

THE NEED OF TRAINED OBSERVATION

By Theodore Roosevelt

EVERY hunter *ought* to be a field naturalist, and *must* be an observer, if he is to be a hunter in anything but name. His observations will deal primarily with the animals he pursues, but if he is wise, they will also cover a wide range of other subjects. The professed naturalist owes much to his sporting brother. This, of course is especially true as regards big game, and, indeed, as regards all the rarer quadrupeds which vanish before the advent of civilization. It is a real misfortune when a man who has exceptional opportunities for observing the wild life of these creatures fails to take advantage of his opportunities, for too often they have vanished by the time the trained scientific man comes upon the field. Moreover, the latter is apt to be absorbed with his observations of the numerous lesser forms of animal life, which stay in the land, and the records concerning which therefore do not have the same value. It is for this reason, by the way, that the big game hunter who has scientific aspirations should not lose his sense of perspective, so to speak, and neglect the work which he alone can do, for the sake of that which can be done at any time by any of those who may follow in his footsteps. Thus in Dr. Donaldson Smith's recent record of his noteworthy explorations in Africa there are appendices devoted to catalogues of beetles and botanical specimens. This is all very well in its way, but it is not one-thousandth part as important from the larger scientific standpoint, as would have been a full and accurate account by the Doctor of the life history, and indeed the physical peculiarities of the rhinoceros, with which he was brought into such intimate and often unpleasant contact. It is not so important as a full and detailed account of such incidents as the fighting between the lions and hyenas, of which he was an eye witness.

Every big game hunter ought to be an observer. If he keeps a record of his observations, one of his first experiences will be to find that they seemingly conflict with those of some other observer equally

competent. If he is hasty he will conclude that the other observer is not telling the truth; and the public at large will conclude that they cannot both be right. Now, of course, it is perfectly possible that they both are right; and it is possible, on the other hand, that while each has seen a part of the truth, he has not seen all. In any observation of this kind there are varying factors. In the first place, two men may not see the same thing alike; and in the next place, one man may not see the same thing quite alike on two different days; while finally, two animals of the same kind may act utterly different, or one may act differently at different times, or all of those who dwell in one place, or who are observed at one season, may behave very differently from those that dwell in other places, or are seen under other circumstances.

When these conditions are set forth in print, they seem such obvious truisms as hardly to be worth putting down. But as a matter of fact they are continually forgotten in practice. Even a trained observer will make mistakes, and those who, though eager and interested, have no special training or knowledge, are sure to err much more frequently. Besides, the language which one person uses to convey a somewhat unfamiliar idea, may to another person convey this idea in a totally different form. For instance, at one time I was a great deal in the cattle country, and in the spring time, out on the treeless wastes, I frequently came across sage fowl. On a still, clear morning at dawn I would often hear the love notes of the male and, going toward them, have had to travel a very long distance before coming in sight of the bird himself. The impression gradually fixed itself upon my mind that there was a considerable volume of sound, which I described as "booming;" and at first I was rather impatient of correction when a friend of wide experience insisted that it ought rather to be described as clucking, and was by no means a powerful noise. Yet I afterwards became convinced that

my friend was, in the main, right, and that my impressions of the sound were due less to the sound itself than to the stillness, the loneliness, and the uninterrupted, measureless expanse of the surroundings. In another matter connected with this same bird, the difference in certain observations was due not to anything in me or the surroundings, but to a variation in the habits of the bird. I had always found sage fowl far away from trees, on desolate flats, where there could be no ranches. But in 1892, near the head waters of the upper Missouri, I came upon them more than once in parties right by the river, among the small cottonwoods, and on at least one occasion, so near the garden of a settler that I was for a moment doubtful whether they were not domesticated.

Wherever any man has the opportunity to observe but a few individuals of any species, and of course when his observations are hurried, there is every chance for a conflict of testimony. For instance, I recall two friends, each with about an equal experience in shooting our large bears. One has been repeatedly charged, and has a most wholesome respect for the grizzly's prowess. The other, who has killed an even larger number, has never seen the grizzly display anything but abject cowardice, and down in the bottom of his heart I think he regards all tales to the contrary as impinging somewhat on fancy.

In my own experience I have generally found the mountain sheep to be a very difficult animal to bag, far more so than deer or elk. One of the hands on my ranch, however, who had killed several, always insisted that the direct reverse was the case, and that, as he expressed it, they were "dumber" than deer. Another friend who was accustomed to European chamois, not only considered the big horn by comparison a stupid, but also by comparison, even a bad climber—a statement I found very hard to believe. In the United States from the days of the earliest explorers to the present time, the big horn has always been, as his name implies, a mountain sheep; but his giant kinsfolk of Asia are often not climbers at all, dwelling on huge plateaus, level or rolling, and with little or no cover.

It is quite impossible to reconcile some conflicting statements made even by the most eminent authorities. I suppose that

all of us who care for a hunter's life have read, with peculiar interest, the exploits of our fortunate brethren who have shot in that grandest of all the world's hunting grounds, Africa, and the most enthralling chase is naturally the chase of dangerous game. African hunters are agreed that the lion, elephant, rhinoceros and buffalo are the four kinds of game, the pursuit of which must be considered as dangerous. But when the question is as to which is the most dangerous, every variety of opinion is forthcoming. We must, of course, disregard absolutely the untrustworthy writers, who practise a melodrama degenerating into opera bouffe, like Girard, whose accounts of lion hunting in Algeria are almost pure romance (in striking contrast to the admirable descriptions of that great French hunter, M. Foa). But even when we examine the writings of men who have the highest claims to serious consideration, we are met by irreconcilable differences of opinion, and even differences of fact. Taking four such men, all with wide experience with all the kinds of dangerous African game, Mr. Selous considers the lion by far the most dangerous; Mr. Jackson ranks the buffalo first; Sir Samuel Baker insists upon the elephant; and Mr. Drummond gives the palm to the rhinoceros. Of the rhinoceros, by the way, Messrs. Selous and Jackson speak almost with contempt. Again, take the hyena. Most writers on African sport treat the hyena as an exceedingly cowardly and harmless animal. But some of those who write of Somaliland and the north, not only treat of its ravages among the flocks, but also of its frequently preying upon men, and I have already alluded to Mr. Smith's account of its prowess even against the lion.

Closely allied animals certainly show marvellous differences of conduct in different localities. It is hard to give any satisfactory reason for the undoubted fact that throughout Asia, and in many parts of Europe, the wolf is often a dangerous foe to human life; whereas, in America such an event as an attack by a wolf upon a human being is almost unknown. On the other hand, the big American bear, until much molested by hunters, was undoubtedly far more to be dreaded by man than any Asiatic or European bear. Yet another puzzle is offered by the fact that in America the black bear, almost every-

where, outlasts the wolf as settlements advance, while in Europe the reverse is the case. It is not easy to see why a comparatively clumsy animal like the bear, which is less prolific than the wolf, should outlast it. Yet such is undoubtedly the case throughout our Atlantic States.

Turning from big game, let me take an example among our own familiar birds. To many people, including myself, the voice of the Western meadow lark has a peculiar charm. It happened that my early associations with the Eastern meadow lark were such that I rarely heard more than its chatter, and not the plaintive song-note which I have since grown to love. But to me the Western meadow lark is an incomparably better singer. Yet I have seen the opposite opinion upheld, even in a journal like *The Auk*. I wonder how much association really has to do with our appreciation of bird songs? A great deal undoubtedly, as witness particularly the cases of the old-world nightingale and sky lark. These are extreme examples of birds with a literary reputation so great that hardly one man in a hundred who writes of them does anything but accept what other writers have already said of them.

It must remain true always that the surroundings inevitably influence any observer's judgment and appreciation. For instance, any hunter will probably at once assent to the statement that the love challenge of the bull elk, heard, as it so often is, on a frosty night in the mountains, echoing down through the pines, is one of the most musical of all nature's major sounds. But if heard close by, or in a zoological garden, it loses almost every element of attraction.

This same elk, or, to give him his proper name, Wapiti, affords a very curious instance of an entirely trustworthy and well qualified observer being utterly mistaken in his judgment. The late General Dodge was one of our best writers upon sport in the plains and among the Rockies in the old days. He observed elk by the thousand under all conditions. Yet he actually believed that the elk was a mild-mannered beast and that the males hardly ever fought among themselves! To most of us it seems incomprehensible that even a day's experience, where there is any large

mixed herd of elk, should not convince any man of the exact contrary. Wapiti bulls fight together even more freely than black tail or white tail bucks, and are also more apt to turn upon outside enemies.

Then there are entirely different problems in observation; problems concerning the seemingly unaccountable differences two similar species will display under like conditions. Why is it that among the grouse of the plains, the largest of all those found within our boundaries, the sage grouse is the tamest? while among the grouse of the woods, the spruce grouse, which is the smallest, is the tamest? The ruffed grouse is tame also, in out-of-the-way localities, but he is never guilty of such utter folly as the stupid, handsome little spruce grouse. Is the tameness of the white goat when compared with the mountain sheep a parallel case? or does the white goat become as wary as the sheep when equally persecuted? My own experience would lead me to answer the latter question in the negative; but I should much like to have the judgment of men who have seen more of both animals.

I have here mentioned only a few instances where there is need of trained observation among hunters and hunter naturalists. Each man should school himself to accuracy of observation. And yet each man should remember that not only he himself may err, but that the same animal may act in an entirely different manner under different conditions, or indeed under the same conditions. Some of the seemingly inexplicable differences in the character and habits of different creatures which I have mentioned above are doubtless due to differences in the observer, and equally without doubt some of them are due to variation in the animal itself, this variation being either individual, seasonal or local. Only by numerous observations taken by keen and trained observers would it be possible to reconcile or explain these differences. Only when such observers are sufficiently numerous will we ever get really satisfactory life histories of the rarer and more interesting wild beasts; and surely the production of such a life history is better worth while than mere hunting either with gun or camera—good in itself though this mere hunting may be.