his attention on any point of importance to himself. He is intensely observant, not easily distracted. I think that animals look forward hardly at all, and that their memories, efficient as they are, must be a bundle of facts, not of inferences. A man finding his way over a country has a general impression, but the fox remembers almost every twig and stone. The man goes on making a few rapid and almost unconscious inferences as to the district; the fox is passed on, as it were

from stick to stone, from stone to tree, from hedgerow to wood.

With the possible exceptions of the dog and cat, whose domestication has sophisticated their minds, the lower animals live almost entirely in the present, scarcely looking forward at all, backward only so far as memory helps them. It is clear that if, as I think, the fox has its memory developed as being an advantage to the race in the struggle for existence, it will have developed in the most practically useful directions. Thus the old fox, coming back and finding his earth stopped, does possibly recollect that the last time this happened he was hunted, and at once departs for the day ; but I do not think that he has any painful looking forward to the terrors of being hunted, such as we should have. The law of self-preservation prompts him to go away for his own benefit and that of the race, and he goes. But not always. If foxes do take a hint of coming trouble, they are the wisest, oldest, and most experienced. The average fox is but a wild beast. Foxes have the desire of the carnivorous animal for sleep after food ; and trotting off, excluded from his earth the fox will curl himself up in a convenient place near at hand.

The fox sleeps lightly, probably owing to the fact that he has been hunted since the world



began. The soundest sleepers among foxes are soon cut off, as all huntsmen know. I have more than once watched a startled fox, every sense on the alert, the keen nose slightly raised, the ears forward, one slender paw uplifted. Now there are three courses open to him : to fly, to stay, to creep underground. But, again, the fox does not dwell on the horrors of the present, as a sensitive man or timid woman might do. During the flight he has the refuge he is seeking in his mind, and the best way there, which he takes, as we have seen, by the aid of a very minute memory of the objects on the way. He regulates his pace partly by the sound of the pack, partly by the knowledge he has of the state of the scent. At first he has, I think, no terrors : his main object is to reach a place where he can avoid disturbance. It is not absolutely certain that, so long as his powers are in full activity, he realises the fact that he is being pursued, or the intentions of his pursuers. When, however, he begins to fail, when one after another his familiar refuges are closed against him, then his intelligence works to find other means of escape. He is conscious of his failing strength, of the nearness of his foes, and a desire to find a refuge anywhere seizes him. Then it is that foxes seek strange hiding-places,

and often with success. Once a fox climbed a thatched roof and crouched close to the chimneys. It was cold weather and the chimneys were warm, and there he remained until the next day. His footmarks were found in a sprinkling of snow that fell in the night. Another fox took refuge in a pigstye, where there were a sow and a litter of piglings. No one thought of looking there, but a farm lad going to feed the pigs in the morning saw the fox come out and with a gay swish of his brush canter off.

But no doubt there comes a moment when, at the end of a long chase, his strength exhausted and wiles expended, a sense of his fate reaches him. When his enemies, the crows and magpies, swoop and chatter over his head, and the cry of the hounds takes a shriller, angrier note, in tones which in the jungle language speak of their eagerness for blood in a way that he understands, then, doubtless, he realises his danger. I have seen a fox turn in a dry ditch and, facing his foes, die fighting. In any case the end is swift, and for the fox it is the price he pays for all those things—hunting his prey, love, and seclusion—he likes best. But never at any moment of the chase can he feel what a man would feel. The mind of the animal cannot form the image to clothe his misery. His feelings are by so much less painful, as they are



'HIS STRENGTH EXHAUSTED AND WILES EXPENDED'

simpler, than ours would be. A man thinks of what he is leaving ; a fox cannot do this. The long-drawn-out end is only the fate of one here and there : more often the chase is swift, short, and decisive, and the fox is spared what is the most painful thing to him—the failure of his powers. A fox whose whole mind is concentrated on living, whose whole joy is in the successful carrying-out of the life to which he was born, finds his pain in the sense of failure and weakness. But against the pain and failure of the defeated fox, may we not set without fancifulness the more frequent case when the victory remains with him, when he has outpaced, outwitted, and baffled his foes, and can rejoice in his strength and swiftness? I think the many recorded instances where a fox has been known, in the very heat of being hunted, to turn aside to kill a weaker bird or animal, show at least that his own character of the hunter is more present to his mind than that of the hunted.

In this, as in many other things, a fox is a paradox, for he probably owes his success in the struggle for existence to the fact that he has been hunted since the world began. He would not be so successful a hunter had he not been hunted : were he not so skilful a beast of prey, he would be more often a victim of the chase.

CHAPTER IV

HOW TO PRESERVE FOXES

NOTHING is easier than to preserve foxes if we really wish to do so. All the fox needs is to be let alone. The covert should be kept as quiet as possible, and neither dogs nor men be allowed to disturb it. The best way to keep dogs out is to make the fences thick and thorny and the undergrowth close and impenetrable. The fox will creep about and make or find his own tracks and smeuses where a dog will be daunted by the thorns and briars. These coverts are of course equally impenetrable by man. Such thorn-coverts are Norton Gorse and Sheepthorns, both in Mr. Fernie's country. All coverts should be looked after most carefully, and the fences kept in order. Three or four small coverts, each not more than three acres in extent, will suffice, if properly tended, to keep hounds employed for one day in each fortnight. Foxes will be nearly always forthcoming from them. A favourite spot in a

well-preserved country is seldom without a tenant. Just as the trout is never wanting to the suitable hover or the tiger to the jungle, so a fox is always ready to take the place of one killed.

I know a particular corner of a wood not far from the boundary fence, where for several seasons an old dog fox used to make his lair by day. The place was secluded, and yet the air reached it through a gap in the trees. From one point the fox was visible to a man on horseback who knew where to look for him. One day—it may be that he was getting old, and his senses were not so keen as in the past—the fox was dropped on, though he dodged the pack for a few yards. The following autumn when riding past the wood I was startled for a moment to see what looked like the old dog fox curled up asleep in his usual place. Then I remembered how all beasts, birds, and fishes of prey have their haunts, and how a favourite spot is almost invariably filled up.

Thus all we have to do is to keep suitable places undisturbed, and the foxes will make their homes there. Since we desire not only to have foxes, but good ones, the less we interfere with them the better. We can indeed increase the number of foxes in our coverts by artificial means, but wild foxes cannot be manufactured. The degeneracy of a fox begins when

we preserve him by artificial means, and increases in direct proportion to the use of them. The wilder the animal, the better the chase. An animal is only perfectly wild when he is left to his own resources at all times.

Of course we know that nowadays in many countries there would be no foxes at all if no aids to preservation were used, and hunting is kept up by artificial earths, imported foxes, and hand-fed cubs. Unfortunately both these last introduce mange, a scourge which threatens the prosperity of hunting; nor does it seem likely that the disease will be stamped out while the causes remain. Of these, Masters of Hounds and owners of coverts can control some. The supply of foxes from foreign countries is a large trade. No one ever acknowledges to turning down any other than Scotch foxes. Nevertheless the little red French, Belgian, and German foxes (as a recent circular has made clear) are very common, and have done no good to our native breed.

But the greatest mischief of all is that dealers bring foxes over in infected crates and store them in infected cages.

The mange is a disease so persistent, so subtle, and so destructive, that when once it has taken possession of a range of kennels or cages nothing but fire will exterminate it.

As foxes must be imported, it is a pity to waste the fine store of gallant Scotch, Welsh, and other breeds from those parts where no hounds are kept. But they should travel in special crates, and these be made firewood of after one journey. The least relaxation of vigilance and the mischief is done. Another cause of mange is that foxes are frequently penned in most insanitary places. As we have seen, the fox is, perhaps, not the most cleanly of animals in some of its habits, and in a confined space disease is soon set up. It is nowadays quite a common practice for keepers to kill off the old vixens as soon as the cubs can feed themselves. The cubs are then penned in any convenient place and fed on rabbits and sometimes on raw meat. When the hounds come, cubs are let out as required. Such cubs are nearly always diseased and cannot possibly show sport. The only way to have good healthy foxes is to preserve old vixens, and every year this is done less and less. Young vixens have not the knowledge and experience of old foxes, and their litters will never be as well fed, as well taught, or have such a wide range as will those of the older ones. There are many coverts where there is never an old fox except a visiting dog fox in the spring, and it is only by accident that we ever enjoy a really good run from such places.

Instances have been known of whole countries devastated by mange from one of the pestilential pits often made use of by keepers. There are many more of them than we suppose. In one case a well-known hunting man was walking around with a friend. They had visited the kennels and the pheasantries, when he noticed an old hut. 'What is in there?' he asked. 'Oh, nothing, only some things we do not want,' said the host. Yet, as they passed, a most unmistakable whiff of fox reached the nostrils of the hunting man. Taking an opportunity, he slipped back and found a whole litter of cubs under the floor of the hut in a dark, foul little hole. It was a fine wild moorland country, but what wonder that seven-and-twenty dead foxes covered with mange were picked up in the course of the next two seasons! If this could happen where, after all, the shooting did not amount to very much, what must occur where pheasants are reared by the thousand?

Another cause of mange is the habit indulged in of peppering a fox with small shot to frighten him off a particular beat. The fox may not, often does not, die of the injuries, but the shock and the pellets lodged under the skin set up conditions favourable to mange. For mange there is no cure, but the disease

can be eradicated by killing off the infected foxes, stopping all the earths permanently, and perhaps, above all, by allowing the foxes to live in healthy, natural conditions, without interference or assistance.

But mange is not the only difficulty in the way of the preservation of foxes.

Traps in some parts of England are becoming a serious danger. In that wild and beautiful district where the Devon and Somerset Staghounds hunt the red deer, there is rough, but very real, foxhunting. On Exmoor we can still see hounds drag up to the fox's kennel as our forefathers did. Once upon a time in the famous days of the Stars of the West and of Mr. Nicholas Snow there were plenty of foxes, while on another part of Exmoor a famous Master of the old Devonshire school reigned over a hunt which has just been given up. The West Somerset country, which was founded by Colonel Luttrell in 1824, suffers in some degree from the evil. It may be said that trapping in the open is illegal; but when a country is wild it is not possible to overlook it, and the damage done to foxhunting is in any case very great, and in some parts of the West foxes are very scarce indeed. It is necessary that foxes should have earths except in those countries where they are

stub-bred, and the vixens lay up litters in a convenient lair or a nest above ground.

We often hear complaints about earth-stopping, but it is well to recollect the difficulties that have to be surmounted.

The fox is not very regular in his habits; but as a rule, from about 10 P.M. to 3 A.M. are the hours between which he is abroad. Nevertheless a great deal depends on the weather, and how soon he finds a sufficiency of food. A fox does not at any time come home and go to bed regularly. Most dog foxes remain above ground and, except when they are hunted or the weather is bad, do not go to ground at all. In mild seasons we may find foxes asleep anywhere, and everyone has instances to tell of foxes fast asleep in the open. I remember when I was hunting in Oxfordshire a well-known covert was drawn blank with the usual sounds as hounds were drawn out. I rode away over a ploughed field, and there, out in the open curled up fast asleep, lay a fine dog fox.

The danger of stopping foxes in is not perhaps so very great, yet no doubt some foxes are stopped in, and I fear suffocated, every season. The old system of earth-stoppers, where the hunt kept one man who was responsible for the work of others and

whose pleasure and pride it was to show sport, was better than the present, when in most places keepers and others stop, or do not stop, the earths. But, again, shooting interests make landowners and keepers unwilling to allow anyone the run of the coverts. The picturesque old earth-stopper, with his rough pony, his lantern, and his terriers, is a relic of past days found only in some old-established hunts.

There is another point in the preservation of foxes, and that is, the killing powers of the pack. As a general rule, it is sound policy to kill as many foxes as we can. There are many reasons for this. Any given district will only carry a certain stock of foxes. If they are too numerous, they are driven into bad ways and become haunters of back-gardens and pigstyes, robbers of hen-roosts. Farmers, keepers, and cottagers maintain an interested watch upon the local pack, and note whether or not they kill foxes. It will be found that there is no such discouragement to fox-preserving as the knowledge that the pack does not kill a fair proportion of the foxes it finds. A friend of mine who is a very keen sportsman and a first-rate amateur huntsman took a country. He proceeded, in his first season, to kill the foxes at what the members of the hunt thought a most alarming rate. There would

be, they said, no foxes at all before the end of the season. They had not a single blank day, and the sport was better than it had ever been. Next season there were an unusually large number of litters in the country. People will not disturb vixens and cubs if they think that the Master is doing his share in killing them and thus keeping down the numbers. Then, too, the Master who hunts his country equally and gives the good and the bad alike a fair share of attention will find his stock of foxes increase.

The Vale is better for sport, but places like Pinchme-Near are the nurseries for strong wild foxes. The forest foxes travel far and wide in the spring. Probably very few woodland districts are hunted enough. They are useful for foxes, excellent for hounds, but trying for horses, and uninteresting to a great many men. Foxes have a tendency, when much hunted, to collect in woodlands that are little disturbed. If they become over-numerous, if hounds come several times, and because of a bad scent, or on account of the presence of too many foxes, they do not kill, the foxes often meet another fate. Most foxhunting is not merely a great sport, but is really an effectual means of keeping the foxes down, as the following figures will show. It was stated some years ago, that the Government of the colony of Victoria had in

seven years paid rewards for heads of 130,000 foxes. As nearly as I can estimate, hounds in England kill about 15,000 or 16,000 foxes a year, including cubs. If we multiply these numbers by seven, we shall find that 112,000 is the total, so that, apparently, even considered as a means of making war on foxes and keeping down their numbers, hunting is successful.

This brings us to an important matter in the preservation of foxes. What was originally meant by preserving foxes was this, that in consideration of the sport given by the fox before hounds, he was only to be kept down by them. But hounds were to keep him down, and this understanding is still at the foundation of fox-preserving. People who are to be trusted about wild foxes object to those that are turned-down, and not altogether without justice. It may be said that hunting is to a certain extent decadent in those countries where wild foxes are not to be found. But it is in any case clear that one factor in inducing people to preserve foxes is that the pack should kill them down. When spring comes round the stock should be sufficient but not overwhelming. It is in the spring that foxes do most damage. Of course the question what is a sufficient stock of foxes is one on which opinions differ. Writing from a hunting man's point of view, we might say with Beckford

that a man might as well complain of having too much money as of having too many foxes, but there are other people to be considered. What would be a reasonable stock for Leicestershire would be too many to expect in some provincial countries with due regard to other interests. But even in Leicestershire sport depends upon killing foxes. The two best Leicestershire huntsmen of our day, Tom Firr and Arthur Thatcher, were and are killing huntsmen. It was said of the former that a fox never escaped him more than twice, and the latter told me in the cub-hunting season of 1900 that his dog pack alone had been out twenty-nine times and killed twenty-nine foxes.

This question of the stock of foxes leads us to the problem of whether hunting and shooting can exist in the same country without interfering with one another. The answer is clearly that they cannot unless the supporters of each be prepared to give up something for the benefit of the other. But the stakes are not equal. To preserve foxes fairly—that is, to keep a stock of old wild foxes (mere cubs and turned-down-for-the-occasion foxes are no use)—will cost the preserver money, slightly reduce his bag, and give his keeper trouble, for which, however, in most cases, the latter is paid by the Master of Hounds.

On the other hand if no foxes, or bad foxes only, are kept, the hunting men lose their sport altogether and waste the money they have spent. But without entering into a controversy which no arguments will settle, because the solution depends not on reason but on the character and the position of the contending parties, let us try to see what real mischief foxes do to shooting and in what way it may be minimised.

The damage done by foxes on a preserved shooting may be classed under the following heads.

Foxes take a certain number of full-grown birds. They are destructive in the nesting season and especially to young broods just hatched. A fox in a covert, and more particularly in a warm corner, spoils the shooting of that particular covert for the day.

Lastly, where there are foxes hounds will come, and a pack of hounds spending an hour or so in a woodland will drive out every living thing and let in perhaps some characters that the keeper does not wish to see there. We have seen that in order to preserve foxes it is necessary to keep the coverts quiet, and it is no less necessary if we want to have pheasants or indeed any kind of game.

Now if we take these in order it is quite clear that of full-grown healthy birds the fox cannot take many. The birds come down after the foxes have laid up for the

day, and they go to roost before he comes out, so that the fox and the pheasant are not often brought into contact. Nevertheless foxes do catch some pheasants. But the greatest amount of mischief is in the nesting season. Pheasants lay about the end of March or beginning of April, so that the birds are sitting and the broods are hatching out just at the time when the fox's necessity is greatest. Sitting birds are dry and flavourless, and probably these are not looked for unless the need is severe. But no doubt when the young birds are hatched out the smell of the discarded egg-shells often betrays them to the fox. Against this we may fairly place as part consideration the useful work done by the fox in keeping down more destructive vermin. Foxes hunt eagerly for and kill stoats, weasels, and the old hedgerow rat—in whose burrow has been discovered no fewer than fourteen wild ducks' eggs. Rats are pests to which nothing is sacred, nothing comes amiss, and the fox is a most accomplished rat-catcher. But even if we allow that a fox does more harm than good and kills more than he saves, the damage is not so great as to make it worth while for a good sportsman to spoil his neighbour's fun. At the same time hunting men ought not to forget that the pheasant-preserver who keeps wild foxes does no doubt make a very

considerable, though indirect, pecuniary contribution to the hunt.

As to the presence of foxes in pheasant-coverts at the time of the shoot, no doubt the fox is often a spoil-sport, but his presence there is partly the fault of half-hearted preserving. The owner and his keeper do not shoot foxes, but they keep hounds out of the coverts until after these have been shot through. The keeper feeds the foxes, which become fat and lazy and do not readily leave their haunts. It does no harm to draw large woods up to ten days or a fortnight before they are shot. Indeed it does good, for birds fed in a covert scarcely ever fly far except to go to roost, and the hounds move them but do not drive them away. The birds cannot know much country or fly far. The case, no doubt, is different in a small shooting bounded by the fields of pot-hunting neighbours. But in large coverts with hand-reared pheasants it may be considered certain that drawing the woods and driving out the foxes is on the whole, to say the least, no disadvantage to the owner and does not in any appreciable degree, if at all, diminish the bag.

One fact, however, remains, and this is that no man can preserve foxes unless he allows his coverts to be regularly hunted. The hounds must kill off

the weakly and bad foxes. If a covert be not drawn, foxes in a hunting country take refuge there. Then the owner and keeper both feel that they have more than their share of foxes and begin to reduce them to a more manageable number. But they are of course in fact killing the foxes that belong to other parts of the hunt, and such a country is sure to be short of foxes sooner or later. Whilst, however, foxes in pheasant-coverts will do some harm and idle keepers will exaggerate the mischief because foxes give them trouble, it has always been the custom for owners of coverts to help their foxhunting neighbours, feeling justly that while with the shooting man it is only a question of more or less, the very existence of fox-hunting depends on hounds being allowed to draw coverts without restrictions, and to find old wild foxes when they come. This is one of the neighbourly amenities of English country life which are sometimes violated, but never without loss to the whole countryside. But it is a matter for which there is no law and as to which no rules can be laid down : it depends entirely on good feeling on both sides.

CHAPTER V

HOME AND HAUNTS OF THE FOX

THE homes and haunts of the fox vary according to its age, sex, and surroundings. The earth or burrow is used by the fox, in common with the rest of the *Canidæ*, primarily as a shelter for the vixens and cubs. The fox is not, as are the badger and the rabbit, an underground dweller. In some parts of England and Scotland, the vixen lays up her cubs above ground. When the young ones are able to run about she removes them to some convenient shelter, and as soon as the dog foxes grow up, they wander away and set up for themselves. Most of them have a favourite kennel, to which it has been said they return always at night. But it seems more likely that the fox, having killed and eaten, makes a temporary kennel not very far away in some convenient covert. Thus a fox may be found anywhere within his hunting-ground, which is wider or narrower according to the number of his kind in the district, and

the abundance or scarcity of food. We often fail to find foxes in favourite coverts simply because the inhabitants are on some other part of their beat. Take for example such coverts as Gartree Hill or Ranksboro'. No one would doubt that everything was done to preserve foxes, or that there are in fact always foxes which make these famous coverts their headquarters. Yet every now and then they are drawn blank. It is not fair to assume that there has been foul play if any covert under a hundred acres is without a fox. Favourite places are much harried, and huntsmen are not always careful enough not to stain small coverts by killing foxes within their boundaries. The fox, of all animals, is the most ready to learn by experience, and his keen nose warns him for a long time that murder has been done on one of his race. He therefore avoids the fatal spot. If, however, we draw a large extent of woodlands blank, it is nearly certain that the keeper or owner is not dealing fairly with the foxes. In suitable woodlands, there ought generally to be foxes or some trace of them. In addition to his kennel, in which the fox lies up (some dry spot well sheltered where the rays of the sun can penetrate), foxes, at all events where they are much hunted, have a more secure refuge at hand. To this shelter they resort when

driven by stress of weather or the pressure of the chase. The refuge may not always be close to the kennel. Indeed it may be some miles away. The fox has to trust to his speed and endurance to save him. When a fox does not want to be found, but goes straight across the middle of the fields, regardless of the direction of the wind, we may be sure that he has a refuge in his mind. If he is not killed in twenty minutes he will be safe under ground. When food becomes scarce near one lair, the fox shifts his ground.

Foxes grow very restless in much-hunted countries; sometimes becoming corrupted by plenty, and, finding the dust-heaps and pig-styes near a village excellent foraging ground, they settle there and are soon 'lost to name and fame.' Such foxes seldom run far, yet are very difficult to kill. They are often much more numerous in the neighbourhood of large towns than would be supposed. Everyone who has hunted with the South Quorn (Mr. Fernie's) hounds will remember how many foxes there are in the neighbourhood of the suburbs of Leicester.

Another very favourite haunt of foxes is a range of cliffs by the seashore. These are secure refuges for the vixen and cubs, and foxes find a good deal of food along the seashore. They may often be seen

hunting there. Masters of Hounds naturally dislike cliffs, as hounds are very apt to fall over while in pursuit of the fox, and the Masters and huntsmen of the West Somerset, Holderness, and Eastbourne Foxhounds could tell us of many a good hound lost, and of many a narrow escape the pack has had.

But though Masters and huntsmen dread such adventures, the cliff-haunting foxes are probably a source of supply to the country round, and the cubs reared spread over the district and settle down, in their turn to raise inland a new generation of wild foxes.

The first generation is apt to go back to the cliffs, but often give a good run in so doing. Slowly Wood, a big covert well known to the followers of the Quantock Staghounds, used at one time to be a great place for foxes. Before the West Somerset Hunt was fairly established by the late Colonel Luttrell, of Kilve Court, the covert was drawn by harriers, and the foxes went right away for Hurlstone Point, some seven miles off, and were never caught. The harrier Masters tried several dodges, such as putting relays of hounds on likely points of the route. Nor was a fox killed fairly from Slowly until Colonel Luttrell's hounds ran into one, to their Master's great delight.

There is a difficulty about thinning down cliff foxes, and one Master of Hounds was very much taken aback, on asking permission from the agent to a certain estate to hunt some of them, to receive a letter asking 'where he would like the guns placed.' Mr. Nicholas Snow, when he hunted Exmoor, used regularly to worry the cliff foxes in the summer, in the hope, doubtless fulfilled, that they would be driven inland, and help to stock the Exmoor country. Mr. L. Bligh and the Minehead Harriers successfully work parts of the West Somerset Cliff for foxes, and no doubt drive a certain number inland. Unluckily, the prevalence of rabbit-trapping is in the West country a serious danger to foxhunting. I never heard that steel traps—set in the open as they often are—distinguished between rabbits and foxes. Whole tracts of what was the most sporting country in the West have been cleared of foxes, and rabbit-trapping is the chief cause.

When once a fox family has comfortably settled down inland, it does not, I think, return to the cliffs. I do not say that a fox run near to the seashore will not take any refuge that is handy. It is his nature ; but I do not think that foxes migrate from inland coverts to the seashore. 'My foxes have all gone to the cliffs,' a reason which was given to me

once for the scarcity of foxes on a certain estate, is probably incorrect. There were foxes in the cliffs, there were more in the coverts. This was no doubt true. But the cliff foxes had always been there, and the inland foxes had been shot or trapped by a keeper of the kind who shoots foxes because he has nothing else to fire at—for the scarcity of game was as noteworthy as the absence of foxes. There was not as much as if there had been no attempt at preserving. A keeper can always have foxes if his master really wishes, though it may be freely allowed that they give him trouble. An efficient man will always have them in his coverts. The keeper who has none is either inefficient or dishonest, perhaps both. Were I the owner of large coverts and there was not a good head of game, and yet the coverts were drawn blank when the hounds came, I should feel that it was a case for a change of keepers. The man to be dreaded in a hunting country is the dishonest, inefficient keeper, who is practising on the weakness or ignorance of his master.

The various excuses, such as the death of all foxes through mange, the migration to cliffs or other refuges, are, to speak plainly, simply untrue. But in many of the best-managed shootings there is no question of foxes. They are there, and, like the

keeper mentioned by the late Duke of Beaufort, they have litters and old foxes too. All of us who are sportsmen by training owe too much to the keeper friends of our youth to sweep into one condemnation a class of men who no more deserve to be judged by the dishonest and inefficient members of their profession than do, for example, soldiers, sailors, or lawyers.

Foxes, however, as a rule, make their homes in coverts, natural or artificial, and the provision and care of these is a very important matter for the prosperity of a foxhunting country. Although it may be said that the best thing we can do for foxhunting is to leave foxes alone, injudicious friendship and hostility are equally injurious to sport ; but this does not apply to artificial coverts. The best of these really are formed by allowing or assisting Nature to have her own way, and the thickest and most impervious coverts are some of the 'artificial' coverts of which there are so many in Leicestershire and Northamptonshire. But all coverts, whether natural or artificial, require some care in order that they may have shelter or lying for the foxes. Woods, large and small, and gorse coverts have a tendency to become thin, and when there is no undergrowth, and the covert is open to every passing cur, the fox soon leaves it for some more convenient shelter.

As will be seen later, artificial earths are sometimes necessary evils. But the making and care of coverts is one of the great means of sport.

How much we owe to the small coverts of Leicestershire, which link together such delightful stretches of grass ! It is quite clear that foxes, when hunted, will not go into a country where there are no refuges. They may, and indeed do, go foraging where there are no fox haunts or shelters, but they do not run to them as a rule.

I can only recall two instances, in my own experience or in reading, of foxes travelling except with some covert or refuge in their minds. Once many years ago, with the Southwold, I recollect a fox going away with five couple of hounds from Tumby Wood. The Master was with them, one whipper-in, and the late Rev. Edward Rawnsley, a rider to hounds who had fine hands and good judgment. He was seldom left when hounds ran. The line was over the fen country, flat, open grass-fields, divided by enormous drains. The fox ran the bridges made for the cattle to pass over, and his followers jumped the draw-rails which divided the bridges from the fields. The fox was killed on the outskirts of some farm buildings.

But doubtless he was like that fox in the late Duke of Beaufort's time that disappeared near some



'THE FOX WAS SEEN TO SWIM BACK'

outhouses and was seen later to jump out of a pigstye.

In both cases the fox was probably accustomed to forage round the farm, and perhaps to lie up in some convenient and unsuspected corner of the stack-yard or barns. These, however, are exceptions, and unless there are quiet coverts to be found, foxes will not cross certain lines of country.

Fox-haunts are of three kinds. Woodlands, which need no care except judicious planting, if they are kept quiet. Where game is preserved this is of course done, and foxes swarm if treated fairly. Indeed, it may be said that if foxes are not found in preserved game-coverts they have been destroyed. The late Duke of Beaufort relates in his Diary that 'Mr. Garland [Mr. Holford's keeper] has had twenty-one litters of cubs in two years,' and in 1856 the Badminton Hounds killed eleven and a half brace of foxes on Mr. Holford's property. The Stoneleigh coverts are also instances of well-preserved pheasant-coverts abounding in foxes. Every place that has or can shelter a fox should be cared for, however small. How often we find foxes in tiny spinnies, small copses, or wooded ravines ! It matters little how small a place it is if it be kept quiet. I knew a covert, a small triangular bit of rough growth in the corner of a

field, barely three-quarters of an acre in extent. This we had securely fenced round so that dogs could not get in. We never entered it even when rabbit-shooting. Naturally, there was quite a rabbit's sanctuary, but that was rather an attraction to the fox, and there was nearly always one there. Indeed, we might adapt to fox-preserving a well-known proverb, and say, 'Look after the spinnies and the woods will take care of themselves.'

There is a gorse in the West Somerset country which is so well cared for by the owner of the farm that it has been drawn forty times in succession, and a fox found every time. Again, an able writer in 'Baily,' 'C. R.,' says: 'We know of one small estate in the North of England—of less than two thousand acres in extent—that has hardly been drawn blank within the memory of the present generation. Nor is the estate well off for covert, not more than forty or fifty acres of it being fox-shelter of any description. There are three fir, spruce, and larch plantations of about ten acres apiece, a long, narrow dingle, which is no more than 110 yards wide, and some half-dozen ornamental plantations of from one to three acres apiece.' The author goes on to tell how when beating for hares in a little coppice of spruce firs, with an undergrowth of heather, out came

a pig, a fox, another pig, a second fox, and then the hares. 'C. R.,' whose remarks are practical, and whose observations and experiences with artificial coverts agree with my own, remarks on the excellence of spruce-fir coverts. One reason why a fox likes spruce trees is because they often grow in strange forms and are easy to climb. Foxes are very fond of climbing trees when they can, but the trunk must have a slight slope. In Australia, the foxes are accused of the destruction of the beautiful lyre-bird. It is said that they run up the trees and destroy the nests, and this seems quite probable. There is nothing a fox will not eat, and nothing within his power that he will not do. His intelligence is generally equal to the occasion, and if a fox found himself where trees were, with his powers to climb, or perhaps, more correctly, to run or scramble up, and birds' nests in those trees which afforded that greatest of all fox delicacies, an egg just on the point of hatching, it would not be long before he became partly arboreal in his habits.

Gorse coverts are favourite ones for foxes. There are few countries which have not some gorse coverts, the very name of which is suggestive of sport. Not all coverts which are called 'gorses' are now planted with furze, and not a few blackthorn coverts are to be

found in Leicestershire. The richness of the soil causes the thorn to grow vigorously, and grass and undergrowth spring up, forming a shelter for foxes. Real gorse has the advantage of thriving well in a poor sandy soil. In making a gorse covert the slope of a hill facing south should be chosen, not only because the fox prefers such a situation but also because gorse thrives best on land with that aspect. Although gorse grows freely where once established, the young plants require care: they are somewhat delicate and tender at first and grow but slowly. The land in which the gorse is to be planted should be thoroughly cleaned and all twitch-grass and weeds removed. It is a good plan to cut off the top and burn it when the land is foul. The ground should be ploughed over thoroughly. The seed may be drilled, and the ground round the young shoots must be carefully hoed and weeded until the plants have taken a good start. After a time gorse coverts become very hollow and of course cease to hold foxes. A section should be burned or cut every year. Gorse requires much care, but is very useful, being excellent food for cattle and horses. Besides the gorse or thorn covert, any group of trees may be made attractive to foxes by a little attention. Sloe, common clematis and mountain ash may be planted, and broom and

heather sown broadcast ; but the rabbits should be wired out, as indeed they ought to be from all young coverts and plantations whatever the nature of such coverts may be. Stiff fencing round them is important.

Osier-beds are also favourite haunts for foxes who have no objection to the neighbourhood of water so long as they have a dry spot to kennel in ; indeed water is very convenient for the fox, so much food does he obtain on the banks of a stream or lake. Foxes can and do catch wild duck, springing at them as they take flight, and once when a lake near a house where I was staying was frozen over, a fox or foxes actually attacked the swans and killed, but did not carry off, a young swan. We found it afterwards bitten through the neck. The osier covert has this advantage on an estate, that it is a crop of some value. I have always noticed that such coverts in the midland counties, where I have seen them, are particularly favoured by foxes.

From the question of artificial coverts we pass to that of artificial earths. The covert is an assistance to nature, a permission to plant-growth to have its own way. All our care is to keep the shelter thick and give the foxes a secure home. We place them, indeed, where coverts were not, in order that we may

have more foxes and that they may run over certain lines of country. The artificial covert is as little of an interference with nature as may be and yet it has its disadvantages. A century ago, Nimrod complained that, owing to the number of artificial coverts, foxes were apt to run short. Everyone who has hunted with the Quorn on a Friday must have noticed how apt the foxes are to run rings in that most charming district : there are so many convenient artificial coverts. There can be no doubt that in Nimrod's time there was far less covert of any kind in Leicestershire than there is now. The country was more open and fences were rarer. Under those circumstances foxes had necessarily to travel further. Nimrod speaks of a fox found at Billesdon Coplow and killed at Ranksboro'. That would be a very unlikely thing to happen now.

With many artificial coverts and well-preserved foxes, hounds are liable to change frequently, and do so as a matter of fact. As a well-known midland M.F.H. once put it to me : 'If you run a fox more than ten minutes in this country, the chances are that he is another.' But in modern foxhunting certain and quick finds and sharp bursts are delighted in. If the country and the pace are good the objection to a ring is purely imaginary.

There are many people who never know they have ridden one till they find themselves back at the starting-point.

There has probably been some change in the last century in the length of runs, but not so much as might be supposed. The story of any typical Leicestershire run which took place nearly a century ago might have been written yesterday, and will be found indeed to be very characteristic of present-day sport among the artificial coverts of High Leicestershire.

There are, perhaps, quite as many long runs now as of old, the difference being that when foxes were scarce only one fox was pursued from start to finish: nowadays there are often three or four hunted during the run. This is due not alone to the fact—if fact it be—that foxes run shorter than of old, but also to the pressure of the crowd. If the fox turn short back, as foxes will do, when they have reached the limits of the country they know, or if the hounds and huntsman are swept on after the pack have lost the line, there is nothing to do but to cast forward, and a fresh fox is often picked up. There is a story of a modern Master who was going away alongside his leading couples. ‘That is not your hunted fox,’ said a friend. ‘Perhaps not, but he d——d soon will be!’ was the reply.

The question of artificial earths is a different one; it is an interference with nature. Most of the foxes that take to them are hand-reared. A litter of cubs is to be moved; an artificial earth is prepared, they are wired in, and fed for a time. If the cubs once take to an earth, natural or artificial, they will come back to it as to a refuge in time of trouble. Still more is this the case if a vixen can be induced to lay up her cubs in one. I speak with a good deal of diffidence about artificial earths, not having had much to do with them, and I find a considerable difference of opinion about them among people of knowledge. The estimation of the value of artificial earths ranges from the idea that they are actually superior to the natural earth, in that they are more easily kept clean, to that in which they are regarded as necessary evils.

Again, there are some people who seem to have had no difficulty with the foxes. They have made an artificial earth, and a fox has taken possession of it at once. Others have failed to induce foxes to occupy them at all. Probably the truth is that where foxes are found in artificial earths we are not told everything. There are obvious reasons for not publishing the situation of an artificial earth, or talking too much about the introduction of foxes.

Yet there are countries which could not exist without a supply of foxes from the outside, and artificial earths. The truth is probably this, that so far as we can avoid everything artificial with regard to foxes and hunting, we shall have on the whole healthier, stouter foxes, and better sport ; but that if we must turn down foxes, by far the best plan is to make an artificial earth, to obtain a vixen or a healthy litter, to confine them just so long as is necessary, and then leave them to themselves. As time goes on and our artificial earth becomes overgrown and wild it will differ hardly at all in the estimation of the foxes from the natural earths. If a vixen be put down, it is wise to remember that she is very jealous of any taint of humanity when she is about to lay up her cubs. She is quite capable of destroying the whole litter if she is not treated very carefully. The less she sees or smells of man the better.

There have been various forms of artificial earth, and I give them here so that readers may see for themselves, and choose, if they must make an earth, that form which is best suited to their own locality and the situation of their coverts.

But at this point the question arises, 'If I make an artificial covert, should I put an artificial earth into it?' It is not necessary to do so, and if we plant

a gorse covert it is much better not. There must necessarily be a track made by the person who stops the earth, and this may lead others to know of it. It is also likely that a fox might note the traces of human interference and abandon the gorse for the day.

There is not the smallest necessity to have an earth in any covert: the foxes will use the covert just the same. Therefore the question of the artificial earth has little or nothing to do with the covert holding foxes, but it must be determined by other considerations as to whether it should or should not be made.

For general principles I cannot do better than refer my reader to the Badminton volume on 'Hunting.' It is there laid down that there should be (1) a south aspect; (2) a chalk soil; (3) a dry situation; (4) that the chamber should be above the entrance; (5) that the entrance should be too narrow to admit a terrier.

To this I should be inclined to add that there ought to be facilities for getting at the chamber, and that this should neither be too spacious nor too lofty. Foxes are very apt to foul their earths, and as the fox never makes the earth larger than it requires, so the nearer we come to nature the better it will be for the health of our foxes.

There should be a second exit, the mouth of

which may be lightly stopped with earth so that the fox can scratch his way out. This exit should be concealed by some bushes, so that if fox-stealers or a wandering terrier invade the covert, the fox may be able to slip away unobserved. Idle lads have been known to spend Sunday afternoon disturbing earths to try their terriers, or for the sake of sport.

The various forms of artificial earth are as follows :

I. A badger is caught, penned into a covert—which, by the way, is not very easy to do—and kept there till he has dug an earth. This sounds better and is much easier in theory than it would be in practice. I know of no instance of a badger so confined making an earth, though badgers' earths are common enough, and there are two within a mile and a half of the place where I am writing. But they are rather a nuisance, as they are difficult to stop, and as a matter of fact two foxes went to ground in one the last time we drew the neighbouring coverts.

II. The 'Field' in 1877 gave the following method of making an artificial earth, which, except that no dimensions are given, seems to be practical. The writer advises that a deep trench should be dug on the sunny side of rising ground in the chosen covert. The trench should be four feet deep and the same width, being in a semi-circular form, with two entrances,

and from the centre turning off into an oven or den. Then 'lay a drain of very small tiles placed on flat ones to prevent the rabbits digging in under them. By this means the earth will be kept dry after the heaviest rain. Having formed the large trench in which the earth is to be made, lay the bottom with large flat stones, taking care to build in the chamber a kind of raised kennel in which the foxes may lie secure and dry, having two or three spouts into which the fox may stick himself with his head only exposed in case of a terrier being sent in by a fox-catcher.' I am inclined to think that the fox might go into these head first, and that a bolt-hole as described above is better. 'The earth may then be built of stones or bricks upon the floor, terminating at each entrance in a hole of such a size as not to admit a dog larger than a fox. The mouth should be made with a heavy stone, or a large piece of timber, to prevent its wearing away. A large mound of soil should be heaped over the earth, and, for a better protection, a quantity of dead covert placed on that. Badgers should be caught if they take to the earth, as they soon pull it down.'

This seems to me excellent, with the addition of the blind bolt-hole suggested above.

III. In the same year another correspondent

advised two drains with entrances fourteen feet apart. Lay a drain with eight-inch pipes and deepening to the kennel, which should be about three feet in the ground, three feet in diameter and eighteen inches high. Choose a dry spot in an open part of a wood, and if possible near water, so that the cubs can get to it to drink. Procure a litter of cubs. One of the vixens will very likely breed in the earth when grown up to maturity. The tenants should not be stopped out on hunting days during the first season. The objection to this form is that the kennel is lower than the entrance, and such an earth is difficult, if not impossible, to keep dry.

IV. Mr. T. Smith recommended two chambers, one further in than the other, and two entrances. This earth is in the form of an acute-angled triangle, the apex being the further point of the earth from the entrance. A base is formed by an imaginary line outside the earth and the entrances are at the two extreme points of the base, both sides covered with two-inch slabs, width nine inches, height eight inches. The diameter of the two kennels three feet. This does not seem to me so good as No. I.

Again, another very favourite artificial refuge for foxes is the stick-heap. The best place for making a stick-heap is that of which an account is given in

Baily's Hunting Directory, p. 15, 1897. 'The site selected was a sloping bank which shelved inwards and formed a sort of basin above a brook. There were a few old oaks round about.' The rough and partially wooded land was enclosed. The bad and doubtful trees were cut down and flung into the hollow. When a foundation of entire trees was thus formed, smaller branches and sticks were piled on the top. Young whole trees should be used, as they allow of paths and lying-up chambers.

CHAPTER VI

THE HUNTED FOX

MR. DARWIN in the 'Descent of Man' writes that fox cubs in a country where they are much hunted are more wary than elsewhere. This is a quotation from Le Roy's delightful little book.¹ But it refers not so much to the foxes in hunting countries as to those that live in places where they are treated as vermin. Foxes in Scotland, in those parts of Wales where there are no hounds, and in the Hudson Bay Territory where they are trapped for their skins, are doubtless more wary than in the hunting countries of England. They seem to know when they are respected, and to impose upon their hosts. On one estate where the foxes have been long preserved they are extraordinarily bold. A vixen and cub have been known to invade the poultry-yard by day, and to take away chickens under the very eyes of the men who were working on a haystack. The cub actually laid

¹ *Lettres sur l'Intelligence des Animaux.*

down in a neighbouring field to eat his booty, and almost refused to leave it when the keeper came up to him.

Foxes in a well-hunted but carefully preserved country seem to care less for man than in other places. But, as we have repeatedly noted, the fox is as adaptable mentally as he is physically liable to variation. It is curious that, of all our familiar mammals, the fox and the otter, of which the first varies in every possible way, and the second scarcely at all, are among the most widely distributed animals of prey.

The fox adapts himself not only to his surroundings, but also to our methods of hunting him. Foxhunting, as we have it now, is comparatively a modern sport, but hunting the fox with the aid of dogs is very ancient, for the fox's depredations have always made it necessary to keep his numbers down. The story of the fox with many wiles, and the cat with but one, is a very ancient fable, and bears witness to the antiquity of the chase of the fox. It also shows us that foxes in those days ran rings, since the fox was killed under the tree where the cat had at first taken refuge.

The fox, it is clear, had then as now a reputation for puzzling the hounds by many a trick ; yet I have

always thought that he owes something of his reputation for cleverness to his face. His long nose, oblique eyes and pricked ears, added to his swift, easy, noiseless, stealthy action, have made people think him cleverer than he is. Most artists who have painted foxes have exaggerated the human cunning and painted a bad man instead of a little wild animal, which is only worse than other animals in that he is more troublesome to man. But the fox suffers from the fame the fabulists of all ages have given him, and the way naturalists have played up to the story-tellers in their descriptions and anecdotes. The fox-pictures which illustrate this book are, I believe, free from this fault, and the artists have seen and painted the fox as he is in real life. As a matter of fact a hunted fox cannot be compared for the ingenuity of his tricks and stratagems with a hare or an old stag. Foxes in stone-wall countries often run along the top of the walls. In the Badminton book on 'Hunting' there is a picture of a famous Beaufort hound, Potentate, springing at a fox on a wall. But I have never heard of a fox devising a trick of such subtlety as that of the hare which ran along a wall till she came to a gateway, jumped down, and then springing back on to the wall, retraced her steps, and sprang off into a brake, where she squatted. When the hounds arrived one

carried the line along the wall, and naturally he threw his tongue in the gateway. The huntsman concluded that the hare had gone on, held hounds forward, and a fresh hare springing up, the original hare escaped as she deserved to do. Now a fox would hardly have done this quite so elaborately. But then probably hares and stags as a race have more experience of being hunted because they are eatable, and naturally in primitive times man pursued such animals as served for food more eagerly than the mischievous ones. If primitive man or his moderately civilised descendants knew of the whereabouts of a hare or stag, they were all agog to kill him. But if the fox or wolf robbed his neighbour he bore it patiently, and only turned his attention to the less profitable animal when its depredations were intolerable to himself. Even to this day, hare-hunting, and where it survives wild-stag-hunting, are more popular with farmers as a class than fox-hunting. The same feeling survives, too, in many sportsmen who like to feel that the game or fish they shoot or catch will not be wasted.

In truth it is not a fox's cunning but his simplicity that makes him so valuable as a beast of chase. When a fox runs straight from point to point, crosses the fields in the middle, we call him a good fox and celebrate his exploits in story and song. But such

foxes are easy to hunt, while everyone knows that turning, twisting, hedgerow-haunting foxes are the hardest to kill. When a huntsman finds an animal of this sort in front of his hounds he has a difficult task to work out, and need expect small credit, for when he has exerted all his knowledge and science his field will exclaim, 'Why does Tom or Charles not give up this brute and find us another?' But who will say that the dodging fox has not the better chance of life of the two, and does not show the greater cunning? If there were none but clever foxes we should give up hunting; if there were none but simple ones we should soon have no more foxes to hunt. The variability of the fox is an advantage both to the race and to the sport.

There is often a considerable difference in foxes of the same litter. I knew a litter of four of which two were killed and two were left by the first of November. Both of these lived in the same covert. One was not difficult to recognise as he had more white than usual on his underparts and chest, had a greyish coat and a big white tag to his brush. The other, and as we all believed his litter-brother, was smaller and darker. The dark fox never ran a yard further than he was obliged. He generally dodged for an hour or more about the covert, a wood

of sixty or seventy acres. Sometimes he was forced away, and then he would run up and down the hedge-rows till he got into some rabbit-hole or drain. One favourite place was a pollard willow hanging over a small river. Here he crouched until his hiding-place was discovered. He sprang into the water, hounds had a view, and rushed pell mell over the stream and half-way across one meadow on the opposite side before they found out that the fox was not in front of them. Then they checked. In the meantime the fox had never left the bed of the stream at all, but turning sharply he threaded along in a reed-bed underneath the overhanging bank for some distance and then was seen to swim back. This fox is believed to have been killed in a drain by a terrier at last, but only after he had lived for some years.

Sometimes, however, we hit on the line of the larger fox or we changed on to him in covert. His tactics were perfectly simple. He went straight away for five miles to a big wood, tried the earths and then crossed the border of our hunt for another refuge two or three miles further on, and either ran hounds out of scent or got in somewhere. But he never failed to try the main earth in the covert to which he ran. Of course he found it stopped, and he then went right on as before. He trusted to his speed and endur-

ance to beat hounds, and for two seasons he succeeded.

It was one morning late in the cub-hunting season of 1883 that hounds were put into the covert. They spoke at once, and almost without a moment's pause they settled on the line. There was one of those rare scents on which hounds never pause or waver, but turn with every bend of the fox's course. It was impossible to stop them. When they reached the big wood with but two men in attendance, the first whipper-in and another, the hounds were so close to the fox that he was driven right through the covert without a chance to turn, and was killed two fields away on the far side.

It is quite possible that one cause of the degeneracy of foxes is that we are always hunting and killing the simple-minded animals and allowing the more cunning ones to escape. For when we speak and write of the degeneracy of foxes we refer of course to the amount of sport we have with them. From the fox's point of view the more intelligent and cunning the animal is the more likely he is to survive. The saying that, with a mature fox that has a fair start, the odds are six to four on the fox as against the best pack of hounds, may be brought up against me here. But this applies to that large majority of hunting

days when scent varies from field to field, almost from moment to moment. Such a scent as I have written of above upsets all calculations whether of fox or man. For whatever the vagaries of scent are it is very rare for it to hold for twenty minutes.

But a great many of the simple-minded foxes are caught as cubs before they have their full strength and endurance. Nowadays cub-hunting is almost a part of the regular season. The fixtures are advertised and many men and women come to them. Hounds are more often indulged with a dash in the open than they used to be, and the little brave cub that breaks away is too often sacrificed when he ought to be spared.

Young hounds, no doubt, are improved by a scurry into the open and the triumph of a fox rolled over, but this is hardly legitimate unless all the other foxes have gone, and hounds, horses and men have earned a little gallop if the fox is willing to humour them.

A question arises at this point, How far have the changes in our methods of hunting affected foxes? The fox has always been hunted. At first by men and dogs as in the cat-and-fox fable referred to above. This no doubt was a kind of bobbery pack, which was, however, the germ of our foxhound packs. We cannot doubt that to the fox we owe the

breeding of the foxhound. Primitive hunters would see at once the advantage of a dog which hunted by scent, and gave notice by his tongue of the discoveries of his nose.

In forest countries greyhounds must have been comparatively useless, though no doubt the ancestor of our greyhound was much less of a mere gaze-hound than his descendants, and could, like the lurcher, or the Scotch deerhound, use his nose at a pinch. Thus the dog which would not only hunt by nose, but speak advisedly with its tongue, must early have been of value for every kind of chase, especially in rough forest countries. The race of foxes must soon have become accustomed to be hunted by scent and used to the cry of hounds.

For a long time the packs of hounds hunted everything they came across, and it is hardly a century and a half since the fox became the object of special attention. Even later than that, well into the nineteenth century, the fox was thought of as vermin; and in the West, where the fox-hunt was, and still is, overshadowed by the hunting of the stag, the owner of an historic pack told me that the people regarded his father as a sort of superior rat-catcher when he hunted foxes. Of the primitive fox-hunt a vivid sketch is to be found in 'Guy Mannering,' both

in the text and in a note. Dandie Dinmont's last hunt shows that the old school of fox-hunters could be as enthusiastic as those of the present day.

The change in the style of hunting, and the rapidity with which a vermin-hunt grew to be regarded as a fashionable sport, made an immense difference to the fox.

It is not so much that foxhound packs are faster as that they are hunted more quickly. In an old book published in 1805, 'The Sportsman's Cabinet,' there is a very spirited plate after a picture by Reinagle of two foxhounds racing on a hot scent. With the exception of the fact that they are possibly a little more throaty than would be approved of to-day, these hounds would pass muster anywhere in the twentieth century.

Judging by these and other notable pictures, the hound was much the same a hundred years ago as he is now. The fact is that the pace of a pack of hounds depends much upon the man who hunts them. A foxhound left too much to himself will potter, hover and rejoice over the scent almost as much as an otterhound. He will even wait for his huntsman. The difference in demeanour between hounds that have a slack man, or even one who is too bigoted to the 'Let 'em alone' maxim, and those that are hunted by a keen, sharp man, is wonderful.

The modern system of foxhunting has had a marked effect on the foxes in several ways. Careful preservation makes the English Midland fox less wary and shy than the Welsh or Scotch fox, and a fairly experienced Leicestershire fox is almost impossible to head. He will thread his way through a crowd of horsemen and carriages rather than be baulked of his point. I once saw a fox run down a hedgerow on the other side of which was a big field of horsemen. He was not a yard away and I could easily have touched him with the thong of my whip. Of course several people shouted, but he ran right along the whole line, near half a mile in length at this point, and turning sharp through a hole in the fence, crossed the road behind us. Now I think that it would be impossible to see a fox do this in a country where he is an outlaw. A fox, if I may put it in that way, is far less affected by being hunted than by the care taken for his preservation. Only I think that an often-hunted fox puts a much longer distance between himself and a modern pack and a quick huntsman than he did when hounds pottered after him. I am not sure that the old-fashioned style was not more fatal to the foxes than the new, for a stout fox once started seldom stays till he reaches his point. Goosey, the Belvoir huntsman, who begged leave to state that the

fox was a toddling animal, was certainly right, meaning as he did that he must press his fox at some time during the run if he was to kill him, or the fox would run hounds out of scent. Whereas with the old style of hounds they went hunting on, never resting, never halting, seldom overrunning the line, and steadily, pitilessly pursuing the fox to his death.

There was nothing like the number of foxes that there are nowadays, and thus the fox that was found in the morning was killed later in the day. Now the fox has every chance of putting off the burden of the hunt on another. Though the danger to the individual fox was possibly greater, he was not so much on the alert as he is when a smart, eager huntsman and a driving pack are on his line. If he is hunted in this way for any length of time he receives a sharp lesson. And this he does not forget. Next time the fox does not dawdle, but, as Goosey says, keeps on 'toddling,' putting a longer and longer interval between himself and his pursuers as chance offers, so that it is perhaps commoner for hounds to be run fairly out of scent nowadays than it was when the fox just kept in front of a slower pack.

The foxes of the present day have probably a much more limited range than their ancestors. Since there are many more of them, and as each dog fox

has a range of his own, they are kept within narrower limits. Besides this, a fox has not to work quite so hard for his living as he had formerly. Thus, while the actual fact of being hunted is no new factor in the fox's life, the preservation of foxes necessary for hunting has modified the struggle for existence, has made life easier and diminished the dangers and anxieties inherent in the existence of a beast of prey. We can see the evidence of this in the modern fox, less shy and evasive than his predecessors, or than he is in those countries where he is still regarded as vermin.

There is one topic of great interest with regard to hunted foxes that must not be passed over. This is scent. It would be going outside the limits of my present topic to discuss the problems of scent, or to recount the various theories which have been propounded to account for the presence or absence of it on particular days or in certain places. The point with which we have to deal is the result to the fox himself of the scent which he leaves. I have no theory on scent to propound in this case: I am only dealing with facts. The first thing to be noted is that a rank odour is diffused by most of the race of foxes. It varies not only from species to species but from individual to individual. All the varieties of our

common fox have the distinctive odour except the little Bengal fox. The Arctic fox—which, however, is a separate species—has it not, and the Eastern foxes have it to a much less degree than those of Europe or America. We are prepared therefore to find that the foxes we hunt differ to a considerable extent in the trace they leave. The secretion of the scent depends on the individual animal, on its strength and maturity, and probably to a certain extent upon its sex. I think dog foxes have generally a stronger scent than vixens. Thus it is quite possible to hunt two foxes consecutively under apparently similar conditions and to find that hounds can scarcely hunt one fox at all but will run eagerly after the other. We say that scent has improved, and so no doubt it has, but, in fact, we have before us a fox with more and stronger secretions. A fox that lies still apparently gives no scent at all, and as we know a hound may actually sniff at a bush under which a fox is lying and pass it by.

When, however, the fox is in motion and he grows warm with pursuit the scent becomes stronger; but as soon as he begins to tire and his strength to fail, the scent grows fainter and sometimes ceases altogether to be emitted. A fresh fox will lead most hounds astray from the line, the trail of the newly aroused animal being so much more attractive than that of

the hunted one. Many hounds, however, seem able to recognise that the change of scent means that the fox's powers are failing. Now, they seem to think, is the time for an effort, and the observant huntsman riding alongside his pack will notice that certain hounds push to the front and begin to run harder than ever, while others drop back, apparently unable to hold to the line or to follow it with the same enthusiasm as before. There are hounds in every pack which are perhaps rather slack drawers, or not very forward in the chase, until the time comes when they can run for blood. Such hounds are frequently responsible for the death of the fox.

The use of their odour to the race of foxes is rather difficult to explain, but it is probably a kind of bond of union, or it may be of warning, so that one fox shall be able to recognise when it comes upon the beat of another and to know its sex and possibly even its age. This odour might seem to be a disadvantage in some ways, but it is withheld either voluntarily or involuntarily in times of danger. We have seen that it is in some measure dependent on sex and health and age, and it is clearly an advantage to the younger and weaker foxes as well as to vixens in the spring that they give off a fainter odour, or perhaps, in the latter instance

one so changed that the hounds are unwilling to hunt it. But there are other cases in which the scent ceases quite suddenly, and it is very evident that fear diminishes the secretions to the great advantage of the fox.

Instances of this are familiar to every hunting man. Suppose, for example, a fox is coursed by a stray cur—an incident only too common in the grass countries—it is generally found that scent fails wholly or in part, and the pack no longer run with their former dash and confidence and sometimes cannot hunt at all. It would be interesting to know how many foxes' lives are saved by shepherds' dogs, in the course of a season. The total would certainly be large. In the same way when a fox springs up in view and hounds course him for a couple of fields they find it difficult to hunt him afterwards. For this reason, too, I think it is that the life of the fox is so often saved when a tired fox is viewed after a long run. Huntsmen are often led away to shout by the excitement of the moment. Hounds catch a view, then the fox runs to a hedgerow and all trace vanishes. On the other hand, when a nearly beaten fox is before hounds the quietest man will be more likely to kill him. Of course, with an absolutely beaten fox it does not matter so much, though it is more satisfactory that the

hounds should run into their fox fairly than that he should be mobbed by the men. The most perfect huntsman at the finish of a long run is the present Duke of Beaufort, and he probably loses fewer foxes than anyone else. If a fox be not quite so done as we think he is, he may very likely escape, since, as we have seen, at such times he appears to lose his natural odour altogether. No doubt these modifications of the scent-bearing power of the fox are of advantage to the race. That the weaker individuals should give a fainter odour, the younger foxes should be more difficult to hunt, and that the scent of a thoroughly frightened fox or a weary one should fade altogether, must, in the case of an animal always throughout its history an object of pursuit, be a great advantage.

I think, too, we are entitled to draw certain conclusions from these facts as to the feelings of the hunted fox, and we may infer that until the scent fails the fox feels no fear. We have many instances to show that this is so of foxes ; for example, while they are being hunted actually killing and carrying off fowls and ducks. Once in the Old Berkshire country a fox grabbed at a fowl when hounds were running him and disappeared with it into an earth. Indeed, when we come to think of it, if an animal like the fox, which has many enemies and is constantly an object of

pursuit, were to suffer greatly from fear its life would be a miserable one ; whereas the fox probably enjoys its existence as much as any inhabitant of the woodlands. The effect on him of hunting in this way has been to stimulate the cunning and resource of the race—we might almost say the reasoning power—for we recollect three remarkable cases of devices which are the more valuable as being attested by sportsmen and observers of no ordinary trustworthiness.

The first story is told by Mr. Charles McNeill, now Master of the North Cotswold, a forward rider who was likely to have many chances of seeing what the fox was about. In this case a weary fox dragging himself over a grass-field sprang on to a manure-heap and rolled himself over in it. Thus, Mr. McNeill thinks, he endeavoured to obliterate his own by a stronger scent. It is well known to huntsmen that manures and fertilisers are bad for scent. Is it not possible that this is known to the fox also ?

The next instance is still more remarkable, and was related in the 'Field' by Mr. H. S. Davenport, who is not only a sportsman of experience but a careful and accurate observer of wild life. Mr. Fernie's hounds were driving a fox hard near to the Lovers' Walk in the Cottesmore country. In a field close at hand was a plough-team at work, three horses

abreast. Just as hounds appeared in full cry the man went to the horses' heads to adjust the harness. Then he returned to the plough-handle. There, crouched in the furrow, was the hunted fox, trying to use the ploughshare as a screen. A moment later the creature sprang up and struggled onwards. As Mr. Davenport observed, the notable point was that the fox should seek shelter by the ploughshare when there was some thick covert close at hand. May we infer that he thought he was less likely to be looked for near the plough? At all events between the two points of Allexton Wood and the Lovers' Walk he had had plenty of opportunity to learn that on a scenting day no covert is a refuge for the fox, even if his previous experiences in one of the most constantly hunted districts of the shires had not, as is more than likely, taught it to him already.

Another witness is Mr. Walter Woodgate, so well known to several generations of Oxford men for his knowledge of rowing and of sport. On two occasions, he writes, a fox had been seen to run with a pack that were hunting him, 'for in a run with the H.H. the fox had doubled sharply, and the hounds were on the line short of the point at which he had doubled. The fox turned again, reached a tussock of coarse grass, and squatted.' The hounds ran on

and the fox crept back to the nearest covert. 'On another occasion, a fox was seen running with some of the tail hounds of the H.H. Then he was lost sight of and the hounds ran on. Probably this fox had suddenly squatted when he found a suitable spot.

'Again in the "fifties" the Old Berkshire hounds were running one spring day a twisting fox that had been found in Bagley. The fox had doubled back from between Lower Radley and Abingdon, and reached the pond below Radley School House in Radley Park. Some of the lower-school boys were strolling there. The fox crouched up to them and laid down. One of the boys threw a jacket over it and picked it up. The fox submitted to the handling as amicably as a lady's lapdog. The boy carried the fox up to the school enclosure, and when the hounds had passed, released it. If I recollect right, the boy was Meredith Brown, of Trinity College, Oxford, stroke of the Oxford crew in 1865-1866, and President of the O.U.B.C.'

In all these cases, which are well authenticated, the fox displayed something more than cunning. He recognised at least the difference between possible friends and certain foes. Animals doubtless appreciate courage and gentleness combined, and in the

case I have quoted the firm and considerate handling had no doubt something to do with the fox's confidence and submission. We know how some people can handle dogs and horses that others dare not come near. Animals have, I think, some faculty of discernment of character, and know a friend at once. I remember once seeing a strange, nervous, and very frightened little Skye terrier who was introduced into a room full of strangers. He darted at once to one lady and clung so to her that at last he became her property, and for twelve years never wavered in his affection and allegiance. Needless to say, he chose well.

CHAPTER VII

THE FOX AS A CAPTIVE, AND NOTES ON MANGE

THE fox is a wild animal by nature. He may, like other animals, be partly tamed, but he is never domesticated, and although captive foxes with characteristic adaptability will make the best of their restraint, they never, as do the dog or the cat, become members of their master's family. In almost all cases they are shy with strangers.

The captive fox always lives a life apart from that of man. His love of concealment and desire to slay remain as strong as ever. However well fed, no fowl is safe within his reach. He has no respect for his master's property. Even the cat will spare her owner's birds, and the most confirmed poacher among cats is to be trusted in the farmyard. But the fox is never trustworthy. Indeed, if careful observers are to be believed, he adapts his ruses to circumstances and endeavours to entice the unsuspecting

poultry within reach of his chain. Mr. St. John, who was a most careful observer, tells of a captive fox which would beguile fowls within his reach by leaving some of his food as a bait. This story has been ridiculed, but there is nothing incredible in it. The fox is as likely to do this as to feign sleep so as to lull the suspicions of his intended victims. This trick captive foxes have often been observed to practise. To an animal so active and so adventurous as the fox, a great part of whose life is spent, and whose happiness is found, in hunting his prey, well-fed captivity must be dull. We can imagine that a fox, if so elaborate a calculation were possible to him, would greatly prefer freedom, with uncertain meals and the chance of being hunted, to a dull and prosperous captivity.

Yet to this there are well-authenticated exceptions. Indeed it is most difficult to lay down the law as to what a fox will or will not do. I began to write this book with certain well-defined theories about the fox, based on long interest and observation; nevertheless, as these have been examined and verification has been attempted, it has been necessary to abandon some, modify others, and allow exceptions in all cases. There are instances, then, of foxes preferring the society of man and domestic

animals to the wild life of the woods. There is, for example, the case of a fox cub which was kept with another fox in confinement. Every day the cub was allowed a run in a walled garden from which escape was supposed to be impossible. One day, however, some strangers came in with his master, and the fox, seized with a sudden panic, scrambled over the wall into the next garden. There he was attacked and chased by two dogs. Once more he scaled the wall and was next seen at some distance from his home. He then tried to take refuge in another garden, but here the house-dog and the cat both flew at him, and at last he disappeared into a small wood. He was given up for lost, but to the surprise of everyone he was found asleep in his usual resting-place the next morning. Here was a case of voluntary return to captivity. Incidentally, we see how a wild animal like the fox keeps his wits about him, for the cub knew how to find his way back. One might have supposed that the strangeness of the outer world and the perils he encountered would have confused him. Even a dog when thoroughly frightened is lost sometimes. But this fox came back to his home, retaining his sense of direction and a memory of the landmarks by which he could trace his way, although to do this he had to climb a high fence and

creep along several garden walls before he could find his own.

But the most remarkable instance of a tame fox comes from County Cork. In this case, the fox had been captured as a cub. Before he was a year old he made his escape, but to the surprise and delight of the lady who brought him up, he returned of his own accord. Henceforth, he led a half-domesticated life in a covert on a steep and rocky eminence at the back of the house. A correspondent of the 'Field' relates how the fox's mistress would take a plate of meat and a whistle. Joe was sure to make his appearance. When he received a piece of meat he always took it away and buried it, returning for another piece, which he also buried. Not only would this fox come at call: if hungry he was in the habit of appearing at the kitchen window, where the cook would feed him.

Joe was on excellent terms with the two dogs, and when he felt inclined for company he would come on to the lawn in front of the house to seek a game with them or with the cat. He was fond of hiding and springing suddenly on a dog's back. One of his playfellows was a setter which would invariably point if he touched the line of Joe's travels in the coverts. The fox would go out rabbiting with

the dogs, who found him a most useful ally. Once, when some distance away from home, Joe fell in with the hounds. He had to run for his life, but, fortunately for him, he was a well-known character, and when he made for his home at Oakfield the Master recognised what he was hunting, and called the hounds off.

The story of Joe was the means of clearing up a disputed point about foxes. The writer of the account in the 'Field' stated that when Joe saw the plate of meat he wagged his brush. It was at once denied that foxes do wag their brushes, and a spirited controversy ensued. One writer quite unjustly implied that Joe was a fiction, or that at least his story was made up of much-embellished facts.

It was, however, established beyond doubt that foxes do wag their 'tails.' One reason for this I have suggested elsewhere. But the waving of the tail is common among cats and dogs as we know, and some other animals express pleasure or expectation by moving the tail. When a wholly domesticated dog or cat, a partly tame wolf, fox, or other wild animal, wags its tail, the origin of the habit is of the same kind, though not always identical.

I have already pointed out that in the feline carnivora and the fox, which are both stealthy stalkers

of their prey, the gentle waving of the tail which we see, is useful in distracting the attention of the intended victim. So with the dog. If we watch a pack of hounds we see that a hound who touches the line of a fox lashes his stern from side to side. The pack in a covert do the same when they think, but are not sure, that a fox is there. Directly a hound begins to 'feather' the others take the waving of the stern as a signal: they flock to him to see if they can make anything of it.

Now which is the cause of tail-wagging, pleasure or a signal to the pack? I think the fact that dogs, cats, foxes and wolves all seem to show pleasure by tail-wagging is a mark that a certain sense of gratification is the spring of the action. The perception on the part of the others that one of their number is expressing pleasure at the anticipation of a kill brings the rest to him, and thus the signals become a recognised code, as they help in the capture of prey. So the cat and fox may just move the tail as a sign of pleasure, or at least of pleasurable expectation; and if, as I have suggested, the action was an advantage to the race, then it would tend to become fixed. At all events there is no reason to doubt that with the half-tame fox or wolf, pleasurable expectation is at the root of the action.

The dog, it is true, has lifted tail-wagging to a higher plane by using it as an expression of affection. The tail of the terrier lying at my feet wags when his dinner is coming, waves frantically as he sees preparations being made for a walk, but it beats the ground only in response to the voice of the person he loves best. Even here the dog does not stand alone, though in his case the affection for persons and animals outside his own race is more powerful as a moving or restraining influence than with the wolf or the fox. In the case of these last, and especially with the fox, the affection for a master is apt to be swept away in a moment by the rising tide of ancestral habits and instincts. The same thing happens with the dog, but more seldom ; and even with man there are moments when the primeval animal is stronger than the continued influence of civilisation and affection.

To return to our tame foxes. The fox is not incapable of affection, but he never quite gains confidence in man as the dog does ; which is not wonderful, considering the age-long enmity between the two. But there is one curious circumstance about tame foxes, and indeed any other domesticated wild animals : that although they never lose their distrust of man, even if they learn to have confidence in

individuals—watch your tame fox's terror of, and distaste for, strangers—they will fraternise readily with the dogs and cats about the place. This is only one of the wonderful glimpses we obtain by careful observation into the minds of animals. The fox is probably capable of the generalisation that man is the most intelligent and dangerous of animals. He would, could he speak, express of us exactly the same opinion we have of him : 'An intelligent animal, with some capacities for affection, but you can never trust him.' Such in fox language would be the account given by an escaped fox of his experience of man. But with other animals there is a freemasonry. No one can doubt that the lower animals have a kind of common language, probably of gesture. This *lingua franca* of the woods is very limited, but is also effective to warn of danger or to attract to food.

The fox soon makes friends with the dogs and loses all fear of them. There was a fox cub in the Duke of Buccleuch's country that was put into a kennel with terriers and hounds. He was soon on the best of terms with them all. After a time, however, the ancestral instinct for killing was too strong for him, and a whole hecatomb of dead fowls one morning caused the fox to be sentenced to the chain. But in spite of this he would get loose at times, and then the

hounds—old ones used for tracking wounded deer—were put to hunt him. This the fox regarded as a joke : he would set the hounds puzzles, and then lying in some ambush spring out upon their backs. After a time, however, the old hounds would tire of the fun, and then one of them would roll the fox over and hold him until he was recaptured and chained up again.

Nothing is more notable than the way hounds, and even terriers, will generally respect a tame fox. A pack of hounds was running a fox on one occasion through an orchard in which a tame fox was chained. They took absolutely no notice of the tame fox. Then there is the well-known and often-quoted instance of Mr. Templer, of Stover, who hunted nothing but bagged foxes, some of which when at home were on the best possible terms with the hounds.

The same thing has been said of the terrier ; but he is a bloodthirsty little person, and the following story is a proof that the terrier is not so discriminating as the hound. A friend who has some excellent working terriers went to visit a neighbour, taking two of her dogs with her. Knowing that the visitor would stay to luncheon and that the dogs would come into the dining-room, a young man who was

staying in the house put a *stuffed* fox under the dining-table. Hardly were the company seated when a tremendous uproar arose. The lady of the house was much distressed, being under the impression that the terriers were worrying her favourite Skye, which, however, with characteristic dislike of strangers, had already retired from the room. The host and the visitor dived under the table and soon discovered that the terriers were worrying the stuffed fox with the greatest eagerness. There is, however, a reason why terriers should be more indiscriminate than hounds : the terrier's desire is to tackle, the hunting is secondary with him ; but on the other hand the fox-hound's first impulse is to hunt.

Now there is in all probability a considerable difference between the scent given off by a wild and a tame fox, and foxhounds hardly recognise the latter as that of the quarry they are accustomed to hunt. Every huntsman knows what a difference there is in the demeanour of hounds when they have a bagman before them : the puppies and the riotous ones come to the front, while the best hounds in the pack can hardly be persuaded to acknowledge the line. Indeed the bagman often escapes to spread mange abroad, because the best hounds are so slack in hunting him. But such refinements are unknown to the terrier,

whose desire it is to fly at his enemy wherever and whenever he can get the chance. Even hounds do not always respect the chained fox, for I know of one instance where a single hound, getting wind of a tame fox, jumped over a fence and murdered it then and there, to the great annoyance of its owner. But still I think it may be taken as a general rule that hounds will not interfere with a fox in captivity.

The fox, as we have already noted, may be partly tamed ; it may even be moved by some affection for its owner, but it is very seldom if ever domesticated. Among all the instances of tame foxes which I have heard of, there are only two in which the fox seems to have been actually employed usefully. Some years ago a rat-catcher in Gloucestershire used a fox in his business ; the fox was set to watch the holes when the ferrets were put in, and seldom missed a rat that bolted. This fox, the man declared, killed more rats than all his dogs put together. But the story does not tell how the fox was trained to respect the ferrets. It is well known that foxes are most determined foes of stoats and weasels, and there are several instances of foxes attacking ferrets. But that the fox is a very clever ratter is well known. In the days when wild-fowl were captured in a decoy, the well-known

curiosity of the birds was played upon by showing them a reddish dog or a tame fox. One of the latter was used at the Berkeley Castle decoy, a generation ago.

It is quite possible that wild foxes practise on the curiosity of wild ducks, for it is a fact that foxes do manage to capture a good many of these wary birds. By gambolling and playing on the bank, they bring the ducks within reach of their spring, which is as quick and as certain as that of a cat or a weasel. But in both these instances there was of course no domestication: it was only that man was making use of the natural aptitudes of the fox and his stratagems for his own purpose.

The difference between the tame fox and the domesticated dog is notable. In the dog the wild traits are only, and often useless, survivals. The dog buries his bone, though he has no experience of hunger and probably knows the next day's dinner will be forthcoming. He turns round on the hearthrug because his ancestors prepared their lair in that way. But this latter is not always quite a useless habit, for I know a pet dog who thus habitually arranges his rug to his liking in his basket. But in the fox all the cunning, lurking ways of the beast of prey persist. The lust of slaughter remains, even though he is well and

regularly fed. The same desire to kill breaks out sometimes in dogs, though it can be and is restrained ; but the fox is never to be trusted. The creature has always been in contact with man and always at war with him, and the long enmity cannot be pacified.

Of all the enemies of the poultry-yard the captive fox that has escaped is the worst. There is, at the time I write, a very large fox which is supposed to be an escaped captive, and in this season, 1905, he has had twenty head of poultry from one yard, sixty from another, and forty from a third. He has lost much of his fear of man, and will not seldom forage by day. Yet his natural cunning is not abated, for the county pack, though they often find, have not, so far, been able to kill him, although they are a killing pack, having slain some forty brace in the cub-hunting season.

Some thirty years ago, a Mr. Eagle Cole gave a most interesting account of some tame foxes that were kept at his home in his boyhood. There were three cubs, two dogs and a vixen. In the summer-time they lived in the open confined by chains. Each fox had his own earth, made with a burrow which led to a barrel buried in the ground. At first they were chained underneath a cherry tree, but they ate so much of the unripe fruit as to make

themselves ill. Indeed, fruit was always a favourite food, and the boys of the household used to feed them with gooseberries and grapes. They were very fond of cockchafers, but they loved best of all a rat after it had been buried for a day or two. Curiously enough, they seldom buried their food in the same place. In the winter they were confined in a large outhouse, with blocks of wood hollowed out to sleep in. Sometimes the boys would take out live rats. There was a stealthy gliding movement, a swift paw would come out, and the rat was dead.

Each spring the vixen produced a litter of cubs, generally from six to eight in number. When the cubs were old enough to leave the mother they were turned into a yard with some greyhound puppies. Dogs and foxes were excellent friends and used to play together. Hide-and-seek was a favourite game, at which the foxes could always beat the puppies. From time to time, one or other of the foxes escaped, and they never failed to signalise their freedom by a great slaughter in a neighbouring poultry-yard. After two or three days, the truant would return. One of the dog foxes, however, which was of a sullen unfriendly disposition, escaped at last and never came back. The other two died in captivity, the dog at ten, the vixen at thirteen years old. It is

probable that in a wild state few foxes live so long, but if they survive the perils of their earlier years, and if I am right in supposing that many of the older foxes manage to escape being hunted, it is possible that they live to this age.

As a rule, old foxes are able to keep themselves fat and sleek, and I have seen some killed that had not a tooth left, and yet were apparently in good case. Whatever the fox's physical infirmities, he makes his intelligence supply the place of strength, and Mr. St. John relates the death of a fox that had only three legs, having lost one in a trap. This fox, an old dog, was in first-rate condition and fat and well-liking, so he evidently fared well. It was a rifle-bullet that laid him low. His tracks were well known from the peculiarity of the prints of the stump by which he had often been traced in the snow.

On the whole we may be tolerably certain that, in spite of security and regular food, the captive fox would prefer, and be happier when leading, a wild and free life, even though he might be occasionally hunted in the course of it.

But besides the tame foxes we see and hear of, there are many captive foxes in England. This is nothing new. Beckford speaks of the necessity of a yard for foxes. I gather that the object of this was

to supply bag foxes for the hounds to hunt, for in Beckford's day foxes were not too plentiful. The M.F.H. was probably the only person who held foxes imprisoned. But nowadays the keepers have taken a leaf out of his book, and many of the foxes we find have never known liberty. They have been kept in some pit or den by the gamekeeper, who saves his credit and his game by turning out one or two when the hounds are coming. These generally fall easy victims to the pack, for without condition and without knowledge of the country such foxes can show no sport. If they do escape—and bad foxes are difficult to kill on a very bad scenting day, when they turn and twist about till the covert is foiled—they are often mangy, or have the seeds of the disease in them. But they have served their purpose, for they have earned for the keeper the money paid for each fox found in his covert. It is these captives that are one source of mange—a scourge which may well be dreaded, for it kills the foxes and devastates the country. I am very much inclined to think that, once started, the disease will run its course in the district.

Since, then, the captive fox is one of the sources of mange, this seems the right place to speak of the disease. It is not necessary to go into the nature of

the ailment, which is highly contagious—so much so that it has been said that horses have contracted it from the masks of mangy foxes being suspended from the saddle of a hunt servant, and that terriers which have been used to bolt a mangy fox have been found suffering from the disease. The only way of dealing with mange is on the sound principle that prevention is better than cure. It is profitable, then, to examine into the causes of the disease. These are the same as those which cause it in dogs : a low state of health and a bad state of blood induced by foul and dirty surroundings, improper food, and, I think, anything that seriously lowers the vitality. It used to be said that foxes hard run, which take refuge in an earth when hot and wet, become mangy ; but I can find no evidence of this. It may be so, but I confess that I have no faith in the statement. I believe the principal causes to be four :

First. Unwholesome captivity in fox-pits, pig-styes, or any dirty place.

Second. Turned-down foxes bought from dealers, that have travelled in dirty crates. It may be taken as a certainty that markets which deal in such things are simply hotbeds of mange, and that it is far better to go short of foxes than to buy them.

Thirdly. Feeding on horseflesh or other flesh.

Foxes require fur, feathers, and apparently some insect and vegetable food, for it will be noted that the tame foxes of which I have written above were fed with considerable attention to variety.

Fourthly. A lowered condition of health caused by picking up poisoned rats, even when there is not enough poison taken into the system to cause death, or from being shot at and wounded. Several classes of people, with or without murderous intent, if they do not shoot foxes at least shoot at them. The number of foxes so injured every year is very large. The magnificent skin which I selected for description belonged to a fox so shot at. The veteran first whipper-in of the West Somerset told me that hounds found this fox and he holloaed him away. The pack ran the line for two fields and then threw up, when Jack found the fox dead under a hedge. The late Mr. Wilfred Marshall, who was then Master, sent the body to Mr. Ell, of Dunster, for a *post-mortem*, and a pellet was found in the lungs. No doubt directly the fox began to run, hæmorrhage set up and choked him. Such injuries are, I believe, very frequent causes of mange when they are not fatal. This practice of shooting at foxes, with intent, perhaps, to warn them off a particular place, is, I think, on the increase. It will be found that where people are

openly or secretly hostile to foxes, and such are nearly always known in their own neighbourhood, there mange will be prevalent and destructive.

Two other causes of mange have been put forward: overcrowding—*i.e.* foxes too thick on the ground—and in-breeding. I am inclined to suspect that both are probably imaginary.

Foxes are relatively numerous, but there is not, and cannot be, such crowding of wild foxes as to produce disease. Of course if disease be started by any of the causes suggested above, where foxes are plentiful, it is more likely to spread. As to in-breeding, the habits of the fox forbid that supposition and as a matter of fact much foreign blood has been introduced of late years. Germany, France, Belgium, Sardinia, and possibly Siberia, Scandinavia, Scotland, and Wales, have all contributed to infuse fresh blood into our English fox.

But from the disease we turn to its prevention, for cure there is none. Of course the soundest method is to cut off the contagion at its source. Turn down no foxes except with the greatest circumspection. Let there be no confined cubs, no poisoned rats, no charges of shot 'To make him leave that.' And above all, and this I believe to be the key of the whole position, *preserve the older vixens carefully.*

But if the disease is already devastating whole districts of a number of countries, what is to be done ? Then only the most stringent methods will avail. All the foxes within the infected area must be killed, the natural earths be broken up, and artificial earths picked to pieces and re-made. If for any reason this is not practicable, then the following method of fumigation is effectual. I once tried it, and I believe with success, in the case of an earth which the owner was unwilling to have disturbed. The method was, I think, published in the 'Field' many years ago, but I take the recipe, as I used it, from a useful book of sportsman's notes kept now for many years, into which I copied it.

Two iron dishes should be procured and placed one on the top of the other. In the upper one, put common carbolic, and in the lower a red-hot heater (such as a washerwoman uses in box irons). Put the apparatus into the mouth of the earth, and fill up the mouth carefully with clods. The vapour seems to disinfect the earth, and does not cause foxes to abandon it altogether. Two cautions are requisite : first, that we should be quite sure that there is no fox in the earth ; and secondly, that the person using the apparatus must be careful not to inhale the fumes.

But the most stringent methods are the best, and for this end all must work together—landlords, farmers, keepers, and members of the hunt.

Nor should we forget that Masters of Hounds must themselves exercise self-denial. Two excellent countries I have known in which wealthy Masters introduced mange by turning down foxes. In one case, the Master wanted to have his country better than good, and in the other the M.F.H. had made up his mind to hunt more days in the week than his area of covert justified.

There can be no doubt that it is far better for sport to be content with the natural supply of foxes which the country affords. It may be repeated here once more that *if*—and alas! it is a large ‘if’—we can have our fox-coverts kept quiet and left alone, there will be plenty of foxes. Artificial earths, and indeed all interference with nature, are expedients: they are not the best way. I only except what are called artificial coverts, for there is really no such thing. All coverts, when once started, are natural enough. What we mean is that we have made judicious use of nature to assist our sport, by placing the coverts as links between one section of the country and another.

I believe firmly in keeping foxhunting wild, and resisting as far as may be the encroachment of artificial sport. So long as we can preserve its character as a wild sport, so long will it survive in the healthy and prosperous condition it enjoys at the present time.

CHAPTER VIII

THE FOX AS OUTLAW

IN parts of England only is the fox a welcome guest. Everywhere else in the world, when he comes in contact with man, he is an outlaw. Yet he survives and holds his own in spite of gun, trap, and poison, and although his cubs are dug out and massacred whenever their hiding-place is discovered. Indeed it is only when he is carefully preserved that we hear of his degeneration. In the countries where he is outlawed he is larger, sleeker, more powerful, more cunning, and possessed of a marvellous power of endurance. The largest, heaviest foxes come from Scotland, Wales, and the fell country of Cumberland and Westmorland, where there is no truce or armistice in the warfare against their kind.

It is true that in some places on the European Continent the fox was for a time valued as a trophy in the game-bag, and received a certain amount of protection. I have heard that in Denmark fox-drives

were a favourite form of sport, and that in parts of Germany the fox was esteemed for the sporting shots he afforded. On some estates the host would like to see a few foxes in the bag, and no doubt they were, if not protected, yet spared. But in Denmark and elsewhere the pheasant is becoming more common, and the fox has no deadlier enemy than the pheasant, unless it be the hare in Germany. Hare-drives on a large scale are a favourite sport on some German shootings, and to preserve the hares it is necessary to keep down the foxes. Some German sportsman with the national love of accurate statement has calculated that each fox destroys seventy hares a year. I do not know how this calculation was arrived at, but it has had the effect of causing the fox to be proscribed where its presence was, if not discouraged, yet winked at by the owners and keepers. I have sometimes been inclined to doubt if foxes could catch many hares. The hare, if we may judge by her ruses when hunted, is not much less cunning than the fox, and certainly swifter. But the fox has a gift of apparently planning-out his stratagems, and I have come to the conclusion that he is a very successful hare-hunter, and that the German sportsman may not be so far out after all in his calculations. The fox hunts round the field in which the hares are, and finds out their

favourite smeuse in the hedgerow. He takes covert near one of these, or even scratches out a sort of rough trench so as to conceal himself more effectually, and waits till a hare comes through the hedge, when he springs upon her and carries her off. Occasionally two foxes will hunt together—for though the fox is generally speaking a solitary, there is no fixity about his habits any more than there is in his size, weight, or the colour of his coat. He adapts himself in all respects to his surroundings. At the same time I think when two or more foxes are seen working together, they are usually a dog and a vixen that have paired, or it may be a vixen with one or more of her cubs. It has been said that foxes in the highlands combine to kill lambs and even full-grown sheep. I have failed to find any sufficient confirmation of this. But I should not like to say that it never happened, for the study of such an animal as the fox is a wholesome corrective to dogmatism.

But to return to the case of two foxes hunting together. I have been told by a man who was a gardener by day and a poacher by night, that he used to take advantage of this habit of the fox. There was a favourite feeding-ground of the hares (which were carefully preserved) that was regularly worked by two foxes from a neighbouring wood. One would take

covert in the way I have already described, while the other hunted the field, putting up the hares one after another, one of which was sure to rush through the ambush where the fox was hiding, and be caught. The man would drive off the fox and appropriate the hare. The same method of hunting was observed by the late Charles St. John, in Morayshire, and he adds that he has seen two foxes working in concert the sandhills where rabbits abounded. Each of the two took a side of the sandhill.

We cannot deny that the keeper who wishes to preserve hares in large numbers has some justification for his enmity to foxes. Indeed, this enmity is encouraged, in Mecklenburg and elsewhere, by a fixed scale of gratuities for all vermin killed, among which the fox is ranked as chief.

Yet even in those countries where the fox is vermin, he is in a measure protected by foxhunting. Large numbers of foxes are imported from the Continent into England, chiefly from France and Belgium. In Germany there are a few packs which hunt bagged foxes, and they too must buy their quarry. Scotch foxes are often bought and turned down in England. Thus the fact that the fox has a market value tends in some degree to prevent his entire extermination. Of those foxes which are

brought from Scotland and Wales I am induced to think that some find their way back. It is certain that if we turn down foxes and earmark them, only a very small number are brought to hand, and I think that a few do actually work their way home. In another chapter I have given a few instances of the homing powers of foxes, and it is difficult to say what the limit of those powers may be.

Of all the countries where the fox is an outlaw, Scotland is the one in which he has most enemies. Farmers, shepherds, and gamekeepers are his persevering foes ; but yet the struggle is not so uneven as it seems. The fox has a way of rising to the occasion and developing a wonderfully elusive cunning, and far greater boldness under persecution. The very dangers he escapes seem to give him courage, and he may often be seen hunting by day as well as by night. He grows to a large size on a varied diet, which ranges from honey to moles, cats, and venison. He is accused of sheep-stealing, but has the credit of all the mischief done by dogs. Yet no doubt weakly lambs, sheep that are in trouble, the young roedeer, and a wounded stag may fall to his share. I am bound to say that in Wales and Scotland he is believed to attack full-grown sheep, but the principal evidence against him is the wool and bones found in his den, which might equally come

there as remains of sheep that have died of disease or accident. But it would be difficult to persuade a Welsh or Scottish farmer that the fox does not kill sheep, and it is never wise to set oneself altogether against the beliefs of practical men : they have a way of proving right after all.

The methods by which war is made against the fox are various. A good many foxes are trapped, but the traps have to be most carefully set. The smallest taint of man is detected. Moreover, if a fox has once grasped in his mind the nature of a trap, he cannot be induced to go near one again. If a fox has once been caught by a foot, if he cannot drag the trap away with him he will gnaw his foot off. In England a three-legged fox soon falls a victim to the hounds, but in Scotland he seems to get on very well, and to be as sleek and well-looking as ever, and a great deal more wary.

In Scotland the professional foxhunter was at one time a familiar figure ; his duty was to track the foxes to their dens and earths, and to draw out the cubs with one of his clever terriers, or to organise a hunt for the extinction of some well-known robber. Mr. St. John, who was one of the best of observers, gives a vivid description of the Highland foxhunter, his steady old hounds, his wiry terriers and swift

‘streakers’ or lurchers. One passage will show us at least that the hunted fox is the same everywhere. The fox is described as coming leisurely along, sitting down, and listening to the cry of the hounds just as we have seen him do in the Midlands. But in the Highlands the fox is shot without mercy when the hounds have driven him past the ambush of his enemies, or the terriers bolted him from his den. Another plan is to put down a bait (hare or cat a little gamey, or a bit of honeycomb, is the most attractive), and then for the hunter to conceal himself behind a rock within sight and gunshot. I think that it is not generally known how partial the fox is to cats. Probably in old times when the wild cat was comparatively common in Scotland and elsewhere the fox robbed the cat of its kittens in its absence, for no fox would ever have tackled a wild cat, which is the larger and more powerful animal of the two.

But there is no doubt that the fox does hunt and destroy the domestic cat, and it is possible that foxes may be of some service in keeping down the half-wild cats which are noted for their destructiveness in game-coverts. But the most carefully laid ambush is sometimes defeated by the cunning of the fox, which will circle unseen round the bait, and if a whiff of his

enemy reaches his sensitive nostrils make himself scarce at once.

In spite of the constant efforts to destroy them by all possible means, foxes still multiply. When they are much persecuted, they choose rocky and inaccessible places on the sides of mountains for their lairs. Many of these caves and dens are not to be reached by man or dog, and though, when the young ones are laid up, the keeper or shepherd may watch for the parents' going and coming, it is hard to get a shot. Mr. Colquhoun says that the old ones bring food in the morning and evening, and the fox, stealing along in the uncertain light, often escapes observation altogether, and at the best offers but a small mark as he creeps towards the den. The difficulty is to see the foxes at all, so clever are they in keeping out of sight. It is rather the rule than the exception for the fox to escape the gun. Again, the deer forests, which must be kept quiet, are refuges for foxes. Some of the deer forests, says Lord Granville Gordon, are 'crawling with foxes.' On one occasion the stalker had hit a stag hard and was surprised to find the animal plodding wearily on instead of lying down. At last he discovered that a fox was following him. When the stag laid down for a short time the fox sat up a few yards away watching him. No doubt foxes often

taste venison, and know what a wounded stag means. They stalk the stalkers, as we have already seen that they haunt the steps of the pheasant-shooters, and thus no doubt pick up many a rich meal of venison. Occasionally, too, fawns and red-deer calves fall victims to the fox.

In Wales there are many more packs of hounds than in Scotland, but in the mountainous districts a price is often set on foxes' heads. In those parts where there is no regular hunting the farmers subscribe to a fox fund. In Wales, as in Scotland, there is often a professional fox-catcher, who receives about five shillings a head for foxes. Two of the most successful Welsh fox-catchers were women. One, Margaret Evans, is said to have slain more foxes than all the confederate hunts put together. Her hunting-ground was round Snowdon.

Another famous Welsh huntress was Catherine Thomas, who gained her livelihood by thinning down foxes in Carnarvonshire and Merionethshire. She used two or three couple of small Welsh terriers of the old breed. Catherine kept the score of her kills by notches cut in the mantelshelf of her cottage. At her death there were 175 nicks.

As in Scotland, so in Wales, foxes are sometimes bolted by terriers when the earth is accessible, and

shot at as they come out. But this is an uncertain method, for five foxes were once bolted from an earth near Dolgelly and every one of them was missed. In fact a fox is not easy to shoot. A Welsh Master of Hounds was entertaining on one occasion a brother M.F.H. from England. One morning a messenger came to say that a farmer threatened to shoot a fox that was lurking round his homestead. 'Tell him to blaze away,' said the Master, calmly. Then, turning to his guest, he said, 'You see, we can't afford compensation. Most likely the gun won't go off, or the old man will miss the fox. If he does the fox will never give him a second chance.'

Many stories are told of the extraordinary endurance of Welsh foxes. The Ynsfor Otter Hounds once hunted a hill-fox over the slopes of Snowdon for three hours. The late Lord Henry Vane-Tempest's hounds had also some wonderful runs. The hill-foxes, with their knowledge of the ground, have every advantage, and slip over and round obstructions which hinder and weary the hounds, so that these stout hill-foxes of Wales are recorded to have beaten hounds after running for four hours and upwards, covering immense distances.

But it is not only in these wild regions that the fox is an outlaw: there are many places in England

where he is diminishing in numbers, even in hunting countries. In England the fox can hardly exist unless he is preserved, and it has come about that he has fewer friends than he used to have in some districts. This has come about by changes in the country life of England which have brought in their train alterations of sentiment about foxes in many a countryside. In the first place, a resident landlord was an influence in favour of the fox. Even if he did not hunt, his neighbours did, and each man respected the other's sport. The hunting squire preserved his game in the rough fashion of those days, for the sake of his shooting neighbour, who in his turn respected the foxes, and, what is more important, obliged his keeper to do so too. Game was much scarcer formerly, and men were content with bags that would now be regarded as absurdly insignificant. I have seen in the game-book of a great estate that when the Prince Regent and Beau Brummell were shooting the bag was sixty-three pheasants. Game being scarcer, foxes were fewer also than they are to-day, for if undisturbed, the quiet and plenty of a carefully preserved covert are very attractive to them. When there are more than a certain number of foxes in a covert they are difficult to kill with hounds. But in the days when there were but few pheasants



A. Gould Thayer - 1904

SHADOWED

and fewer foxes, it was not worth while to incur the odium of vulpecide. The influence of the landlord was therefore, on the whole, on the side of their preservation. Even the shooting landowners favoured hunting. It was the well-to-do farmer's natural recreation. Hunting comes at a time of year when the farmer can spare the time, if he has the money, and in those days it was his own fault if he had not. On the other hand, the shooting farmer was regarded with disfavour on many estates. He was often on terms which were hardly cordial with the gamekeeper, and at odds with the agent or landlord about the damage done by the game. Therefore he and his sons hunted, and sometimes kept hounds.

There have been many notable farmers Masters of Foxhounds or Harriers. Indeed, many historic hunts owe their existence to the combination of the farmers. The West Somerset Hunt, now for over fifty years governed and supported by the Luttrell family, began by the farmers helping a man named Read, said to have been a retired butler, to keep a few hounds after the fashion so vividly described by Surtees in the account of Michael Hardy and his hounds in the opening chapters of 'Handley Cross.' But now many shootings are let, and if, as often happens, the tenant is a kindly and liberal man, his

influence is naturally cast on the side of the gun. At the best the shooting man who wishes for a big bag can hardly regard the hounds as anything but a nuisance. It is not so much the toll taken of pheasants that is objected to as the disturbance of the coverts. It is only fair to remember that the planning of a beat so as to give the sporting shots which the true sportsman delights in, is a matter of elaborate strategy, and a fox or foxes in the covert will often cause the defeat of the best-laid scheme for bringing the birds over the guns. The old school of keepers had a sort of traditional hostility to foxes handed down from the days when the fox was vermin, but the modern keeper has developed a quite natural antipathy to an animal which injures his credit and his pocket, and at the best causes a great deal of work if its misdeeds are to be counteracted. Even the keeper's master is not enthusiastic about foxes. He does not hunt, and it is a curious fact that those who are devoted to particular games and sports regard with disapproval other sports and games which they do not care for. The shooting and hunting men have something of the same feeling, each for the other, that the orthodox in religion and politics have for dissenters or opponents: they wonder at their mental position, and have a quiet disapproval of their

moral attitude. Thus between the imperfect sympathies of the master and the active hostility of the man, the fox is proclaimed an outlaw from some of his once-favoured haunts. But there is another change of greater importance because more far-reaching. The farmers were once hunting men by predilection and necessity, and the old school still carry on the tradition ; but the younger farmers are more in sympathy with shooting than hunting—partly because of the fact that they often shoot over their own farms as a right, partly because they cannot afford to hunt.

Thus the sportsmen among them take to shooting naturally, and the gamekeeper occupies the place and exercises the influence which the huntsman formerly had in the social life of the country-side.

Again, even the few partridges, pheasants, and hares of a farm have a market value : the shooting can be let. In some countries the rabbits are a source of income, and the rabbits are let to professional trappers. Thus the unpopularity of the fox spreads, and a kind of antipathy grows up against him. There are hunts where the traditional love of foxhunting has decreased, and the fox is no longer safe even where there is little or no game. I know estates where there is neither the one nor the

other. Public opinion is changing about foxes in some districts. Formerly, as I have said, the fox represented the farmer's recreation : now he merely means fewer rabbits and hares to shoot. We may injure a man in his business, and he will forgive us ; but interfere with his sport, and his enmity is aroused. The fox is forgiven the damage his pursuit occasions, but the partridges, rabbits, and hares he consumes and drives away are not forgotten. And no doubt it is true that a fox does more damage in an open shooting than in coverts. The animal that can stalk and catch a wild duck can probably catch a pheasant now and again, and is no doubt likely to take a few partridges. We have seen that he can catch hares cleverly, and we know that rabbits are one of his favourite foods. There is, in fact, more excuse for dislike to foxes in the owner or tenant of a small shooting than in the case of those who own or rent many acres.

But there is one aspect of the fox that saves him from becoming an outlaw, and that is his economic value. If it costs a sovereign to shoot a pheasant, it costs fifty times as much to kill a fox.

Thus the fox is a valuable animal to the district in which he lives, and his value is increasing. Forty years ago every fox killed in a certain country

cost about 12*l.* 10*s.* Twenty years later, the sum rose to 26*l.* per head, and at the present day is 36*l.* This allows nothing for the expenditure on hunting by the followers of the chase, but is simply the money spent by the Master and members of the Hunt on horses, hounds, food, and wages, before the fox is brought to hand. Thus a hundred pheasants represent 100*l.* of expenditure, while fifty foxes mean 1,150*l.* circulated in the neighbourhood.

Again, if we accept Mr. Sargent's figures given in 'Thoughts on Sport,' the annual cost of hunting in England, Ireland, and Scotland totals up at 4,250,000*l.* in round numbers. Suppose 30,000 foxes are killed every year, the average cost of each fox is rather over 140*l.* I have selected these figures because I am convinced that Mr. Sargent rather understates the expenditure than over-estimates it.

Thus the outlawry of the fox in countries where he can be hunted is a mistake from a pecuniary point of view. To suppose that the money would find its way by other channels into the same pockets if there was no hunting is an error. Besides these direct benefits, the fox is a principal agent in keeping up the breed of horses. There is a continual tendency to make our thoroughbreds mere sprinters, which is kept in check by the steady demand for

thoroughbred horses of the hunter type as stallions. The hunter is, apart from its connection with sport, by far the most generally useful horse in existence. Foreign buyers are never tired of picking up mares of the well-bred fourteen-stone hunter sort, and these would become as obsolete as the old roadster if the fox was not. It is difficult to exaggerate, though we cannot now enlarge on, the benefits which the fox confers on the nation which preserves him. It would be nothing less than a revolution in the social and economic life of our country districts if over a larger tract of country than is now the case he should come to be regarded as an outlaw.

CHAPTER IX

THE FOX IN FABLE

THE fox is frequently mentioned in literature : he is a favourite hero in folk-tales and fables in almost every country. The East is the birthplace of the fable, and indeed these stories could only have found congenial soil at first where the doctrine of the transmigration of souls was held.

To the people who believed that the soul of man might find a prison in the shape of the lower animal there was nothing wonderful or incredible in a fox, a lion, or a frog speaking and thinking as a man might do under like circumstances and with similar limitations. The fable, indeed, anticipated the animal psychology of Darwin and Romanes in that it assumes that the minds of men and brutes differ in degree, but not in kind. If we are to study the intelligence of the lower animals it can only be by assuming that within their limits their mind is the same as our own. Otherwise we can know nothing about them, and

the logical alternative is the belief that they are only automata.

Fables have a special interest for author and readers of a book like this. They enshrine the earliest observations on natural history, and a consideration of them may lead us to understand that we have only inherited, not discovered, the study of animal life.

But although the East is the cradle of the fable, the fox as a hero belongs not to the East but to the West. He makes no figure in the earlier Eastern fables, and it is thought that the later Hindoo stories in which the jackal stands for the type of cunning, wisdom, or policy, are borrowed from the fox of Greek fabulists. The fox's place in fable steadily grew in importance, from the days when Æsop pointed his pithy sayings and illustrated his teaching with fables drawn no doubt from popular stories in vogue in his day (about 620 B.C.), down to the twelfth and thirteenth centuries, when the fox became the hero of that most popular and elaborate of fables of which many versions have come down to us. Of these the best known are the Latin poem, '*Renardus Vulpes*,' the German '*Reineke Fuchs*,' and the French '*Roman de Renart*.'

All the fabulists from Æsop onwards based their

stories upon popular legends. It is curious to note how in all countries and in all ages the character of the fox has made an impression on the mind of man. He has become the type of those who seek by the exercise of wit and cunning to redress the inequality—greater in earlier times than now—between strength and weakness. The fox is a beast of prey and yet not dangerous to man. He is widely distributed and haunts the neighbourhood of our houses ; a thief and a robber working by night ; sudden in his descents and often escaping when hunted by men and dogs, as the fables will show he always has been.

We have seen above how the fox has survived at first in spite of pursuit, and later because he was hunted. The character of the fox sketched in fable, and elaborated in '*Reynard the Fox*,' reflects the impression made by him on the peasant mind. The fox fable had its origin in the cabin of the peasant or the hut of the serf. Reynard in the fables displays a type which attracts and repels the peasant in all ages. The poor man cannot but sympathise with the astuteness by which the fox outwits powerful, benevolent, but withal capricious animals like the lion, while he resents the trickery which robs his own hen-roost. Superstitious himself, he envies the elegant freedom of Reynard from scruples of conscience. Honest

and hard-working, he cannot altogether repress a certain envy of the luxury and success won by wrongdoing. Mr. Tulliver, though honest himself, would yet prefer to have a 'raskill' for a lawyer, as being better able to cope with the Wakems, by whom he himself was badgered and outwitted. The very coarseness of some of the fox fables, and the rough nature of the practical jokes which are invented for 'Reynard the Fox,' are a mark of the origin of the stories. When Reynard persuades the wolf to fish in the hole in the ice, using his tail as a bait, and the luckless wolf is frozen fast and eventually, attacked by peasants, loses his tail by a blow from the priest's wife, we can imagine how inextinguishable laughter would arise round the fireside of the farmhouses when the story was told.

The fables have their roots deep down in the minds of the peasantry and reflect their virtues and failings. These stories have the simplicity and universality of interest and application which ensure to them popularity and immortality.

No doubt the fables were adopted and adapted by later writers. Phædrus and La Fontaine gave them the polish of literary genius and used them as vehicles of satire or moralising. In later times, and especially in the French versions, there was more

than a touch of satire and a caricature of well-known personages. The statesman used them as Machiavelli does in 'The Prince' to point his counsels of diplomacy, and the mediæval moralists discovered edification in the simplest tales. A certain ecclesiastic of the thirteenth century, Odo of Cheriton in Kent, seems to have put together a book of fables with morals, for the benefit of preachers, who were to use them to point and illustrate their sermons.

The following fable is of Eastern origin, but the application is Odo's own.

The fox and the cat meet. The former boasts of the number of artifices by which he has escaped the hounds. The cat confesses he has but one. 'Come with me,' says the fox, 'and I will teach you mine.' But when the hounds came on their line, 'I will go no further,' exclaimed the cat, 'I wish to use my own artifice,' and with that he scrambled up a tree. Reynard went on and was killed after running a ring. The death of the fox is described in such a way that we might imagine Master Odo himself a foxhunter. The cat exclaims, 'Oh, Reynard, Reynard, all your artifices were not equal to my simple one.' By the cat we are to understand the simple souls who know but one way—the right one. Reynard symbolises barristers, attorneys, tricksters, full of dodges. But

when the devils hunt them the tricksters are seized by the demons, while the just escape to heaven exclaiming, 'All your cleverness could not save you.'

This fable is interesting as showing the antiquity of foxhunting, and an illustration of it occurs to everyone who has drawn a covert for jackal in India. The hounds touch on a wild cat and there is a furious chorus, which ceases as the cat takes refuge in a tree and allows the pack to settle on the line of their jackal. Every Indian M.F.H. knows what a trial of patience the cat's one wile is to him.

But it would take us too far to follow the fox fables into the various lines they offer. We must turn away from the satire of knights, priests and kings, which varies from gentle raillery to fierce diatribe, and confine ourselves to one line of thought, the extent to which these fables of the fox are based on fact. And very real observation of the lives and habits of animals underlies these stories. In the present day we have returned to the simpler methods of the original fabulists and care more to tell of what the animal is and does, than to confirm a philosophy like the Hindoo, teach common sense by its example like the Greeks, or point a moral or edge a satire like the Roman or mediæval writers.

Let us begin then with the relationship of the fox to the other animals—the lion, the wolf, the badger and the hare. Who that has sat up at night in the jungle will not recognise the submissive cunning of the fox to the lion or tiger? At the approach of the lordly beasts, the jackal or fox slinks humbly away. Yet if by chance the royal beasts have a kill, how quickly and silently the smaller beasts return! There are materials for a whole series of fables in the very attitude of the fox or jackal in the presence of the lion or tiger. The jackal certainly knows when the tiger is hunting, and while he avoids the king of the jungle, is on the alert to gain his share of the spoil. There is a touch of nature too in the fable when he comes into contact with the lion over the division of the calf (*‘Reineke Fuchs,’* Bk. 3, cap. 13). The fox is driven to hunt by the necessities of his vixen and her cubs, which we know is the case since a fox takes a share in the support of the cubs, and one keeper has assured me will feed the litter altogether if the mother is killed. The fox is then driven to danger by the necessity of the case. It is only the story of the division of the calf which is fable, the fox’s share in the transaction being quite true to nature. The lion, the fox, and the wolf go out hunting together. A calf is killed, and the

lion asks the wolf to divide the spoil. The wolf, being no courtier, suggests an equal division of the calf. The lion then turns to the fox, who assigns the greater part to the lion, and the hoofs only to himself and the wolf; the latter complains and is driven off by the lion, while the fox remains and basks in the royal favour.

In the enmity between the wolf and the fox we have only the embellishment of a literal truth, and these stories of the wolf outwitted by the fox are among the oldest fables, bearing traces of their popular origin in a certain coarseness of humour and detail. We have already seen that the wolf is the most dangerous enemy of the fox. The idea that the fox deceives and robs the wolf ‘*Saepe condita luporum fiunt rapinae vulpium*’ (Plautus) is probably literally true. The wolf, like all the rest of the *Canidæ*, buries what he cannot eat; the fox’s keen nose finds the hoards and he digs them up. Even the wrongs against the family of the wolf laid to the fox’s door in all the Reynard poems, have a certain foundation, partly in fact, partly in the universal belief of the people in the interbreeding of fox and dog and wolf. Everyone who has read the account of the relation between the fox and the badger, indifferently called the fox’s uncle or nephew, will recognise much

observation of nature in the description of the simple, kindly, harmless badger played upon by the superior intelligence of the fox. The idea of relationship between them is based on the fact that they haunt the same coverts, and sometimes inhabit different branches of the same earth. It is noteworthy in this respect that when, knowingly or not, the fox in conversation with the badger disclaims any very close relationship with the wolf, this is also true to modern opinion of the natural history of the two animals.

Everywhere the fox is believed to impose on the simplicity of the badger, and often to occupy the earth the badger has been at the labour of digging. This tendency of the fox to make use of the labours of other animals, and to reap where he has not sown, reappears constantly in fact and fable. The fox watches the hen-roost, follows the shooters in the covert to make an easy prey of the wounded game, and digs up the wolves' caches.

The fox is regarded more favourably from a moral point of view in the innumerable Slavonic fables, or versions of fables, to illustrate his tendency to make use of other people. The fox and the hare were neighbours one winter, when the fox built a house of snow, the hare made one of wood. In spring-time, when the sun grew hot, the fox's house melted, and

he proceeded to take possession of the hare's by means of a fraud.

It is, indeed, a notable instance of the truth of the natural history of the fables, that when the fox comes into contact with the hare, he is represented as always succeeding rather by cunning than by force—the size, strength, and swiftness of the hare making this an absolute necessity. Thus in ‘Reineke’ the fox beguiles Lampe the hare into his castle, where he is devoured, and there is a quaint and simple bit of comedy when Reynard persuades Bellyn, the ram companion and fellow-ecclesiastic of the hare, that the hare is comfortable inside with his aunt. Reynard always lays particular stress on relationship when he is brewing mischief. At the same time Reynard gives Bellyn the head of the hare to carry to the king. But the fox is not infallible and is sometimes himself deceived.

Everyone knows the famous and ancient fable of the fox and the crow and the piece of cheese, but there are several variations of this in a Russian fable in which the fox is caught by flattery. A fox comes under a tree on a branch of which a cock is sitting. The fox persuades the cock to come down to make his confession. The fox is in the Slavonic, as in the Latin and German stories, often the ecclesiastic.

The cock flies down and is seized, but he flatters the fox so dexterously that he is allowed by him to escape. Even quainter is the Italian fable of the chicken that wished to go out to feed with the cock in the open plain. 'You had better not,' the father advises, 'or you may fall a victim to the fox.' However, the chicken will listen to no advice and insists on going. The fox captures it and then the chicken pleads, 'If you let me go now I shall grow fat, lay eggs, bring up chickens, and you will then have far more than if you devour me.' The fox agrees, and the chicken rears a hundred chicks. With these she returns home, and each chick carries in its mouth a straw. The fox is waiting. 'What are all these chickens carrying?' 'Foxes' tails,' replies the old hen; and the fox flies in dismay, for, like the legendary devil, he is somewhat easily deceived.

But in Greek and Latin fables the fox is as a rule a successful deceiver. He fails only when he tries to beguile his own kindred. The fox that lost his brush is proverbial, but he only seems to me to have been before his time, for the great runs given in almost every country by a bob-tailed fox—that is, a fox which has by some accident lost his brush—are well known; and the brush, though, as I have elsewhere suggested, it may be useful to the fox in stalking its

prey, when clogged with mud and wet is a most undoubted encumbrance.

If we turn to particular authors, I am struck with the accuracy of the observation of Æsop and Phædrus. In the latter, the fox is among the *dramatis personæ* of the fabulists the most true to nature. There is the remark of the ape when he begs a portion of the fox's brush—'What,' he asks, 'is the use of dragging such a mass of hair through the mire?' The fox replies that he would drag a brush much longer and heavier rather than lend the ape a bit of it. With the moral I am glad to say we have nothing to do, but two things are here set out: that the brush is often a drag on the hunted fox, yet that on the whole it is an advantage to the race—an assistance in hunting (and by the way, the fox tucks his nose into it when asleep), a comfort in his domestic moments. There is a keen touch of observation, too, in the case of the fox who would be king. Granted by Jupiter a human form and seated on his throne, the fox espies a *beetle* in the corner, and springs down to capture it. Jupiter promptly sends him back to the woods—'Live as you have been accustomed to do, since you are fit for no higher position.'

There was a peculiar aptness about this, for the fox is one of the most untameable of animals. His

natural instincts may be subdued by discipline or kindness, but he is underneath it all always the beast of prey. Those who have read the earlier chapters of this book will note the accuracy of observation which makes the beetle such an attraction. We are more familiar with this fable in another form, that of the cat and the mouse, but we may recognise the complete truthfulness which underlies them in either case. This accuracy we shall find equally in the Oriental, the Greek, and the Latin fabulists, the common origin in popular tales giving similar characteristics to all alike.

Another fable which has something more than a basis in fact occurs in several versions of the Reynard epic. It is winter, and Reynard is hard pressed for food. A fish hawker with herrings comes along in his cart. The driver sees Reynard stretched lifeless by the roadside. A fox's skin has and has always had a certain value. So the man picks up the lifeless fox and flings him into the cart. But Reynard was only shamming, as is the well-known habit of jackals and foxes. He eats the herrings and escapes with some eels, which he takes home to his cubs, who

Si lievent contre lor père
Qui s'en venoit les meunez sauz
Gai et ioienz et liez et bauz.

Everything in this little tale is true, except the purpose for which the fox shams death, which is perhaps a little beyond his intelligence.

Again, if the fox ever did succeed in leading the bear astray, it would doubtless be by means of honey, as in the fable. It is at least true that the fox knows where the honey is, since he digs' out the bumble-bees' nests. The fox has quite a sweet tooth, and the old fable of the fox and the grapes is but a simple transcript of an incident which anyone might have seen in a grape-growing country, the moral being just such as a shrewd mother wit might add.

Indeed, the natural history of the earlier periods of the fables was more truthful than that of the seventeenth century, for Bishop Pontoppidan, who wrote a *Natural History of Norway*, informs us that the fox was in the habit of watching the otter going to fish. Reynard then concealed himself behind a stone. When the otter came ashore with his prey, he made such a spring upon him that the affrighted animal ran off and left his booty behind. The otter is quite as strong and fierce as the fox, and is very unlikely to be alarmed thus.

The same writer tells us that a certain person was surprised to observe a fox laying some cods' heads in a row. The fox then hid himself and caught the first

crow that came down. Now there are just two touches of truth here : one fact is the surprise of the person who saw this, the second that the fox only caught one crow, for these shrewd birds would certainly take warning from the first mishap. After all, the old story of the fox, the crow, and the bit of cheese is just as good and quite as true a way of accounting for a fact which the fabulists had observed, that there is a great enmity between foxes and crows. Who has not seen the crows and magpies swoop and chatter at a fox nearly at the end of his powers, after a long chase ? Is it that two of a trade—both arrant thieves—cannot agree, or that the crows foresee the fox's end, and a possible meal for themselves ? At all events the fox's character is of the worst, and Buffon draws a lively account of the fox listening to the crowing of the cocks and hens, and forming his plans accordingly. Probably, not being a foxhunter, that great writer exaggerated the iniquities of the fox. Somervile, too, shows that the fox in his time had not had his misdeeds condoned for the pleasure he gave :

From his kennel sneaks
The conscious villain, see he skulks along
Sleek at the shepherd's cost, and plump with meals
purloined.
So thrive the wicked here below.

Or again, when the wolves had been destroyed :

But yet alas the wily fox remained,
A subtle pilfering foe prowling around
In midnight shades and wakeful to destroy.
In the full fold the poor defenceless lamb
Seized by his guileful arts with sweet warm blood
Supplies a rich repast.

The fox is not quite such villain as he is painted, and in England at least probably seldom actually kills a healthy lamb. He often has the credit of mischief done by wandering and licentious curs. So that it is quite a pleasure to find that in Russian fable the fox is a benevolent character, and works for the benefit of the hero much as Puss-in-Boots or Dick Whittington's Cat does. Perhaps, however, the methods by which the fox brings fortune to Buhtan in the Russian story, are more ingenious than moral. Buhtan has but five kopeks. The fox changes them into small coins and asks the Czar to lend him some bushels to measure the money in. The bushels are declared by the fox to be too small. The fox takes care to leave a few coins at the bottom when the bushels are returned. The Czar is struck, as he was intended to be, with the riches of Buhtan. Then the fox asks for the Czar's daughter as Buhtan's wife. The Czar asks to see the proposed bridegroom.

Buhtan is poorly dressed, so the fox rolls him in a muddy ditch and then goes to the Czar and tells him of the accident. The Czar lends a dress. Buhtan is somewhat uneasy in his new splendour. The fox accounts for his embarrassment by saying that his friend was never so badly dressed before. Then Buhtan is struck with amazement at some golden ware. The resourceful fox declares that his surprise is caused because these fittings are only used in Buhtan's bath-rooms at home. This so surprised the Czar that the wedding ceremony takes place, and the fox leads bride and bridegroom to an enchanted palace.

After the age of fable, in England at least, the fox becomes of some importance, but of less literary interest, and in modern times the literature of the fox deals with his place in sport. The horse and the hound were made for each other, says Mr. Jorrocks, and the fox is the link to bind them together, and the immortal grocer of Great Coram Street sums up the place of the fox in story. 'The Life of a Fox,' by Tom Smith, successively Master of the Hambledon, Craven, and Pytchley Hunts, only deals with the episodes of the fox's life that have to do with the chase, and only once has the fox been written of, and written of well, for his own sake. In a charming

series of sketches, the late George Rooper deals with the life of a fox, and both by the accurate details he gives of a fox's life and the charming style in which it is narrated, makes us regret the death of one who had taken the highest place as a writer of the sportsman-naturalist type. Most people who have written of the fox have thought of him only as the hunted and not as one of the most resourceful of hunting animals.

The fox is sometimes written of as though he possessed a cunning and cleverness beyond the range of any animal. It is probably his physiognomy which has gained him an even greater credit than he has deserved. The artists who have painted him have forgotten the beast of prey and have read into their ideas the character of the hero of the *Epic of Reynard*; so that foxes are seldom drawn as they really are, but as it is supposed they are. The foxes of artists, however anatomically accurate, have for the most part an expression of human intelligence, not the look of the wild, shy, savage, little beasts of prey they are.

In this book I have tried to keep to the plain truth, yet if it had not been for the fabulist and the foxhunter the creature would probably never have had a book to himself.

CHAPTER X

COUSIN JACK

THE jackal is more nearly related to the dog than to the fox, indeed the animal is in the direct line of the pedigree of the dog, and it is said that the jackal and dog breed freely together, which, as we have seen, the dog and the fox will not do. Yet though I have spent many years in India and have hunted the jackal with both greyhounds and foxhounds, and thus often found myself in those places where jackals are most common, I have seen only a few dogs that look like jackal hybrids and have never killed a jackal that showed any trace of the cross. Yet jackals are commonly found near villages where pariah dogs of both sexes wander at perfect liberty. The assertion of this cross is made by naturalists of repute, but such crosses apparently do not take place except in the case of animals in confinement. Now we know that the wolf and the dog cross freely, and the sledge dogs of the north have much wolf blood in

them, the cross being generally between wild wolves and the female dogs of the traders.

In appearance, in habits, and in the way he runs before hounds the jackal is strikingly like a fox. The Indian jackal, which may or may not be of the same species as the European or African (there is much difference of opinion on this point), is very widely distributed in India, and is also found in Ceylon and Burmah. In Southern Afghanistan there were few or no jackals, but they followed our armies up the Bolan Pass, attracted by the abundance of food a camp affords. I have heard it said that the jackals followed the armies in the same way during the first Afghan war, and gradually disappeared after the English had left.

In India the jackal is to a certain extent protected on account of its usefulness as a scavenger. Its strange weird notes, like those of a ghostly pack of hounds in full cry, may be heard even in the outskirts of the most populous cities. In its habits the jackal is, like the fox, a hunter by night and a seeker of concealment by day. Though jackals live on carrion and offal in the neighbourhood of towns and villages, in the jungle they are true hunters, and chase and overpower by numbers antelopes, goats, and sheep, choosing generally the young or weakly animals.

The jackal is as carnivorous as the fox, and like the fox has a sweet tooth, loving grapes and sugar-canes. Every Master of Hounds in India knows that the sugar-cane crops are a safe draw for a jackal. Like the fox, too, the jackal makes a burrow or more often uses one ready made, and there lays up its litter, which varies in number from three to five. The jackal, however, lives above ground except in the breeding season, and it far more rarely goes to ground when hunted than the English fox, while as to the Indian fox, it is difficult to keep him above ground for any length of time. The jackal is larger than the English fox, stands somewhat higher on the legs, but his brush is to that of Reynard as a shaving brush is to a spoke brush, and is in fact, a very poor apology for the once much-prized trophy of the home hunting fields. But the jackal is an animal of great endurance and can run before hounds for a long time. The longest chase of a jackal I ever had lasted about three hours and a half. I found my quarry about 7.30 A.M. and killed him a little before 11 A.M.

The jackal, however, has certain advantages over the fox when being hunted, in that hounds in India are seldom in as good condition as in England. Moreover, Northern India, in which my experience lies, is not a good scenting country. Luckily the

jackal has a powerful odour, and hounds as a rule enter readily to the scent.

The jackal has in the East the same reputation for cunning and knavishness as the fox has with us, and in the Indian fables he takes much the same place as the fox. In fact, as we have seen, many of the stories which are told of the fox by the Greek fabulists are related of the jackal in Indian folklore. Although the first idea of the fable took its rise among the Brahmins and found congenial soil amongst the Indian Buddhists, when once the Greeks had the idea they made it their own and repaid the debt, and the jackals of later Indian fable probably were borrowed from the stories of Greek foxes. For wherever there was contact between the Indians and Greeks there was also a reciprocal exchange of ideas. Each borrowed from the other.

But however this may be, it is evident that the character of the jackal and the fox, as types of cunning, is of very great antiquity; the former is called in Sanskrit the 'cheater of animals,' and in this description he is found in the Mahabharata. The jackal, the tiger, the wolf, the mongoose, and the mouse—truly, a happy family, to be imagined only by the writer believing in the transmigration of souls—go out hunting together. The jackal persuades the

tiger to kill a black buck. Then he tells the tiger that the mouse has threatened to kill him. The tiger, much insulted, starts off in pursuit of the mouse. In the meantime the mouse comes for his share. The jackal tells him that the mongoose has bitten the flesh, and that, imbued as that animal is with snake poison, it would be dangerous to touch it. The mouse therefore goes off. Then the wolf appears, but, as in the fox fables, he is both stupid and cowardly. He believes the jackal at once when the latter tells him that the tiger means to kill him, and runs away. There is only the mongoose, and the jackal simply bluffs him by saying that he has killed the other three animals. Whereupon the mongoose too departs, and the jackal eats the whole antelope.

There are, in Sanskrit, two interesting variants of the story of the fox which reveals its nature by a sudden impulse to catch a beetle. In the first the jackal, having fallen into some dye-pots, comes out in such gorgeous tints that the other animals, struck by his magnificence, unanimously elect him king. For a time all goes well, until one night he hears the other jackals howling, and, unable to restrain himself, he joins in. His true nature is thus discovered, and he is torn to pieces by the lion as a usurper. The

other is the story of the jackal brought up by the tigress with her cubs, which shows his mean origin by running away in cowardly fashion when his foster-brothers attack an elephant.

There is also a kind of fable in proverb which comes from the East, and describes the jackal as being the lion's provider. I think that when the larger animals are on the prowl the jackals haunt their footsteps in hopes of picking up some share of the prey. It is even possible that they may be sometimes, in a sense, the lion's or tiger's provider. Suppose a pack of jackals to have pulled down an antelope, or killed a wandering sheep ; if the tiger or leopard, to whom the cries of the jackal pack probably tell what is going on, appear, the jackals would perforce retire at once and give up their quarry. In such cases the jackals sometimes linger so close as to be killed by the tiger. The dead bodies of jackals are not seldom found near the kills of the tiger, so that the jackals are sometimes involuntarily the provider of the feast for their betters. It was some incident of this kind, some rapid generalisation of a rustic wit, that provided us with that kind of natural history which, like the stories of Bishop Pontoppidan related above, is also fable. But when the larger carnivorous animals are hunting, the jacka

awakes. Every Anglo-Indian sportsman knows the weird cry by which the jackal warns his kin that the tiger is abroad in the jungle: a cry of warning no doubt, but also a call to the pack to look out for plunder. Everyone who has sat up by a kill knows that if the tiger is scared away the jackals are quickly heard pulling and snarling over the carcass.

Infinitely weaker than the tiger, the jackal has this advantage over the royal beast in the struggle for existence, that he is not much afraid of man. The natives, however, believe that the jackal that utters the peculiar note to which I have referred is a solitary driven from the pack. Such outcasts, they say, attach themselves to the tiger, leading him to his prey by their superior sense of smell, and perhaps acting as scouts. They think that the jackal sometimes sees that all is clear in the neighbourhood of a kill, and that it utters its strange cry as a signal to the tiger.

A story is told of a sportsman who was waiting for deer at night. He heard the peculiar cry of the jackal, soon after a tiger made its appearance, and the watcher forthwith became a convert to the native belief. I am very unwilling to put aside the beliefs of natives as being altogether baseless, but this evidence hardly seems as convincing as it was to

the sportsman in question. The peculiar cry must have some meaning, and it must either be a warning or a call to the pack, or partly one and partly the other. On the other hand, it may be a signal to the tiger by his appointed companion, the solitary jackal, though I do not think this is so. It is easy to imagine a communication by an animal to one of its own kind : it is not so clear that different animals can convey their meanings to each other by means of sound. It is possible, however, that their actions may, and do, serve as a warning or a hint. Thus we can imagine a vulture wheeling in the clear sky, and seeing a hunting jackal, taking a sweep in the direction the beast was going, and thus being led to a carcase. On the other hand, the sight of vultures gathering would certainly tell its tale to the jackal, supposing his keen nose had not first warned him of the prey.

I once had an interesting glimpse of the different grades of jungle society. I was looking for small game when I came upon the carcase of a heifer killed probably by a leopard. These animals were fairly numerous in the neighbourhood. However, the leopard had gone away with the daylight. On the carcase, growling and tearing, were two hyenas. At a little distance was a ring of large vultures. Behind

the vultures was a circle of jackals, behind the jackals again another ring of black crows, and behind the crows a number of mynahs. So intent were all of them, that they did not see me till I was fairly close ; then the hyenas bolted—they are always cowardly brutes—but the vultures spread their great wings, hopped forward in their own peculiar ghastly way, and were soon tearing at the carcase. The other circles closed in. A few hours afterwards I came back. The carcase was gone, the bones picked clean, and a few gorged vultures sat humped up on the stunted trees after the fashion of their race. There are trees in the more desert parts of India that look as if they grew on purpose for vultures to perch in.

The jackal is hunted in India in three ways : with greyhounds, with a bobbery pack (that is one made up of any kind of dog that will hunt, from a greyhound to a fox-terrier), and with foxhounds. At one time I kept a brace of English greyhounds, but soon parted with them. They are altogether too fast for the jackal, and give but poor sport. The bobbery pack is difficult to control and very unsteady, but they often show a fast gallop in an open country, though as a rule they are not of much use in covert. They do not pack well, and as there are often many jackals together, it is rather difficult to make them

settle upon one of them. The best fun is to be had by intercepting a jackal and laying the pack on as he slinks home across an open plain at daybreak. Then, if the pack be well selected, and there are a few hounds and terriers to throw their tongues when the jackal is lost sight of, some good gallops may be enjoyed. Probably, for the man who desires to ride hard, and to whom the hunt is little and the gallop much, this is the best form of jackal-hunting.

I once kept a small bobbery pack consisting of two or three couple of foxhounds bought from a native gentleman, a spaniel, a couple of fox-terriers and a mongrel. The spaniel was invaluable: he had a perfect genius for finding a jackal, and if there was one in a patch of covert he invariably went straight to the place and roused him. A dog of great intelligence, he was silent at first, but he learned from the hounds to throw his tongue after a time. But I fear he was sadly mortified, when the run really began, to find himself left behind. The hounds, of course, were far too fast for him. The terrier had a most excellent nose, and carried a line over a bad bit of scenting ground in a wonderful way. The hounds trusted her, and would fly to her sharp 'yap yap' as readily as to the deeper challenge of another hound. Many a pleasant morning and evening

gallop we had with this little pack, and they taught me something about hunting and something also about the habits of the jackals.

One evening I had run a jackal into some reed-beds near a river. The short Indian twilight was closing in, and I was sitting in an open space collecting my little pack, when I caught a gleam of light, and saw that all about me were many eyes. A ring of silent jackals was seated all round the pack. It was a most eerie sight, and reminded me of the stories I had heard of jackals setting on greyhounds in order to rescue a comrade in difficulties. But this incident also gave me an insight into the ways of the jackal. In the morning we generally found the jackals going home one by one, and I came to the conclusion that the creature is solitary by day, but gregarious at night, and that I had probably hit on the trysting-place of a clan of jackals.

I think it is likely that as the foxes hunt more or less in families in their early days, so the jackals, never having been as much hunted as the foxes, retain the habit of hunting together in families or clans. There is a faint trace of this clan feeling in the way that hounds of the same family are found to hunt together. Every huntsman will tell us that a father and son, or a mother and daughter, may often

be seen to work together. It is also well known that hounds drafted from some kennels will pack well together while others from certain packs will not. Miss Serrell writes that, whereas her famous working terrier, 'Sharper,' would attack any strange terrier when the latter first joined the pack, he would never attack his own sons.

In the jackal we are a step nearer to the primitive community life of the dog tribe, and we see the instincts of the pack to combine at night for support and defence. This we may add to the instances recorded above of the correctness of observation which underlies so many fables. The combination for a common end is, as Mr. Darwin says, a mark that social animals are of a higher level of intelligence than solitary ones.

Everyone who has hunted jackals has learned two other facts about them : that they are exceedingly tenacious of life, and that they feign death in the most convincing fashion. I have seen a bobbery pack run into a jackal and apparently kill him. The dogs have worried the body, though they have not torn him, for a jackal's skin is most extraordinarily tough. If the jackal be picked up he is to all appearance dead. All his muscles are flaccid. Fling him down, and he falls in a lifeless heap ; now

call the hounds off to a safe distance and wait : presently there will be the slightest movement, an ear will cock ever so little, and perhaps an eye be opened. If the coast is clear, up springs the dead jackal and away he goes. Is this catalepsy or shamming, paralysis or cunning? It is very difficult to say, but my own opinion is that it is shamming brought to perfection, and that in process of time it has become an advantage to the race. The jackal is one of the weakest of the beasts of prey in the jungle, and he has a hard struggle for existence : his necessities and way of life bring him often into the neighbourhood of larger, stronger carnivora. The jackal is not particularly good to eat, though there is a tribe in India that catches and cooks him. I used to dread their appearance, for the encampment of Brinjaris near a covert almost invariably meant a long draw and perhaps a blank day. At all events, if when attacked by a stronger animal the jackal feigns death, he is very likely to escape, especially as this generally happens near a kill, and any beast of prey would certainly prefer a chunk of antelope or ox to the strong, ill-flavoured flesh of the jackal. Thus we can see that to sham death might be a distinct advantage to the jackal. Not only would he live, but he would have the ultimate chance of coming in for his share

of the food. I have formed rather a high opinion of the jackal's intelligence after being pitted against him on many occasions, and by no means always having the best of the deal.

Jackals cannot have had much experience of being hunted, except, perhaps, in the Peshawur Vale, or on the Neilgherries, yet it takes them a very short time to learn the advantage of shifting the burden of the chase on to another of their tribe. Again, a jackal is well aware of the advantage of clinging to a covert, and as scent in India is often better inside a covert than out, it is most difficult to bring hounds away on the first jackal that breaks. As in the case of the fox, the first to break is generally the boldest and best. Another thing jackals learn is to leave the coverts which are much hunted. I rather doubt if the jackal is as much attached to his haunts as the fox, and the best coverts are therefore uncertain draws. Yet, on the other hand, sport in India, as in England, is much benefited by careful work in covert, and when I did find jackals in the coverts most often drawn, they went away boldly and well as the season drew on.

The jackal is in another respect like the fox: he runs only over as much country as he knows. A good wild jackal has a range of about five or six miles.

After he has been hunted that distance, he turns as a rule, and if hounds have not changed, works back to the place from which he started, beating up every covert on the way. When we bring back a beaten jackal to a covert, we may be sure that he will not leave again, although it is by no means certain that we shall kill him.

In creeping, crawling, twisting, turning before hounds a tired jackal has no equal. Only at the last moment will he take to the open again, and if we view him and there is no riot in the covert, we shall pick him up. It is probable, however, that jackals change their haunts from time to time. When they have hunted over a country it is certain that they must frighten away the smaller animals. Jackals are very like wolves in miniature, and their habits and methods of hunting are very similar. The jackal is, I think, a more difficult animal to kill with hounds than the fox. He does not play the game as the fox does. He is as cunning, as intelligent, as wild, but he is far less sophisticated, and it used to please me to think that perhaps in the chase of the jackal we saw hunting as it was in an earlier phase than that at which it has now arrived in England.

To begin with, we started early: for the more distant meets four o'clock was not too soon. It was

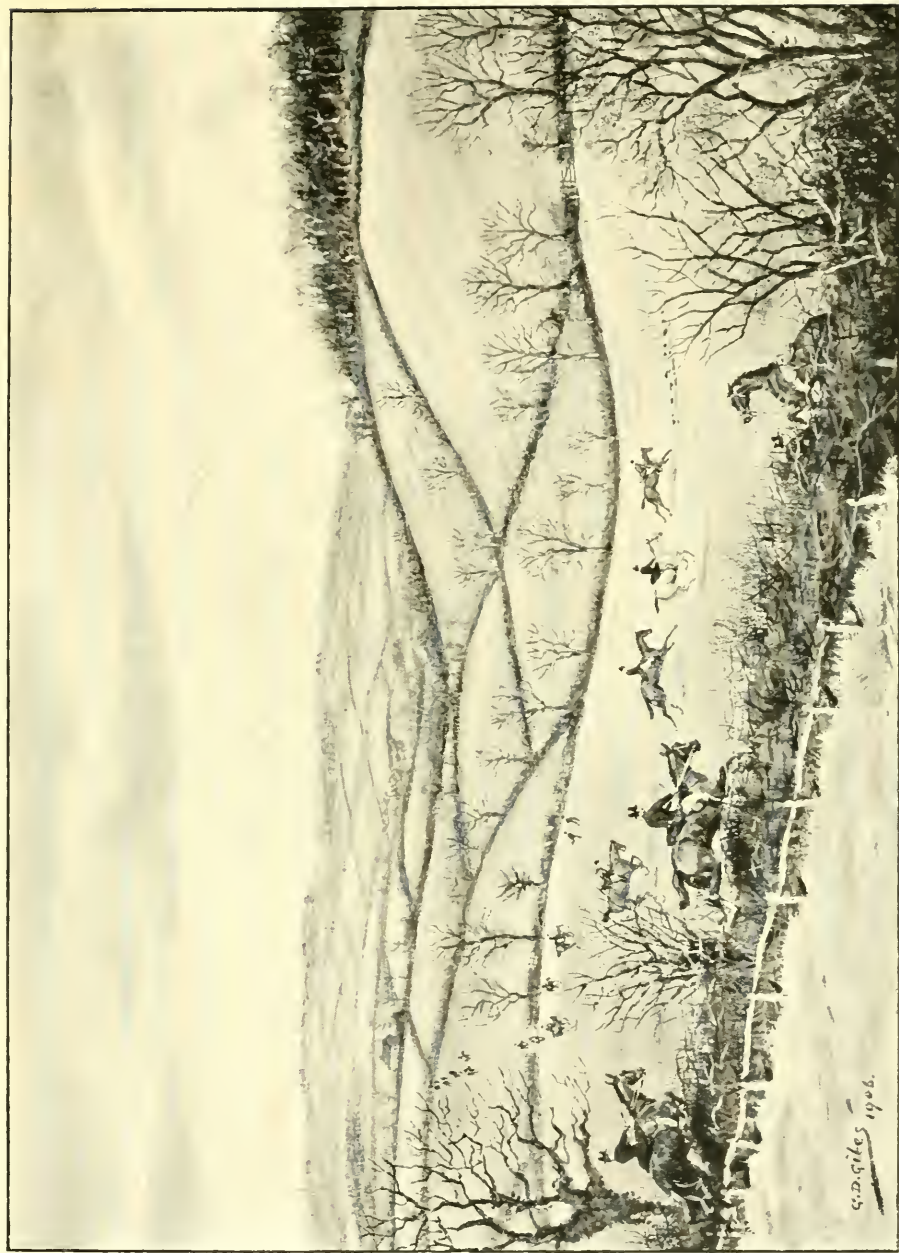
pitch dark and a syce with a lantern was waiting at the kennels. A joyous cry is raised as the Master's footstep is heard, 'Couple up Rattler and Lavish, Random and Redwing.' They might break away in the dark. We count them over. One or two lame or delicate hounds are shut up in the bitch-house and howl dolefully at intervals till our return. The Master swings into the saddle and we feel our way to the road and strike the path along the canal. Then we know where we are, and, discarding the lanterns, drop into a steady hound jog, trusting to the long hours we have spent in the kennel and the attachment to us of the riotous crew which without a name among them landed from England a month ago. Hard work, steady exercise, and occasional whipcord have done wonders, but above all some of the most troublesome have developed a liking for the Master, and a word now and then keeps them near his hack. Gradually it becomes lighter. We let the pack stretch out and trot more at ease, but we have to keep a sharp look-out, for there is always the chance of dropping on a wandering jack. We have appointed the third bridge as the meeting-place, and we should not care to disappoint the small but keen band of followers of the hounds. At the appointed spot we find the field. Late comers have little law, for early

morning hours are precious. We want to find our jack and drive him away when the dew is just warmed, as it is then that scent is at its best. Earlier the moisture is too cold, later the sun dries it up and there is no scent at all. The best scent I ever knew in India was when a light shower had fallen on a sandy soil. Hounds fairly screamed for twenty minutes and beat us all.

But there is the covert, and the field ride along outside, the Master and hounds disappear. In a few minutes the former is wet through. To ride into an Indian covert on a dewy morning is to take a shower bath. What does the jackal make of it all? He is not acquainted with the moves of the game as his relative the fox is. He has slunk home an hour or two before with the air of a suspected pickpocket that is peculiar to the jackal, and is in a light sleep. Like his cousin Reynard he may have a village hen-roost raided overnight to dream of. Does he connect the strange noises with himself? But the music of the pack, if not exactly his own dialect, is a sound which he can interpret. The hounds are clearly hunting something. At all events he slinks out of the way, not hurrying, but someone views him and holloas and the hounds are cheered on to him. It is better to seek some other refuge, so he goes

out, and, luckily for the huntsman, the hounds, urged on lest they should change, come away on his line.

Then he rather helps his pursuers, for he runs in the little raised pathways above the fields. They are fairly firm ; the ground, lately irrigated, is sticky and clogging, but the 'bunds' carry a scent and we drive our jack hard. He is hustled more and more, and the easy canter becomes a stretching gallop. The jack realises that the hounds mean business. When, however, he finds matters are serious he turns back, and now—sure sign that he is growing tired—he begins to dodge and twice nearly gets away. Once the hounds strike the fresh line of a wild cat in a patch of sugarcane. Puss, however, solves the difficulty by going into a tree and the pack once more come back to the line. Once a little scentless graceful Indian fox springs up in view, but the amateur whipper-in gets to their heads smartly. Again a fresh jack comes out of a sugarcane crop and the field begin to holloa. Luckily the Master views the hunted one, and a touch on the horn brings out Gambler, Senator, Victory, and one or two more, while the others fly to the deep notes of the two dog hounds (Victory, though useful, is almost mute). Now the jack is hard pressed, and hounds, who have driven him right through an old walled garden,



'DOES NOT PLAY THE GAME AS THE FOX DOES'

have a long start. Once back in the familiar covert, he exhausts every dodge known to his kind. He crawls in the ditches and slinks along until he is actually running a few yards behind the pack. He dodges to a small patch of standing corn, and when the hounds are in the corn he is in the covert, when the hounds are in the covert he is in the corn, and so he plays a kind of game of hide-and-seek. At last he runs a few yards out and lies down. Two or three hounds run up to him, but touch him not. Old Victory and Gambler fear nothing. Did they not once try to tackle a wild boar with disastrous results? Who-whoop! Not a bad morning, since for about forty minutes out of the three hours we galloped hard over a rough country. Hounds, say some people, will not break up a jackal, but ours will with a little help. The jack is killed. A hunting-knife makes an incision or two, and he is thrown to the hounds and they break him up fairly—that old sleeping partner of the chase, Rollicker, who has done not a bit of work, eating the lion's share, while Victory, who put us right and is one of the keenest hounds, sits by and looks on. Nevertheless, even the keenest hound will grow slack for want of encouragement and blood. Hounds may not care to break up the fox or jackal, but for all that they like to see him killed. Anyone

who has hunted a pack knows how much easier it is to handle a successful foxhound than an unsuccessful one. But after all hounds are few in India, and jackals are not often disturbed. Like foxes, they soon find out where they are protected, and in the public gardens they are numerous and bold.

Nearly every cantonment has its company 'bagh,' part of which is used by the officers, civil and military, and their wives as a meeting-place and playground; and here the jackals lurk in numbers. I have often seen them slinking back to the gardens at Lahore. But the neighbourhood of a town has a corrupting effect on jackals. They become cunning, eaters of offal, spiritless brutes, and are far less bold than those of their brethren who live in the open and hunt in the jungle. They are like the pigstye, back-yard haunting foxes of some parts of our midland hunts, animals as easy to find as they are hard to kill, and impossible to make run. Nevertheless, in a well-hunted country the jackal affords sport, and the reason why it is often not so good as it might be, is that few people are willing to give the time and trouble necessary to keep hounds in India in sufficiently hard condition to enable them to tackle a stout old dog jackal. Like other animals that hunt by night the jackal has a keen sense of smell, and when the pack

is in pursuit of its food the jackals hunt much more by scent than wolves do. The latter animals, in India, at all events, hunt often by day, and use their eyes a good deal. Without exactly packing, the Indian wolves often combine in pursuit of an antelope, stringing out not unlike staghounds, and each one taking up the lead as the turns of the chase favour him.

Jackals, however, do sometimes forage by themselves, and though they work together chiefly at night, they are seldom far away when any stray morsel is to be picked up.

On the whole the jackal is a very sporting beast. It is only want of practice and opportunity that prevents him from being as good as the fox. But with the exception of a few isolated hunts, such as the Bombay, the Poonah, the Peshawur Vale, there are few packs with any continuous history. Indian packs of foxhounds require to be recruited by continual drafts from England, and to be managed and hunted in India by a man who will give some time and thought. Everything turns on kennel management, and this must always be under the eye of the Master. Native servants require to be carefully looked after. They have of course no experience. On the other hand, they are fearless with hounds, and manage them well.

Foxhounds will stand a good deal of handling from natives. One thing I think is necessary, and that is that the Master should feed the hounds as often as possible.

In my own case I took the greatest trouble in feeding my hounds, and kept a sharp eye on the cleanliness of the kennel. For Indian work I like small light hounds, as they do not knock themselves to pieces on the hard ground. I always had a mixed pack, but prefer dogs to bitches. Short packs are the rule, on account of the cost of imported hounds, and I never had more than twelve to fourteen couple and often less. But I took great pains to make them handy. Indian hounds always require to be hunted in a sharp and decisive manner. We had, as a rule, but a short time of a serving scent, and it is necessary to press hounds in order to make the most of it. I started with the idea of letting the hounds hunt, but I found that it was necessary to take every advantage to secure a run, much less a kill, of so stout and cunning an animal as the jackal. Two well-trained terriers were most useful. In the thicker coverts, and particularly in sugarcane, they could get about in a way impossible to the heavier foxhounds, and they kept at the jackal, yap-yapping at his heels till, for the sake of peace, he was forced to go.

Sugarcane is very hard on hounds: the leaves cut like knives.

The Indian M.F.H. should carry a powerful, well-sharpened hunting-knife, as hounds cannot break up the jackal without help. He will have many difficulties and troubles, but also many delightful moments ; and I for one shall always look back with pleasure to the seasons when as whipper-in and as huntsman I joined in the pursuit of ‘Cousin Jack.’

CHAPTER XI

THE FOX AND HIS FUR

THERE are few fur-bearing animals which are clothed in a greater variety of fur than the fox. Hardly any two skins are exactly alike. No creature has been more familiar to me all my life than the fox. Yet until I sat down to write this book I had had but very few fox-skins in my hands. But for the purpose of giving a true account of the fox his fur is not an unimportant matter. When once we begin on any such study of nature the interest and the material seem alike inexhaustible. In the course of my inquiries I discovered that the common fox and his various relations were as important commercially as they are to sport.

It is said that a board-school boy, being requested to write an essay on the pig, asserted that 'this animal has four legs and a curly tail, is interesting when alive, and refreshing when dead.' So we find that the fox is a most interesting animal in life and

profitable after his death. The probability is that many hunting men have never seen a fox's skin except in the hundred tatters of brown to which the hounds reduce it after a run. However, I endeavoured to find a typical skin of our common fox, and I have examined and measured a good many skins. The one I have selected is both fine and typical. The length of the skin after preservation, from the tip of the nose to the end of the tag, is exactly 48 inches, of which the brush measures 18 inches. The length of the snout from between the ears to the point of the nose is in its present condition 5 inches, but must have been more than this in the living animal. The ears are very large, measuring $4\frac{1}{2}$ inches from the root to the point. The fur is in magnificent condition; the prevailing tint is a bright rufus yellow, light on the back and graduating into a darker tint about the shade of a red deer's coat below. The brush is much darker than the rest of the fur, many long very dark brown hairs being interspersed. Along the back-bone there is a large number of hairs tipped with white, increasing in prominence towards the root of the tail, until the lower part of the back is almost grey. Underneath the longer hairs is a brown woolly undercoat. The chest, abdomen, and under side of the forearm and hind

legs are a clear grey shading into white ; the pads are black like the ears. There is a white tag to the brush, but not a very large one.

Luckily the skin of the common fox, in spite of its beauty, is not of much value, though the skin of the fox in other countries is a considerable article of commerce, and as many as 100,000 skins of the various American foxes come to England every year. From Germany about 500,000 are exported every year, and nearly as many from Russia. Thus over 1,000,000 fox-skins find their way into the market. Among these are included some of the rarest and most expensive furs, that of the silver fox, whose pelt of the black variety may be worth anything from 50% upwards, according to the state of the fur market, down to the ordinary red fox, worth at its best about two shillings.

But after all our own little red fox is more valuable than any of them, since if the others are worth much when dead he costs far more to kill ; and the English fox, as I shall show elsewhere, represents an investment of capital and expenditure of income beside which the Hudson Bay Company itself is but a small matter. To put it in another way, a cloak of our common fox-skins fairly killed in the hunting field would represent a sum of money far exceeding

the value of the Emperor of Russia's most magnificent silver-fox rugs.

But all the foxes whose pelts are most costly belong to the same family, and the silver fox of Labrador, the choicest of his race, is of the same species as our own fox. In fact, they are mostly variations of the common fox, and of those noted in this chapter only two can really be distinguished by naturalists by well-defined and undoubted characters as belonging to different species. Indeed, Mr. Baird considers that all the American foxes except the grey fox of Virginia, which is perhaps not a true fox, are immigrants from the Old World, for no fossil remains have been discovered in America. They have, with the extraordinary adaptability of the race, varied with the climate, food and surroundings to which they are accustomed, and have adopted the form most suitable to their environment. The fox is, in truth, one support of the theory that species have varied not so much by natural selection, still less by sexual selection, as in correspondence to their environment, and that climate, food, and the conditions of their life have made them what they are. Thus Mr. Allen considers that the much-prized silver and cross foxes are simply cases of melanism among the American foxes to a greater or less extent; and,

indeed, we know that there is in the so-called silver fox every variety of colouring from a light grey up to an almost jet black—always, however, in the choice specimens with a well-developed white tag to the brush. Most of the American foxes are rather larger than their European relatives. The most typical black-fox skin is one with black hairs, most of which are ringed with white. The pads are black, so are the under parts of the body, and the brush is large and bushy with a white tag. Very little is known of these foxes, but some light was thrown on them by a quotation from a Russian observer, which was translated in the 'Field' (vol. 97, February 1, 1902), where the writer records that on an estate in West Gothland he has seen black foxes catching rats in open day. The tracks of the foxes were frequently followed, but in no case was a trace of fur or feather found. We are not told, however, what game was most common in the district. The writer found the earths of two vixens, and four cubs were taken alive. They refused birds, but fed readily on milk, rats, and meat. These cubs were extraordinarily quarrelsome, and by digging under the partitions of the cage in which they were confined, they got at one another and fought so fiercely that 'none of them survived.'

The black fox is very wary, and gives the trappers more trouble than any other fur-bearing animal. Its sensitive nose warns it of the least taint of man, and it is said that it can snap the springs of the traps and steal the bait without being caught. At other times it will dig under the trap, but this device is met by setting the traps upside down, so that the fox is caught after all.

Next in value to the black fox is the cross fox, which is, like the former, only a local variety of the common fox. The skins of the cross fox vary perhaps more in colour than those of any other variety. Some are hardly to be distinguished, except by experts, from the pelt of the black fox, while others are like the red fox, only that the fur is rather darker. The American red fox is larger and lankier in form than its European cousin. The legs and belly are black as in the Sardinian and Italian variety, known as *Melanogaster*. The red fox has a very fine fur. It varies greatly in size as well as colour, from the little red fox of Virginia to the foxes of Kadiak Island, which are almost as big as wolves. The price of these skins ranges, according to vagaries of fashion and the quality of the fur, from two shillings up to thirty. The young red foxes are laid up in earths like our own cubs, but are born some-

what later in the year, the majority coming into the world at the end of April or the beginning of May. Like our foxes, they are great rat-hunters, but no fish or flesh comes amiss to them.

There are now two foxes to be noted which are both distinct species with well-defined differences. The first of these is *Canis Lagopus*, known as the white or blue fox according to its habitat. This creature is remarkable for its annual change of coat; and in the hall of the Natural History Museum at South Kensington there is an admirably arranged group of Arctic foxes in their summer and winter dress. Not every Arctic fox becomes white in the winter. Any one can see the difference of the Arctic from the common fox in the rounder head and blunter muzzle which distinguish it. It is altogether a much milder-looking and more innocent animal, and the Arctic fox confirms by its habits the suggestion of its form and face. These foxes are the only members of the family *Canidæ* that migrate, and each winter they move southward along the coastline. They are far more sociable than the common fox, and live together in little tribes of twenty or more, each family inhabiting a separate burrow, earths being placed close together. Unlike the common fox, which is scarcely ever really tamed, the Arctic fox is gentle,

It is cleanly in its habits, and has none of the offensive odour common to the fox family. The Arctic foxes feed largely on lemmings, and Captain Nares, R.N., discovered that they had a provident custom of laying up stores for the winter. Coming on a pair of these foxes, Captain Nares says: 'We noticed that many dead lemmings were scattered around. In every case they had been killed in the same manner: the sharp canine teeth of the foxes had penetrated the brain. Then to our surprise we discovered numerous deposits of dead lemmings. In one out-of-the-way corner under a rock, we pulled out a heap of over fifty dead lemmings. We disturbed numerous "caches" of twenty and thirty, and the ground was honeycombed with holes which each contained several bodies of these little animals, a small quantity of earth being placed over them. In one hole we found the major part of a hare carefully hidden away.'

Captain Nares noted that the vegetation round these colonies of foxes was peculiarly rich. This attracts the lemmings, and is, as the writer says, a 'beautiful arrangement—for the foxes.'

As winter comes on, the white hairs of the fox grow longer, and in some cases, but not all, the shorter hairs turn white, or perhaps are shed and

white hairs take their place ; but there are many shades between pure white and the slaty blue of the summer coat to be found in different individuals. The blue-fox skin is much more valuable than the white pelts, which, though thick, are somewhat coarse. This fox lives in the Arctic circle and in Europe is never found below 60° N. Like the other foxes, this one feeds on anything it can pick up : lemmings, water birds, especially eider ducks and their eggs, young seals, and the carcasses left by the killers. Like our own red fox, the Arctic fox does not object to its venison being high.

The next animal is quite a distinct species from the common fox or the Arctic. Known as *Canis Virginianus* to naturalists, as the grey fox in Virginia, as the Tigrillo in Costa Rica, as Zozzo by the Mexicans, and to the Indians as the Colishe, this species claims notice here because it is a beast of chase.

Canis Virginianus is more like a jackal than a fox. It varies in size according to the locality it is found in, but the markings are pretty much the same in each individual. The grey fox of Virginia hunts its prey by scent, and may perhaps represent a line from which our pointers may have descended. The grey fox when hunting for South American partridges

quarters the ground like a pointer. When the scent crosses his nostrils he crouches and 'points,' creeping slowly on, flushes the covey and secures one with an incredibly swift and cautious spring. Like our red fox, the Virginian cousin will run up a tree when pressed by the hounds. Some writers have asserted that it climbs trees, but it seems more probable that it can only ascend those trees which have a slope or some irregularities on which it can fasten. In the Southern States of America these foxes are often hunted with hounds, and give good sport. Their scent is said not to be so strong as that of the red fox, but it suffices for the persevering, mellow-tongued, low-scenting American hounds, who are wonderful line-hunters. Probably the hounds are not quite so fast as ours, but as they are seldom off the line they perhaps get over the ground with nearly as much speed. The grey fox helps them, too, by not running right away but keeping always just ahead of them.

The old Virginian foxhunters were famous sportsmen; they took, and take, as great delight in foxhunting as the squires, their English cousins. The Virginian fox has a handsome skin, dark grey, along the back shading into red. It has no white tag; each of the hairs of the back is banded

with black and white, in alternate markings. This gives a charming effect, and is moreover useful by blending with the coverts where the animal lives.

Thus we see that the fox has, so to speak, his serious and commercial, as well as his pleasure-giving, aspect, and that whenever he touches the life of man he is interesting and important.

CHAPTER XII

HUNTING THE FOX

THIS is a very large subject, but it will only be treated of here so far as it relates to the nature of the fox. We shall look at the fox, not, as we have hitherto tried to do, as far as is possible from its own point, but from ours. We shall endeavour to see what light our study of the fox throws on what our forefathers loved to call the science of foxhunting.

At this point we may consider briefly whether our study of the fox throws any light on a question many people ask in these days: Is foxhunting justifiable to the conscience of a lover of animals?

We need not stop to consider the case of those who condemn a sport they do not understand, and write of what they know nothing. Even if by accident they were in the right, they could not hope to prevail by such methods. But there are people who have thought the matter out, and, deciding that foxhunting is not to be justified to their consciences,

have denied themselves henceforth the pleasure which it gives. These persons, whether we agree with them or not, we must respect. Nay, more, the advocates of sport are bound to consider their arguments and state, for their own satisfaction at least, why they do not agree. The opponents of foxhunting put their objections upon a syllogism. It is not right to inflict pain and death for our pleasure; foxhunting inflicts pain and death for no other reason: therefore foxhunting cannot be justified. To this it is a fair reply, first, that pain and death are not the *objects* of the sport; and secondly, that we may without scruple inflict both for sufficient reason. No one doubts that foxes must be killed, and that if there were no organised sport they would be killed just the same. The race might even be exterminated, though reasons will occur to the reader why this is not quite so easy a matter as it appears to be on paper. But at all events there is nothing wrong in killing foxes. There is no real difference of opinion about that. The only question is as to the method. The key lies in the pleasure we find in the chase. Of course those who take things as they find them or who are like Tom Tulliver when he assured his sister that worms did not feel when impaled upon a hook, and was 'privately of opinion that it did not

much matter if they did,' are the happiest. But in these days many people cannot take things with such simplicity, and questions will obtrude themselves. Some people have qualms, and failing, as it were, to make the best of either world, would go on doing what their consciences condemn, or are at all events uneasy about. It is better to face the point and decide one way or the other. I have already suggested that people who decide against hunting are too anthropomorphic in their views of the feelings of the hunted: they ascribe to mere animal nature thoughts which are impossible to it, and a memory of past pains and an anticipation of future suffering which none but man is capable of.

I never could see that Macaulay's often-quoted Puritan, when he objected to bear-baiting, not because it gave pain to the bear, but because it gave pleasure to the spectators, deserved the sting implied in the epigram. If bear-baiting was a cruel, cowardly, and unsportsmanlike pastime, then the pleasure of the spectators was by far the worst feature of it, and was the vulnerable point of the diversion. The bear had no chance, the spectators ran no risk, the pain inflicted was the source of the pleasure. But between bear-baiting and foxhunting there is no parallel. Those who delight in the latter

sport are not merely idle spectators ; they share in the fatigue, and to a certain extent in the peril of the fox. They are not passive spectators. The pain and death of the fox is an accident of the sport : a necessary one, for foxes must be killed, and it matters very little to the fox how he meets his death. I have given reasons for thinking that he does not realise what hunting means, and if he does, then to hunt and be hunted is a law of his nature. Nor are we quite in the same position with regard to the fox as the bear-baiters to the bear, for we take from the fox what we have given and what we have the right to give or withhold from the lower animals, the permission to live. The fox receives certain privileges in order that he may be hunted, and though he cannot be a party to the arrangement, it is clearly for his good. The joy of living is much greater than the fear of death or pain in the lower animals. Were it not so the world of nature would be a scene of suffering which it would be terrible to contemplate. We may therefore be sure we give more than we take. But, after all, it is only the method which is in question. Even so, this brings nothing new into the history of the race of foxes : the wolf, the leopard, and the dog have always hunted them.

There never has been a time in the history of

the race when the fox has not been hunted—with less paraphernalia than now, it is true, but with far more bloodthirsty intent. Our pleasure is not in the suffering but in the pursuit: in the musical cry of the hounds, in the spring of the good horse, in the sense of difficulty and danger faced and overcome, in the skill, courage and resource which are tried and tested. We do not, as in bear-baiting or similar pastimes, make the suffering an end. No one ever went out hunting for the sake of seeing the fox killed. If a fox is killed and there is no run we regard it as a misfortune. Yet I will not deny that the pursuit of the fox has something to do with the pleasure, for few people care for drag-hunting or a paper-chase as they do for foxhunting. No one ever made these the recreations of a lifetime as men of note in all professions have done with foxhunting. Lord Althorp, the late Lord Granville, the great Duke of Wellington, and a whole host of lesser notabilities have found in foxhunting exactly what they needed. It heightens the joys of youth, lightens the cares of manhood and postpones the shadow of age. Everything has its darker side, but there is nothing against nature in a foxhunt—the fox, the hounds, the men, all fulfilling a law of their being. The fox is not always the hunted; he has his turn of being the hunter, which in this

country is made possible to him by hunting ; and the conclusion we must come to, unless we permit ourselves an entirely imaginary and sentimental view of the brief, rare suffering of the hunted fox, is that the benefits of foxhunting even to the fox entirely outweigh any objection on the ground of humanity. To put it in the way of an apologue, I am sure that if we could call a parliament of foxes, and they could understand the question, there would be an enormous majority in favour of foxhunting. Each fox would think that it would be others who would be killed. He would know that he himself was alive, and intended, if speed, intelligence, and endeavour availed, to remain so.

It has been said that many Englishmen, and perhaps the whole English nation, would be richer if they did not indulge in sport. It may be so. But the money and time spent in hunting bring so great an addition to the happiness of life that the sacrifice, if any, is worth while. Hunting, too, comes well within the definition of true sport which I believe to be the most defensible : that the hunter should share in a greater or less degree the fatigue and danger with the hunted.

But there is another point of view : how are we to meet the wiles of the hunted fox ? The celebrated

Mr. Facey Romford used to say to himself when his hounds came to a check, 'Now, Facey, me böööy, what would you do if you were a fox?' and that is probably not a bad principle for a huntsman to go upon. There is enough of the animal in man to enable us to divine something of the wiles of the fox. Nevertheless the hunted fox not seldom outwits us, and it is only after he is lost and the run is over that we see what we ought to have done. Some men have an extraordinary gift of divining which way a fox has gone, and what he has done or is likely to do. Mr. Tom (or Gentleman) Smith was one most notable instance of this. It was said of him that a fox was less safe with Tom Smith after him with a stick than if pursued by anyone else with a pack of hounds. But the fox is, as we have seen, sometimes too clever even for the cleverest huntsman. There is a well-known instance of a pack which ran a fox to the edge of a steep cliff. Apparently there was nothing but a sheer drop, and the field turned away, confident that the quarry must have shared the fate of some leading hounds who had fallen over in the eagerness of pursuit, and been killed on the rocks below. But again and again a fox followed the same tactics, until they came to the conclusion that this fox must be the same. A man was set to watch, crouched behind the

only tree near. Presently he saw the fox coming. It ran to the edge of the cliff and disappeared. Springing out, the watcher stopped the hounds. Then he crawled to the edge of the cliff and looked over. Great was his surprise when he found himself looking into the eyes of the fox, which was holding on by its paws to the face of the cliff, just under the edge. Its mask was pointing upwards, so that it must have turned as it scrambled over the brink. Directly it saw the man it climbed quickly up and made good its escape.

It is evident that the chances of the chase are very much in favour of the hunted fox. We have heard the reproach against hunting that it is unfair for many men and dogs to join in the pursuit of one animal so small as the fox. In reality the advantage is all on the other side. The hounds have only one sense, that of smell, to guide them, and as we know that is a very uncertain one, and apt to fail at critical moments. On the fox's side are sight and hearing as well as a keen sense of smell, a speed at least as great as his pursuers', condition even more perfect, and, if he be fairly treated, endurance far greater. Besides this, it is a great mistake to look on the other pursuers as the fox's enemies. In theory they are supposed to desire his death, but in practice they more often save his life. What are the holloas we hear but, in many

cases, so many extra chances for the fox? Even whippers-in, though officially among the fox's foes, are often of the greatest assistance to him. A whipper-in goes forward to view the fox and heads him. In his excitement at viewing the fox he holloas too soon. Back goes the creature into the covert. Presently he tries again to break, but this time a whiff of a strange odour reaches his nostrils: there is a man smoking: back he goes once more. At the next attempt he gets half across a field when he meets two or three boys, who yell in his face. The fox by this time is becoming certain that he is safer inside the covert than out, and in this he is confirmed by being chased by a sheep-dog the next time he tries to leave. After that he determines to try creeping about inside, or crawling in the ditch, slipping along the boundary fence. The covert is now becoming more and more foiled, and it is perhaps with a sense of victory on his side that he hears the long-drawn note of the horn that might tell him that the enemies are going somewhere else to look for a fresh fox. A fox has many unsuspected allies and helpers in the hunting field. People always feel that it adds completeness to the chase if they have seen the fox, but if we view one close at hand at the beginning of a run, the chances are that we are somewhere where we ought not to be. If people

would stand still and remain silent far more foxes would be killed than now fall victims to the hounds.

The fox has thus many advantages on his side, and he may often be observed to make use of them with great intelligence and resource.

Reynard, however, has two very dangerous enemies. One is the huntsman who understands the necessity of condition for foxhounds, and how to give it to them by long, steady summer and autumn work on the roads. This is the kind of official whose labours are so hard out of the season that, as a famous representative of the profession once remarked, 'I look upon the season as a sort of holiday.' The brightness and movement of the regular season was a relief after the slow, long grind of the preparatory weeks. Consequently, the foxes found that they could not run his hounds out of scent nearly so often as those of his predecessor.

The other is the man who does not get the hounds' heads up on a bad scenting day. When scent is bad, hounds cannot be left too much alone ; even a heel line they will often work out for themselves, discover what they are doing, and coming back, pick up the forward line again. Another enemy the fox might well dread is the man who is quick at bringing his hounds out of covert. The

quickest man in the long run, as Will Goodall years ago found out, is he who goes to fetch his hounds, not the one who stands and blows till they are driven on to him.

One thing a fox must have is time : a terrier can sometimes bowl him over when he first starts, a greyhound can hardly catch him when he is once in his stride. I have been told of a habit of foxes that have had experience of being hunted. This was noticed by a late Master of Hounds and confirmed by others when their attention was drawn to it. The trick or method of escape was told to me thus : ‘ If in a hilly country a fox goes away and when clear of the hounds stops half-way up a hill and lies down, and then waits till the hounds are as he thinks near enough before he starts off, he will seldom be caught. On the other hand, the fox that goes right away and of course for the time being draws a long distance ahead of the hounds, is far more likely to be caught. The one economises his strength, and later he is enabled to obtain the full advantage of his superior condition, and thus to beat the hounds. The pack when blown and tired cannot keep the line, and thus it frequently happens that foxes do not so much run hounds out of scent by placing a long distance between themselves and the pack, as by

wearing out the power of the hounds to keep on the trail ; whereas the fox that goes away as hard and far as he can at once, and thus exhausts his strength, is easily caught up and disposed of.'

In the light of this observation and the remark of 'Nimrod' quoted elsewhere,¹ which another writer, 'Cecil,' notes with approval, it seems that the aim of the hunted fox is to gain time. The longer he can delay the better are his chances, except, of course, in the case already mentioned, when the fox having a refuge makes for it as straight and as fast as he can. Indeed it is an argument against the plan recommended by Mr. Tom Smith, when Master of the Hambleton, that earths should be broken up and foxes forced to lie above ground, that if foxes had no secure refuges they would not nearly so often run straight as they do now. It is clear at all events from what we have noted about the hunted fox, that as it is his best chance to gain time and to delay his pursuers, so it should be the huntsman's business to press him as much as possible. It has often been said that a fox is killed in the first ten minutes of the hunt though the chase may last much longer. Mr. Jorrocks, whose capabilities as a huntsman have been rather overshadowed by his reputation as a wit, noted that

¹ P. 33.

it was necessary that hounds should press upon their fox at some period of the run. Thus, while the huntsman's mind is fixed upon shortening the length of the chase, the fox's wiles are concentrated on prolonging it. Indeed it seems probable that in hunting runs of over forty minutes (perhaps we might say half an hour) the foxes more often than not beat the hounds. So that when the fox spends a great deal of intelligence and some strength in gaining time he is quite right, and this, and the desire to economise his powers, are probably the two leading methods of the hunted fox. By them we may interpret most of his devices and actions in the course of a run. It is to gain time that he runs the hedgerows, takes a turn round a covert, or lies down in a ditch.

Cubs often escape just because they are timid and distrustful of their capacity; old foxes, because they know exactly what their powers are. The majority of the foxes we kill are probably young ones in the spring of their vigour, who trust too much in their strength and swiftness.

As an illustration of this we may note the fate of a litter which were brought as cubs from a distant covert to a small one. They were ear-marked—there were five in all. In the cub-hunting season they were dispersed: one was killed as a cub in the

covert, and the others moved to a chain of woodlands six or seven miles off. Two were killed by hounds when they were obviously making for the home covert—one, indeed, was killed within a field or two of the fence. One vixen laid up her cubs there in the following spring, and for some years afterwards the other fox took up his abode in a gorse near a village, was often hunted and never caught, but met his end at last. He was found drowned in a ditch with a rabbit-trap on his leg.

The point I draw attention to is that the two that were killed were the two that tried to run straight, and they were both in their second year. The vixen, and the old dog fox that was murdered at last, never seriously ran at all: they dodged, crept, twisted, turned, laid down in ditches, crawled down hedgerows, until they beat hounds, or the Master lost patience and ordered the pack off to draw for a better fox.

With regard to the fate of the fox that was trapped, this is a new danger to hunting which has arisen of late years, and it is a very serious one. Trapping and foxhunting are incompatible. Farmers who employ a professional rabbit-trapper are not always at heart hostile to foxhunting, but they must come to see that they cannot have both. I know three countries at least which are in a very precarious

condition chiefly through this cause. Given a weak landlord, an inefficient keeper, and indifferent farmers, and foxes may soon disappear from a whole estate, to the great detriment of a hunt. Since, after all, prudent motives have very little to do with human actions, it is not much use to suggest that if, as Mr. Sargent states, about 100,000 horses are kept for hunting alone, that would give a consumption of 1,200,000 lbs. of oats per diem during the hunting season. This would again be 8,400,000 in a week, and, allowing thirty weeks as the time hunters are in condition, would give a consumption of 252,000,000 lbs. (6,300,000 bushels) of oats. I have allowed 12 lbs. per day per horse, which seems to me to be rather under than over the quantity consumed by a horse in full work.

This is a digression, but in a book on the fox and a chapter on foxhunting it is not irrelevant, seeing that rabbit-trapping in the cruel and systematic way it is now carried on is incompatible with the existence of the fox. If trapping were of more benefit to farmers than hunting we should be sorry, but we could not complain. But the market for oats and hay is of much more importance than the market for trapped rabbits. Whatever other view we may take of foxes, they are a great agricultural interest to

English farmers, and make no small item in the market for forage, seeing that the hunter demands the best of condition in order to follow the fox, and thus requires the highest-priced food for which otherwise racing-stables would be the only customers.

But to return to the fox before hounds. How long will a fox stand before a pack of hounds on a fair scenting day? If the hounds are able to keep up a sufficient pressure, and the fox is found to go all the time at full stretch, about twenty minutes is the limit of the staying power of most foxes. If the time be longer the pace must be slower, and there are sure to be some pauses. We talk of forty minutes or even an hour without a check : what we mean is that we have been galloping all the time. But the fox knows, or seems to know, that he must check hounds or die. If a run lasts more than from twenty to thirty minutes, some of the following things must have happened : The first, and by far the most likely, is that there has been a change of foxes. Quite good runs are often made up in this way, especially in grass countries with many small coverts. We start from a small covert and run to another, from which hounds go on with a fresh fox, taking away a third from the next covert, and all without any apparent pause or check. Sometimes hounds pick up a new

line in the open, and this is not uncommon in grass countries where there are many foxes. After hounds have been running about for some time, the whole country seems alive with foxes and changes are frequent.

Huntsmen do not always acknowledge these changes, but they are an important element in the chase, and increase the fox's chance of escape very greatly. 'That is not your hunted fox,' said a sportsman to an old huntsman whose hounds had killed a fox. 'Perhaps it may not be,' was the reply, 'but if I handles him it's much the same.' It is indeed a very high standard of skill that can make reasonably sure of killing the fox that was found. But the great aim of a huntsman is to show sport, with an eager crowd behind him he must do what he can, and that is often to cast forward and pick up another. But supposing the fox finds no substitute, even if there be no actual pressure there are relaxations. Everyone who has been lucky enough to ride close to the pack knows how often he is able to pull back to a canter or a trot. The man behind, of course, knows nothing of this ; he must keep on galloping, but the fox and hounds have many a moment to take breath of which the ordinary pursuer knows nothing. Something of this kind happens : Let us suppose it

is a scenting day. The pack has started fairly close to the fox. He has to lay his ears back and run for his life. The voices of the hounds warn him of danger. But there comes a change of note. A space of bad scenting-ground or a field of plough has checked the many tongues. Though hounds are still making the most of every whiff of scent and after the manner of high-bred foxhounds driving forward, and getting on at a fair pace, the fox can steady his speed and catch his second wind." Sometimes, as we have seen, he actually lies down to rest. When the hounds are on better scenting soil, or perhaps have been lifted over the bad ground—a liberty the huntsman may take freely when scent is good—the fox starts off again as fast as ever, but much refreshed. Then he meets a flock of sheep or a herd of cattle ; again the chorus wanes, and once more the quarry slackens speed. In front of him is a small covert, but it is not his point, there is no earth, and a thick covert is no place for a heated fox, so he creeps round, just skirting the outside.

Now this is another chance for him, and if hounds flash over the line into the covert the fox may gain a great deal of time and save his life. Hounds rush about the covert, and when at last they pick up the line again outside it is too late. Perhaps there is another

fox in the covert, and then our hunted friend escapes for the day. But we will suppose that the fox is not the only person with his wits about him. The huntsman looks forward and sees the plantation, 'Close covert; fox won't stay, very likely to change; will lift 'em round.' 'Put 'em on, Jack!' Toot! toot! The fox, which has once more eased his pace as the jangle of the pack stopped, now loses heart, for when once more the clamour assails his ears it is much closer than before. His point is a badger's earth on the side of a hill, still three miles away. Quickly he realises that his strength will not last him so far. Hounds are very near: something must be done. Before him is a fence with a gate; he runs to the gateway, stops, turns short round and creeps under the fence, on the same side as that on which he approached it. This is most effectual. Hounds are in a tremendous state of excitement, promising each other to 'tear him and eat him' in a very short time. Helter-skelter they dash through the gate; the clamour ceases, but still they flash on right into the middle of the field before they realise that they have no line. The foxhound is no fool, but he has a slower mind than a fox. The huntsman is puzzled and proceeds to make an all round kind of cast in the next field, where the fox has not been, and five or six minutes are

wasted. By this time it has dawned on old Melody that she never really smelt fox after the gateway, and she goes back with perhaps a daughter or son who always keeps her company in the front. The whipper-in is half inclined to rate them on, but seeing which hound it is, and knowing her to be a trusted favourite, lets her alone. Shrill, high, eager, comes the note, 'Down under the wall, you idiots ! here ! here ! here !' To that well-known tongue they fly at once, and the pack streams off, but soon has to hunt, for the fox has gone into an open wood, and having taken a wide sweep, he is once more on the way to his refuge with a good start. Ten minutes or more have been wasted (or gained, according to the point of view) in working out the half-mile, so that he is now comfortably in advance. He has rested a few moments, not long enough to get stiff. He has once more caught his wind ; true, his brush is clogged, and his pace has lost something of its early elasticity, but he is still able to plod on steadily. Just then a most delicious odour reaches his nostrils : there is a heap of rotting fish manure in the field. Though time is precious he cannot resist a roll in it. He finds the odour which causes his pursuers to blow their noses, draw out their flasks, and light cigars, stimulating and refreshing. Moreover it puzzles the hounds terribly.

I do not know whether the fox calculated on this, but I doubt it. At all events it saves his life, and a few minutes later hounds are baying round the earth. 'Fifty minutes without a check,' says the timekeeper. It was only forty, but thus is hunting history made.

There are, however, many longer runs on record, without counting the wonderful hunts which the fell foxes in Cumberland and Westmorland, or their Welsh brethren, afford. In the best of our countries over the cream of the grass, with the fastest packs and the quickest huntsmen behind them, foxes have been known to stand for hours. I think that long runs are not really rarer than they were. They could never have been ordinary occurrences. So many things must coincide on a single hunting day in order to produce one. First there must be a scent, not necessarily a burning scent, but one that holds. Hounds must be able to drive forward and to go on. Then they must find the right fox in the course of the day's draw, and they must force him away early enough to enable the run to be finished in daylight; for in most cases the heroes of the great runs have been found after midday, when foxes are fresher and lighter than in the morning. The fox should be a dog fox (though one or two historic runs have been after little vixens), old or of rather mature age, and one

that has come from a distance. Such a fox does not know all the drains and earths and badger-haunts of the neighbourhood, but is visiting, so he speeds away for home as soon as he can disentangle himself. It will be found in all the instances quoted below that in every case but one the fox had come out of another country. This is shown not only by the fact of his going back there as quickly as possible, but by the way he ignores coverts and other similar refuges until he reaches his own ground.

I have looked over the records of a great many runs. The odd thing is that, whatever period of hunting history one examines, the great run is always introduced with a comment that foxes do not now run as once they did, and the remark that the Master's grandfather enjoyed such gallops nearly every time he went out hunting. I think the considerations noted above will show that historic runs could never at any time have been at all common, since at no period could all the necessary conditions have come together very often. My own view is that such runs, *i.e.*, an hour or more of practically continuous hunting, are just as common (or as rare) as they ever were. I notice, too, that these foxes were in several cases headed more than once. There is no doubt that foxes in crowded countries learn to disregard carriages, horses,

and foot-people, to go through or to circumvent the crowd, and with a whisk of the brush to defy those whom they know well not to be really dangerous at all. In one respect it is possible that foxes are more likely to give long runs now than, say, a century ago.

Foxhunting countries in general, and Leicestershire in particular, are far more closely fenced than they were, and this is much in favour of the fox by giving him time and delaying his pursuers. Given an open country and a fox too suddenly awakened out of his sleep, and a terrier can catch him. A fast collie can certainly do so, and everyone knows how the innumerable wandering curs of grass countries interfere with sport. I remember seeing in Mr. Fernie's country a running fight between a fox and a sheep-dog. The dog rushed at the fox and rolled him over, the fox bit the dog, which drew off, only, however, to renew the attack. This went on until the hedge was reached, when the fox slipped through and the dog was baffled. The fences help the foxes immensely: I never realised how much until I watched a pack of hounds scrambling through a West-country fence in single file. If anything the chances are more in favour of the fox than they were.

There is another point which shows incidentally that long runs must generally take place with strange

foxes, and that is that they deprive the best huntsman of one of his advantages. The late Colonel Anstruther Thomson, in his account of the Waterloo run, notes that more than once he was deceived as to the fox's point. The very fact that a huntsman is generally able to guess at the run of his foxes is against him when it is the unusual and unexpected that happens in the case of the stranger. These considerations apply to most of the runs noted below, and may serve to make us more contented with our lot, convincing us that we are not so much worse off than our forefathers in this respect. The runs are :—

The Waterloo Run (Pytchley), February 1866. Time, 3 hours and 45 minutes. There were two foxes. The fox was lost.

The Radbourne Run (Meynell), February 1868. Time, 4 hours ; point 14 miles ; distance as hounds ran variously estimated at from 32 to 36 miles. Two foxes. The last fox was killed by a farmer as he was crawling into an earth.

Great Wood Run (Badminton), February 1877. Time, 3 hours 30 minutes ; point 14 miles ; distance as hounds ran, 28 miles. One fox, which was lost.

Mr. Chaworth Muster's Run (South Notts), 1872. Time, 3 hours 26 minutes ; point 18 miles ; distance as hounds ran, 32 miles. Fox killed.

Barby Holt Run (Quorn), December 1894. Time, 2 hours 40 minutes; point 13 miles; distance as hounds ran, 27 miles. One fox was killed.

In these selected runs, of which four can be read in detail in 'Baily's Hunting Directory,' and the account of the Meynell run in 'The Field,' there were, according to the estimate of the several huntsmen, seven foxes concerned, of which only two were killed. The Meynell fox was struck on the head with a hunting crop by a farmer as he was in the act of crawling into his earth. But, so far as I can see, if I had chosen other historic runs the balance would have been still more in favour of the fox.

It is said that the little daughter of an M.F.H. when repeating her Sunday catechism was asked which were the good gifts of Providence we could not do without. To which she promptly replied, 'Foxes.' Without going so far as this, we may say that hardly any animal has, in the long history of its race, been of more importance in the literature and life of man, or is more interesting as a study of animal life and mind.

This is the conviction with which I write these closing words. If we could re-live the past, the fox-hunter would certainly choose many of his best hunting days for repetition. Indeed the man whose remark at

the close of his life was, 'Well, if I had my time over again, I would hunt a great deal more and flirt a great deal less,' will probably, *mutatis mutandis*, find an echo in the hearts of many of my readers, and his words serve as a precept to the younger of them.

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