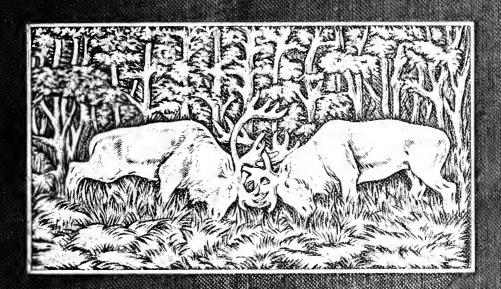
# THE ROMANCE OF THE NEWFOUNDLAND CARIBOU

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# THE ROMANCE OF THE NEWFOUNDLAND CARIBOU

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CARIBOU STAG BUGLING.

In the highlands of Newfoundland.

# NEWFOUNDLAND CARIBOU

AN INTIMATE ACCOUNT OF THE LIFE
OF THE REINDEER OF
NORTH AMERICA

BY

F.R.G.S., F.R.P.S.

AUTHOR OF "CAMERA ADVENTURES IN THE AFRICAN WILDS," ETC.

Illustrated with Paintings, Drawings and Photographs from Life by the Author



LONDON

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# CONTENTS

By Way of Explanation	Page 1
CHAPTER I.  On the Life and General Habits of the Caribou of Newfoundland	7
	7
CHAPTER II.  The Mating of the Caribou	43
CHAPTER III. The Autumn and Spring Migrations	73
CHAPTER IV.  Newfoundland Caribou from the Sportsman's  Point of View	102
CHAPTER V. The Newfoundland Caribou as a Species	119
CHAPTER VI. Newfoundland: The Country and Its History.	148
CHAPTER VII.  Camping in Newfoundland and How to Do It.	163
The Game Laws of Newfoundland	

## LIST OF ILLUSTRATIONS

### FULL PAGE PLATES

Caribou bugling (coloured)	Fron	itispiece
		To face
This doe and fawn came down the river bank within al	out	page
fifteen yards of where I was hiding		2
Another pair came down to the river an hour or two later		4
This is the way in which Caribou cross a river		8
Doe and fawn surprised at close quarters		10
Evidently frightened by the sight of my camera, this herd	has	
turned and is going off at full gallop		I 2
Normal footprint of a Caribou stag		14
Normal footprint of a Caribou stag		14
A one-horned doe		16
The most ugly type of Caribou stag		18
Caribou rising from his noon rest		20
A fine sturdy doe		22
Showing the jaunty air of the stag during the mating season	n .	24
During the mating season. Stag wandering in search of do		26
A young stag with a very pretty, but rather small head	d of	_
about thirty points		28
Over the barrens the herds of Caribou, during the south		
migration, travel in long lines		30
A Caribou fawn		32
A small herd travelling by water in preference to land		34
Caribou swimming across Sandy River		36
Caribou travelling in a snowstorm. From a painting by	the	0
author	: •	38
Migrating Caribou crossing the barrens on a frosty morn	mg.	
From a painting by the author	•	40
During the mating season. A fine stag with his herd of do	bes.	44
Caribou on the hills	• •	46
A stag that is more interested in the does than in me .		48
When on the march the doe is usually careful to look out	tor	
any scent of danger		50

LIST OF ILLUSTRATIONS	vii
	To face
The big white doe that did so much to prevent my getting	page
pictures of the large herd and the fighting stags	52
Stag following his herd of does that have taken fright	54
Alarmed by the scent of man, this herd is making off at good	37
speed	56
The very old light-coloured stag with long spindly horns	58
A young stag keeping a sharp look-out for does	60
A . 1 C.1 111.	62
"The pair of fighting stags seemed to be well matched"	68
Stag watching his does which appear to be thinking of running	00
	70
away	•
Swimming	70
About to land	74
	76
Landed	78 80
Caribou path down the river bank	80
Caribou lead through dry bog-land	00
Where the Caribou leads from many marshes converge at the	0.
river bank	82
Caribou paths, or leads, through the grassy barrens	82
"The whole country looked almost like a perfect fairyland".	84
My sole friend and companion, the Canada Jay, having break-	0.7
fast with me	86
The blind from which many photographs were made	88
The blind, the camera, the Caribou, and the author	88
"As the stag came within range I shot him with the harmless	
camera"	90
"He was scarcely nine yards away"	92
"A large herd, numbering perhaps seventy animals".	94
"A sunlit picture of a perfectly typical line of thirteen Caribou	
under the most favourable conditions"	94
"Within sixteen or seventeen yards was a real stag, with horns	
carrying full forty-five points"	98
"My next visitors appeared—a doe and a fawn".	100
One of the few cases in which I have seen the stag taking the lead	104
A solitary doe crossing shallow river	106
The day being fine this herd is taking it easy	108
This fawn was lying down on the open barren	110
The same fawn as the one shown on previous page photo-	
graphed as it got up and started off	112

	To face
A suspicious herd	page II4
Meat hunters bringing down their winter's meat	116
One of the many types of does—lightly built body and very	110
dark face	122
One of the many types of does; the noticeable features being	122
the heavy build, ugly horns, and very light colour,	
especially of the face.	124
especially of the face	•
build	130
build	144
Evening on Sandy River	154
Herd of Caribou landing in a hurry, having been frightened	
by the canoe	156
Caribou on the river bank	158
Caribou on the river bank	160
Usnea moss, which grows on trees	160
With the heavy load of cameras and plates, walking over the	
soft spongy bogs is exhausting work	164
The easiest way to travel in Newfoundland	164
My camp on the north bank of Sandy River	166
This herd crossed the river directly opposite my camp	174
Mending our canoe with Caribou skins	176
The canoe in the water with its sheathing of Caribou skins .	176
TEXT ILLUSTRATIONS	
	Page
Prehistoric drawing on Reindeer horn	7
Attitude of dejection assumed by Caribou stag during the	
mating season	43
On migration	73
A Newfoundland Stag	102
Reindeer and Caribou	119
Types of horns of the Newfoundland Caribou (Figs. 1— 32) 120	7-140
A glimpse of Newfoundland	148
A camp in recondition	163
MAPS.	
Map of Canada showing approximate distribution of the Caribou	138
Map of Newfoundland At end of	volume
•	

# THE ROMANCE OF THE NEWFOUNDLAND CARIBOU.

#### BY WAY OF EXPLANATION.

An introduction to a book is usually a sort of apology for the sins which one is apparently about to commit, though it is more often written after the work is complete; of course, we all know it is very seldom read. Nevertheless, it is one's duty—to whom it is difficult to say—to write one; so I make the attempt, not calling it an Introduction, but explaining why I am going to write so much about the life of this comparatively little-known creature, and to apologise for all shortcomings and mistakes I may commit.

In England it is quite the exception to find anyone who knows what the Caribou is, unless he happens to have been to Newfoundland or certain parts of Canada; while even in the United States the animal is very slightly known, except to sportsmen, and people will scarcely believe that in the island of Newfoundland herds numbering many hundred head may be seen, at the present time, even by those travelling on trains. Yet Caribou are actually very numerous, notwithstanding the considerable slaughter which takes place during the rather long season when

shooting is allowed. Few animals are more easily seen when conditions are normal, and it is safe to predict that these creatures will continue to be abundant for very many years to come, unless some unforeseen condition arises.

In the following pages I shall endeavour to give as clear and complete an account of the life of the Caribou as I possibly can. Most of the information has been obtained from personal observation during the nine consecutive seasons I have spent in Newfoundland, much is unfortunately lacking, owing to the nature of the country, which permits the wandering animals to frequent regions practically inaccessible to man during certain seasons. The many months spent in the country, nearly always alone, have enabled me to see a good deal of the Caribou and gather some material which will, I trust, prove of interest to the reader appreciative of the habits of wild creatures, be he sportsman, naturalist or traveller, and I sincerely trust that the reading of these pages will give at least a fair conception of the animal's habits, while the photographic illustrations, which have been made frequently under very difficult conditions, will give an accurate idea of the animal's The hardships endured, the almost endless appearance. disappointments and the expense entailed in obtaining this collection of photographs may seem out of all proportion to the results. Yet there has been a certain fascination in the work and I can truthfully say that the pleasure I have derived in overcoming the difficulties has amply repaid me for all the trouble and exposure. Fortunately one forgets discomforts and weariness, while the pleasures that have been experienced grow more and more real as the years go by, and I shall always look back with the keenest delight to the months in Newfoundland when, in the



This doe and fawn came down the river bank within about fifteen yards of where I was hiding among some fallen logs.

They were photographed and crossed the river without detecting my presence.

	·		

company of the Canada jays, the Caribou, the beaver and the wild barrens and forests, I have been as nearly happy as man can ever be.

Usually entirely alone I have wandered through the country, going quietly that I might see the animals undisturbed and free from the fear of man, and, as I have not used or carried fire-arms while on these trips, exceptionally good opportunities have been offered for observation. For hours at a time have I crawled among the unsuspicious Caribou, watching their behaviour while they slept, fed and in other ways led their natural life without the sound of the rifle to fill them with fear. This work has supplied me with much material, not only in the way of photographs and facts for this book, but also for my paintings. In some ways the photographs form perhaps the most valuable part of the material, for in them we have indisputable evidence of the animal's form and action; so that, should the day come, as it possibly may, when the Newfoundland Caribou ceases to exist in its wild and natural condition, there will at least be the pictures to show to those who will then be living.

Unfortunately, the value of wild-animal photographs is not thoroughly realised. Were there even a fair appreciation of what they represent, museums or private individuals who have the means would take steps to ensure proper collections of pictures of some of the vanishing animals, and of those which, though now so abundant, may not endure very long under the rapid strides of civilization. As it is, the work falls on the very few whose keen interest in the animals is so great that they devote their lives to collecting such photographic records without, as a rule, the hope that they can ever pay the expenses of the actual work. Such work does not entail large outlays when the results are

considered, but small as the necessary amount may be, it is such a serious handicap, that many of us are absolutely prevented from doing that which we feel should be done, and done soon. Not only is no help forthcoming from institutions or individuals, but, with perhaps one exception (the American Museum of Natural History), they are not even interested enough in the subject to take advantage of what is being done by securing durable prints for purpose of filing away for the use of future generations. a recorder of facts, the camera takes first place, but the records it makes are only of value, beyond interesting people for the passing moment, if put into permanent form. Perhaps I appear to write with too much feeling on the subject, but it is only because of real experience. When I made the collection of photographs of the larger animals of British East Africa, in 1909, I worked to the limit of human endurance and under the great disadvantage of serious lack of funds (most of which were borrowed from very kind friends). Every moment was of value, on account of the great expense entailed. Almost absurd risks were taken in the effort to get satisfactory pictures at very close range of the most dangerous animals in the world. The results appeared in my book on the trip.1 To the above-mentioned Museum I gave the use of my negatives, in return for their many kindnesses to me, but beyond that, the pictures have never secured any permanent home, even though they represent animals, many of which will become scarce within a few years and extinct sooner than any of us realise. Photographs, too, are easier to keep than more or less perishable skins and skeletons, which require constant care and much 100m for storage.

<sup>1 &</sup>quot;Camera Adventures in the African Wilds."



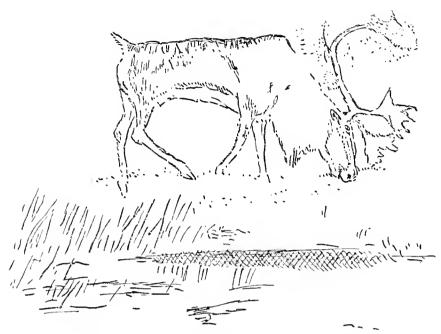
Another pair came down to the river an hour or two later than the two shown in the illustration, page 2. The fawn, however, caught sight of me as I was about to make the exposure. No sooner had I released the shutter than a fine stag, following their footsteps, rushed down the bank, and, hearing the alarm signal, returned to the woods before I could make another picture.

All of this seems apart from the subject of the present book, but I take the opportunity of trying, with but small hope of success, to arouse a little interest in what may at first appear to be only a hobby, but which in reality is of some importance. In these days of speed and still more speed things happen quickly. More changes take place in ten years now than in ten or twenty times ten years a few centuries ago. Animals which changed but little during great periods covering thousands of years are suddenly wiped out before our very eyes. There is no time to waste. The camera in competent hands should be taken on the field, and every species known to exist should be photographed both with the regular camera and cinematograph, and the results stored in places where they shall be safe against all conceivable forms of destruction.

The accompanying photographs will serve to keep a fairly good record of the Newfoundland Caribou, not as good or as complete as I should like it to be, for I am not in a position to carry on the work with the thoroughness that it deserves; but, nevertheless, anyone looking at them will be able to form a fairly correct idea of what these Caribou look like. It would be advisable if photographs of other species were taken, especially those that are in danger of extermination, as for example, Stone's Caribou (R. Stonei), which is one of the more or less well-defined species found on the south coast of Alaska; it is scarce even now and will probably be wiped out entirely before very long; so that if any steps are to be taken to preserve it photographically there is no time to lose.

Among those who have been good enough to help me in this book, my sincere thanks are due to Sir E. P. Morris, the present Prime Minister of Newfoundland; to The Reid Company of Newfoundland, for giving me the facilities afforded by their steamers and railroad; to Mr. J. W. N. Johnstone, the General Passenger Agent for this Company, who has in many ways given me valuable assistance; to the Game and Fisheries Board; to Messrs. Whitaker Cox, and Huntress, of the Bungalow at Grand Lake, for the kindest of help; to Messrs. Squires, Pennell, and many others who gave me much valuable information and frequently did me many favours; to Mr. Madison Grant and to Dr. Hornaday, of the New York Zoological Society, who kindly granted me permission to use the material printed by the Society; to Messrs. J. G. Millais, Hesketh Prichard and F. C. Selous, who have lent me photographs of horns from which some of my drawings were made; to Mr. Ernest Thompson Seton, whose works on the Caribou have been of great help; also to Messrs. Jas. P. Howley and P. T. McGrath, from whose writings I have obtained much interesting information.

Before this book goes to print I hope to be back once more in the island which has so strongly taken my fancy—back to learn something more of the Caribou of Newfoundland.



Prehistoric drawing on reindeer horn done by the stoneman probably thousands of years before the ancient monuments of Egypt. Taken from "Life History of Northern Animals" by E. Thompson Seton.

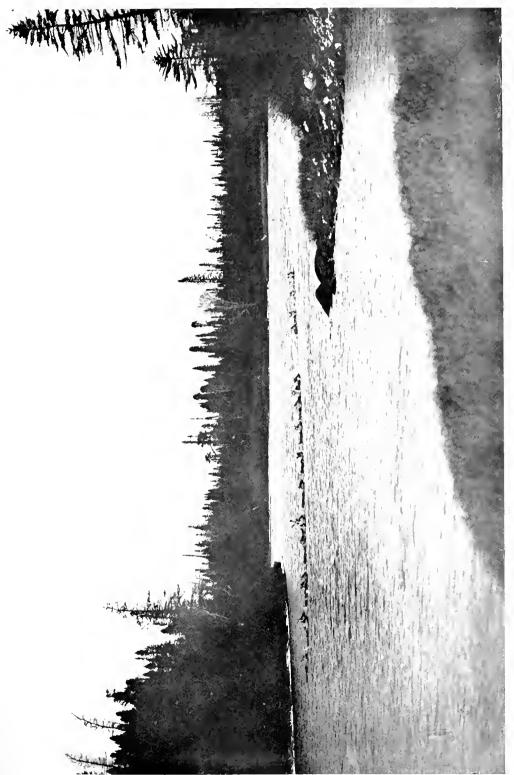
### CHAPTER I.

ON THE LIFE AND GENERAL HABITS OF THE CARIBOU OF NEWFOUNDLAND.

Long before the development of man on this earth, there lived for many years in the more northerly part of the globe an animal which, so far as we know, differed but little from the Reindeer or Caribou of the present day. Indeed, we may say with some certainty that few animals have changed less during the tens of thousands of years that have gone by since the fossil remains which are now found were deposited as permanent records in the oldest Pleistocene deposits. European man in the earliest days knew the reindeer and probably used it in many ways, and he left most remarkable

records in the way of drawings to show us how thoroughly familiar he was with the animal. From the drawings on bone we learn much that the valuable fossil fails to show, for the ancient cave man gives us a picture, wonderfully well done, of what might well be a Newfoundland Caribou of These drawings, together with the many fossil remains, are indisputable evidence of the reindeer's existence in the earlier ages when the world was not as the world we know to-day, when climate as well as land areas were entirely different, when stranger beasts than we now see roamed the land and fought against conditions which were slowly changing and slowly developing. When the great continents were formed and gradually separated from one another by water or perpetual ice, the original reindeer were split up into different herds which took possession of the slowly-forming continents, and by this geographical change they have developed along slightly different lines, so that now instead of one species, we have, or think we have, a great many. will leave this subject till later on, for the Newfoundland Caribou is what we are after and with those alone shall we deal in this chapter. We will not for the present even discuss whether or not it is a separate species, because to do so would bring in the other races of the family which we propose to leave alone.

At the great risk of being called to account by some of my friends, I shall begin by saying that the Newfoundland stag, at its best, is perhaps the handsomest of all the Caribou, even though he is not the largest and does not carry the longest horns. Not only is he a thoroughly handsome creature, but his life is unusually full of interest, to be fully appreciated only by those who have had the good fortune to spend many months in the wilds of his island home, seeing him and his soft-eyed does under many and varied conditions.



This is the way in which Caribou cross a river, single file and close to each other.

To judge of any animal by one or more that have been frightened by the hunter is not fair; they must be seen under happier conditions, when they are natural and free from the terror with which man inspires them. This dread of man is by no means a recent development, but goes back thousands of years, before the most advanced brain dreamed of the deadly firearms. In the dimly distant days of the stone age when the Beothic Indian, probably the first inhabitant of Newfoundland after it became an island, hunted the Caribou as an article of food and used its skin, presumably for clothing, the animal learned the fear of man. But then man was clumsy in his methods and could kill only at close range; there is a strange story, which is told by Mr. Howley, of an Esquimaux tradition regarding their difficulties in getting near enough to the Caribou to kill them. They believe that originally these reindeer had very large eyes so that no man could approach them unseen. Great distress resulted from their inability to secure the necessary meat, and they be sought the Great Spirit to have pity on them in their need, and reduce the power of the eyes of the animals. The Great Spirit listened to their prayers and made the eyes very much smaller, so that the Esquimaux could hunt with far less difficulty. They point to the very marked tear-duct as a proof of the truth of the story and claim that originally the eye extended to the length now occupied by this duct. We know that the ancient man destroyed the Caribou in great numbers, for they were probably his principal source of food; what his earlier methods of killing them were we can only surmise. Spears and tomahawks were among the first of his weapons, and we can still find traces of the immense fences which were constructed for the purpose of bringing the migrating animals within reach of these early hunters. The making of these fences must have involved a vast amount

of labour when we consider the rudeness of the implements employed for cutting down the trees, and anyone who knows Newfoundland can fairly appreciate the difficulties of the task, as the trees of this country are remarkably tough. Some of these fences are said to have been forty miles or more in length; they were begun at the bank of a narrow river which was deep enough to force the animals to swim, and the two arms diverged widely so that a large stretch of country was controlled. The Caribou, coming along in the course of their semi-annual migrations, would meet this obstacle and follow it to the river's edge. As soon as they entered the water, primitive man attacked them with his simple weapons, and we can understand how easily the wretched animals were killed as they floundered through the water in densely packed herds, so frightened that they were incapable of resistance or intelligent action. It is no wonder then that they are imbued with the fear of man. We may even imagine that the modern man, with his far-shooting weapon, who frequently kills without being seen, is less an object of dread than he of the past who engaged in what were literally hand-to-hand conflicts in which the slaughter must have been terrific. Fortunately the island was very sparsely inhabited, otherwise these methods would have greatly reduced the number of Caribou and we would not have the great herds which exist to-day.

How the Caribou first came to the island is somewhat a matter of conjecture, but it seems reasonable to suppose that previous to the severance of this land from the mainland by the Straits of Belle Isle, the animals lived there just as they did on the whole northern continent. There is, at least, no reason to suppose that they did not as the conditions are, and probably were, similar. Most of this northern country was more or less covered with that important though



Doe and tawn surprised at close quarters. The unevenness of the two horns or the doe is very striking, so also is the size of the larger horn. The deeply-furrowed coat of the doe is quite characteristic.

primitive form of vegetation—the lichen—which was then, and is still, engaged in forming a soil capable of sustaining the higher forms of plant life. These lichens, being the chief food of all the reindeer, rendered the greater part of the northern continent suitable for the wandering The theory advanced by some writers that the Caribou crossed the Straits of Belle Isle during the winter, when ice bridged the ten mile strip of water, does not sound plausible as an explanation of how the island was first inhabited by the animals, though it is of course quite possible that at times they have crossed under exceptional conditions. Captain C. Hardy, in his book, "Forest Life in Acadie," which was published in 1869, says that: "Some years ago, during an unusually cold winter, the deer crossed in large bands from Labrador into Newfoundland over the frozen straits." He does not give any authority for the statement, so the information was probably obtained from local fishermen. So far as I can learn, nothing of the kind has occurred during the last few years, and as the Newfoundland Caribou is fairly persistent in its distinctness from the Labrador race we must be content to believe that their separation from the original herds took place very many years ago. Yet, on the other hand, there being always two sides to an argument, the Labrador species may have come over during comparatively recent times, and this would account for the claim that there is a secondary species or variety of the Newfoundland race, a claim which I confess requires some stretch of the imagination to believe in.

To-day we know the Caribou of the large island as a more or less migratory animal which exists in considerable numbers. How many there are it would be difficult to say, perhaps one hundred and fifty thousand altogether would be a fairly safe estimate. J. G. Millais thinks there are more

than this number. In his delightful book, "Newfoundland and its Untrodden Ways" (published in 1907), he writes:

"It is very difficult to figure out the number of Caribou in Newfoundland, and all estimates must be mere guesses. Mr. Moulton, of Burgeo, judging by the numbers wintering in the barrens north of that place and White Bear Bay, puts it at two hundred and fifty thousand, and thinks they are increasing at the rate of ten thousand annually. Howley, on the other hand, places the figures at a hundred thousand, and I think that double this number is a very fair In spite of the enormous slaughter which takes place annually, and which is every year greatly on the increase, Newfoundland will keep the deer for many centuries to come if all shooters are licensed, and the number of deer shot by each person does not exceed three. Thus, putting the death rate at the highest estimate of three animals each to four thousand shooters, twelve thousand would be killed out of two hundred thousand, that is a depreciation of six per cent. Now this is a much smaller rate of killing than takes place among the stags of Scotland, and they are undoubtedly on the increase."

This is a hopeful view of the subject, and though his estimate of the existing numbers seems slightly high, there is every reason to hope that the animals will not decrease unless some entirely unforeseen condition arises. To those who, when out hunting, are accustomed to seeing two or three wild animals in a day, and believe themselves fortunate indeed if they see half-a-dozen, the extraordinary number of Caribou to be found in a single day's walking or canoeing in Newfoundland must be a great and very delightful surprise. During the autumn migration it is not unusual to see four or five hundred in a day, and earlier in the season when the animals are following



Evidently frightened by the sight of my camera, this herd has turned and is going off at full gallop.



their regular habit of slow wandering from barren to barren, or from hill to hill, one may easily see several dozen singly or in small herds; while if we visit the island when the snow lies deep, and venture into the animals' winter quarters, I am told that irregular herds numbering thousands of head may be found. It must be a wonderful sight—one to remember and one which I hope some day to have a chance of seeing.

Before going into the life of the Newfoundland Caribou let us glance at the animal itself, for he is a stranger to most people. He is known scientifically as Rangifer tarandus, or perhaps more specifically as Rangifer terræ novæ. By the general public who know the animal at all, he is called a Woodland Caribou, the name being derived from the Indian "maccarib," or "maccaribo," or "caribo," and not as Sir John Richardson would have us believe from the French "Quarré boeuf." The spelling that is now used—"caribou"—dates at least as far back as 1609, when it was used by Les Cabot. So much for the name which, after all, is less important than the owner of it.

As to the measurements of the Caribou (of Newfoundland) I must confess myself in serious difficulty, for never having actually measured one I must rely on what others say, and unfortunately what they say varies considerably. This may be owing to the method of making the measurements, for when the animal is laid down on its side the forelegs are not in a natural position as there is no weight on them; the leg, therefore, should be forced upward as far as it will go, in order to give the approximately correct height of the animal when standing. This I believe is seldom done, hence the somewhat exaggerated heights given by many writers and hunters. Allowing for errors of this sort, the height of a good stag may be between forty-six and forty-nine inches at the

shoulder (J. G. Millais measured one fifty-two inches), while the doe is fully five or six inches shorter. In length the stag varies greatly, but perhaps six feet five inches to nearly seven feet would be correct, the doe being less by six inches or more. The weight also is extremely variable—age, scason and conditions being the responsible factors. Three to five hundred pounds is I should say within the range, while one writer gives it as between five and seven hundred; the does are very much lighter, seldom exceeding a weight of three hundred pounds. In colour the animals also vary, chiefly with the season, but there is so much individuality that any descriptions must at best be only approximate. Generally speaking, the summer pelage is a rather dark mouse grey, shading almost to white on the flanks and belly. the eyes there is a more or less defined and fairly constant white ring and the ears are, I think, always white, or at any rate very light grey or buff grey. In the autumn, with the growth of the winter coat, the variation colour is extraordinary as will be examination of the accompanying photographs. neck is then a conspicuous feature of the stags, but in the earlier part of the autumn it is not quite so noticeable in the does. The flanks are usually white or very light buff grey, the under parts are the same colour, which, as a rule, shades gradually upwards, the darkest colour, warm grey or brown, being on the shoulders, along the back and on the upper part of the hips. The tail shows conspicuously white and is about six or eight inches long. The face colouring is usually darkest from the back of the mouth almost to the cheek-bone, the nose being either light grizzly grey or white. The throat and the part below the ears is nearly always white, so also is the throat mane, which varies in length from a couple of inches to about a foot. The legs



Normal footprint of a Caribou stag. The points of the hoof come well together, and the dew-claws, or cloots, do not make a very deep impression.



Footprint of the same stag when frightened. The points of the root are widely -eparated, and the cloots are driven far into the ground.



may be light or dark, as can be seen from the photographs. The winter colouring is white or very light grizzly grey (so I am told). The fawns are rather a warm greyish brown at first, frequently becoming white or nearly white early in the autumn. A peculiar feature of the Caribou is the loose flap, or heavy fold of skin, which is most strongly developed immediately behind the foreleg and continues to the fore part of the hind leg. The feet are very large, with greatly-developed cloots, or dew-claws, which are so long that they leave deep impressions in the ground as the animal walks. The footprints vary according to conditions. When the creature is not excited the hoofs are close together, so that the impression is almost circular, the cloots or secondary hoof making scarcely any mark. But when they are excited the hoofs spread widely and the cloots go deep into the earth. This can be clearly seen in the photographs facing page 14.

One of the strangest things about the Caribou's foot is the curious cracking sound which it makes when the animal is walking. The popular explanation of this is that the hoofs strike each other in passing; such, however, is not the case. I have most carefully watched dozens—even hundreds—as they have passed me within little more than arm's length of where I lay concealed. The sound does not occur while the feet are off the ground, of that I am certain. So far as I could judge it happens the moment the full weight is put on the foot or just before it is relieved of the weight, and as it is equally noticeable whether the animal is walking on hard ground or on soft bog, it cannot be caused by the hoofs striking the ground, but more likely by some internal mechanism of the foot. It is so loud that on a quiet day it can easily be heard a hundred and fifty feet or more away; when a large number of Caribou are

walking together the effect is most peculiar, sounding almost like a lot of small castanets. I have never yet been able to determine whether or not this clicking is made when the animals are trotting or galloping, nor do I know if it occurs at all seasons; I have only actually heard it in summer and autumn. From what I can learn, it is characteristic of all the reindeer, both of the Old World and the New. Its object is not known; that it is a signal I cannot believe, as the animal's sense of smell is so keen that it can without difficulty follow the trail of its own kind, and does not need any clicking sound to guide it either by day or night. That it serves some purpose seems more than probable and perhaps the day will come when we shall know more about animals and their peculiarities and this will be among the mysteries which will be solved.

Practically all the male Caribou carry horns, though "smooth-heads" are occasionally seen. The size and form of the antlers will be treated more fully in Chapters IV. and V. A thoroughly good "head" from Newfoundland is probably as fine as, if not finer, than can be obtained from the Caribou of any other region. Horns are carried by most of the does in this country, but it would be difficult to say with any degree of accuracy what proportion are without them. Roughly speaking, one out of every nine or ten lacks any visible horn. Mr. J. G. Millais cites the following two instances which should be of interest:

"Number of female Caribou seen, three hundred and six; made up of one with twelve points, one with eight points, six with four points, forty with three points, (about) a hundred and twenty with two points, a hundred and thirty with no horns or only small knobby excrescences."

Toward the end of the same book, he says:

"Quite eight per cent. of the female Newfoundland Caribou



A one-horned doe. Stalked and photographed at very close range on a dark gloomy morning.

carry no external horns." And continues in a footnote: "My calculations are based on some notes I took of female Caribou seen in open country where I could easily examine them with the glass, in 1906. Out of three hundred females, one had eleven points; one, ten; three, eight; twenty-five, six or seven; two hundred and forty-six, four or more points; and twenty-four had no horns."

By these notes it can be seen how much uncertainty there

exists in the proportion of hornless to horned does.

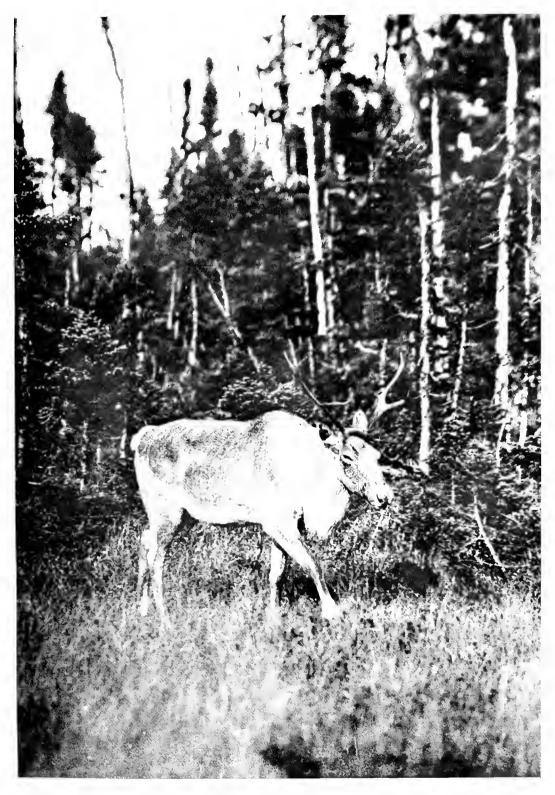
Having now given the reader a somewhat vague idea of the appearance of Caribou, let us look into the habits of this interesting animal.

The Caribou's life may be divided into Four Periods, which correspond very closely with the seasons. Like the spokes of a wheel, there is no beginning and therefore no end, so we may take them in any order we wish. Let us therefore start with the Summer Period and with each season we shall touch lightly on the most important events in order to give a consecutive idea of the animal's life habits. chapters which follow, the two most important seasons—the mating and the migration—will be dealt with more in detail. The kind indulgence of the reader must be asked as this will necessitate the repetition of certain facts further on. present chapter is intended to be a sketch of the animal and his life, touching on what appear to me to be the points of greatest importance. If this chapter proves of sufficient interest, then perhaps the patient, long-suffering reader may be induced to wade through the chapters which follow.

Summer in Newfoundland begins late in June, during which month the Caribou bring forth their young. Those that migrated southward have returned and reached their summer homes in time for the great event, while those which have not migrated seek only a suitable nursery in the vicinity

of their winter quarters. In the thick forests of spruce and fir, the prospective mother goes entirely alone, avoiding her own kind even as she avoids man. There, safe from prying eyes, her fawn first sees the light of day. He is usually an only child, but if he be one of two it will cause no surprise, for twins are by no means rare. Neither does the mother object, and kill the second arrival as the domesticated reindeer is said frequently to do. The fawn is like most of the deer, well-developed and strong at the time of its birth, so that when but an hour or two old it can, with rather awkward strides, follow its mother. Unlike many of the deer, it is practically free from spots and is of a soft, warm mouse colour with more or less defined light grey or whitish regions, marked most strongly on the flank.

How soon the mother leads her little one out of the shelter of the forest I do not know, probably not for several days, for outside the woods the flies are worse even than among the trees; she guards her offspring with the tenderest care, seldom leaving it for any length of time, always affectionate and solicitous for its welfare. Fortunately, she has few enemies to fear. Wolves are practically extinct on the island, the lynx is rare, but its extreme cunning makes it a danger to be dreaded; black bears are fairly abundant, though it is very doubtful whether they ever harm the Caribou, young or old, even though they will occasionally kill sheep and other domesticated animals. The chief enemies are to be found in the insect world: mosquitoes and several species of flies, some of which cause intense annoyance and suffering. Among these the black fly is the most numerous, and though its persistent attacks in vast swarms must be almost as aggravating to the deer as it is to man, its presence does not result in the torture caused by some of the gad-flies. These pests place their maggots in the animal's skin and nostrils,



The most ugly type of Caribon stag; a marked contrast to most of his kind. To judge from the horns, it is probably a young stag of perhaps three years of age; but apart from the horns it has the appearance of a very old one.

and leave unmistakable proof of the distress they cause. The insects, therefore, are the enemies which so greatly influence the life and habits of the Caribou and the doe does what is in her power to keep her young safe from their attacks. During these summer months their lives would be lives of peace and comfort, for food is plentiful and varied and the weather mild, but for the flies who harass them from sunrise to sunset, and the mosquitoes who pester the wretched animals throughout the cool northern nights. Nature has strangely arranged things and no man can find a reason for many of her plans; why she should allow the dumb animals to be pestered is a question that none can answer.

During the warmer months the Caribou are more or less solitary in habit, going about singly or in pairs and only rarely in small herds of half-a-dozen or more. In the day-time they keep very largely to the woods, coming out to feed at the approach of evening. I do not wish it to be understood that they never feed during the day, for they do so occasionally, more especially when the weather is dark and cold, and as the summer draws to a close they feed more and more by day, so that by September their habits have completely changed and they become almost entirely diurnal.

Throughout the season of warmth and sunshine, the doe and her fawn live together, indifferent to all but each other. The young Caribou for about two months or so is almost entirely dependent on its mother for food; gradually it learns to nibble on the mosses and lichens, so that by the end of summer it is self-dependent. It continues to suckle however just as long as the mother has milk, and I have seen them taking it as late as the beginning of November. To a great extent, the Caribou spend the summer in the more elevated

regions, for what reason I cannot say, for, as stated elsewhere, the fly pests are nearly, if not quite, as numerous on the mountains as in the valleys except, of course, when the wind blows so hard that none can face it. In the sheltered valleys and along the river banks vegetation is very luxuriant, grasses, flowers and ferns growing to amazing size; but this does not tempt the deer from the higher and bleaker country, where they live on the various mosses and lichens with which practically the whole country is covered. Up in the high country, often hidden away amongst the forests, marshy barrens abound and nearly all are sprinkled with small ponds and lakes of every size, while ice-cold streams and rivers carry the surplus water down to the flatter lands. On these barrens and among the lichen-covered rocks of the rougher regions the Caribou feed, always wandering and restless, content only if they can escape the flies and find the food they like best.

Both does and stags are hornless at the beginning of summer. The does, not having lost their small horns till the end of spring, do not show much growth until July, but the stags by that time have a fairly good head of velvet-covered antlers, the growth not being complete before the last of August or beginning of September. The coats of these animals during the warm months are entirely different from their winter dress; they are of a soft mouse-grey, varying through the warm and cold shades, some being fairly dark while others are quite light. They are always lightest on the under parts and flanks, where the colour runs into pearly white. The hair at this season is quite fine and smooth—a strange contrast to their winter pelage. The effect of the lighter coats is to make the animals appear very much smaller than when they are dressed for cold weather. Not only do they look smaller, but lighter and more delicate of

Caribou rising from his noon rest.

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limb. The long neck hair which gives so much character to them, especially to the older stags, is lacking, and the neck of the stag is much thinner, as the large glands below the ears are not visible. Altogether, the Caribou of the summer months is a different animal from the one we shall see later in the year, both in appearance and habit, and so seldom are they seen during the day-time that we can quite understand how it was that the early explorers, such as Cabot (in the latter part of the fifteenth century) and others considerably later who visited the island during the summer, failed to see the Caribou, or at least they failed to mention them. Ernest Thompson Seton, in his finest work, "Life Histories of Northern Animals," writes:

"Although the habitat of the Caribou lay nearer Europe than that of any other of the American big game, and the animal was a common characteristic inhabitant of those northern parts of the continent visited by Cabot (1497), Roberval (1534), and Cartier (1535), this species was not discovered by white men until after the Wapiti, the White-tailed Deer, and the Moose. So far I have found no earlier mention than that by Les Carbot (or de Monts) in 1609."

Evidently the early visitors to the island did not penetrate far into the interior, they were content to stay on the coast where the extraordinary abundance of fine fish proved such an attraction. The inland country, which at best presents somewhat unusual difficulties to the explorer, had apparently nothing to offer them so valuable as the limitless harvest of the ocean, so they stayed on the coast and knew nothing of the great herds of Caribou which populated the interior, offering them a supply of the best of meat, which would without doubt have proved a welcome change from their monotonous diet of fish. How it was that these men

did not learn of the existence of Caribou from the natives, the Beothic Indians, must remain a mystery. There is no doubt that they had more or less frequent dealings with these Indians during the sixteenth century, for even as early as the year 1502, three of these Indians were taken across the Atlantic and exhibited before the English king. This leads us to wonder whether the Indians used Caribou skins for wearing apparel, and if they did how it was that the curiosity of the white men did not prompt them to discover the animals which supplied those skins.

Let us return to the Caribou of to-day. We have seen them during the summer period of their existence. As the days shorten and the nights grow colder, the Second Period or season is reached and the animals attain their highest development. The does have grown fat, for after the main pest of flies has passed they can feed more comfortably, free from the constant irritation caused by their tormentors. The young are well grown and strong, and able to take care of themselves under ordinary conditions, though they still stay by their mothers. They have learned the laws of the wilds, not by being taught by their mothers, as some fanciful writers would have us believe, but by the instinct and sense with which Nature endowed them. Some of the stories written during recent years are so childishly foolish that one is lost in astonishment, not only at the absurdity of the writers, but at the deluded public which reads and sometimes believes even the most far-fetched accounts of the schooling of the wild creatures. When a supposedly sane man says that he watched a Caribou doe teaching its fawn to jump a fallen log, we almost expect to hear that they have a written language, and have to struggle with the "three R's." young Caribou learns to jump with the same ease and lack of consciousness as it learns to walk and run, it will jump



a log before it is a week old with as much ease and grace as the older ones.

The stag, even more than the doe, shows great change with the coming of autumn. His horns are fully grown and hardened by about the 1st of September; he then begins the somewhat tedious task of scraping off the now useless velvet against the rough bark of the spruce, the fir, the "juniper" (tamarack) and the alder. He rubs his horns till the greater part of the velvet is removed, while the more inaccessible places are cleansed with his hind hoofs, which are sharp and very sensitive. With them he gently removes each particle of the dried coating so that none remains to mar the beauty of the horns. He seems to be proud of his new possessions and struts about with a thoroughly satisfied air and is even accused of gazing at himself in the mirrorlike pools as though pleased with the reflection of his adornments. When the velvet is removed the horns are rather dull in colour, but they soon assume a wonderful orange tone which adds greatly to their beauty. How this colour is obtained we do not know for certain. The native says that it is from the sap in the bark of the alder which oxidizes and turns to a deep orange when exposed to the light. This is a fanciful idea which does not appear to be based on fact. The colour is more likely to be derived from the horns themselves, the blood and the tissue with which they are covered having some effect on it. I suggest this because the colour varies with the individual animals, those in the prime of life usually showing the most brilliant deep orange, while the very old stags, who have long passed their prime, have as a rule very light-coloured horns. If the colour were produced by rubbing against any sort of tree or bush this would not happen. The horns of the does, which are very much smaller and less vigorous, are also light in colour. The theory that the Caribou colour their horns with a fluid exuded from between the hoofs of the hind foot is also, I believe, wrong, and has probably arisen from observing the habit above mentioned of scratching the velvet from the horns with their feet. The does do not lose the velvet until much later than the stags; indeed it is not an uncommon thing to see untidy strips of dry velvet still adhering as late as October 10th or 15th.

This Second Period is the most important in the animals' lives, for it covers the mating season and the southerly migration. Both of these subjects are dealt with in greater detail in the two following chapters, but as this part is a summary of the whole life of the Caribou, we will glance over the chief events with apologies if, later on, the reader finds certain repetitions. I do this to make the history of the animals' life consecutive.

Instead of a listless creature wandering about in a rather aimless way, we now find the stag conspicuous in his newly-burnished antlers, his crowning beauty, a thoroughly restless animal whose passions usually reach their height by October 1st, or a little later. No longer does he seek seclusion in the dark forests, no longer does he shun the daylight. He seems possessed of the spirit of adventure and at times will even welcome the excitement of conflict. The smooth, mouse-coloured summer coat has been superseded by a heavy, rich mantle which, besides adding to his beauty and acting as a shield to save his body from the sharp horns of a possible antagonist, will protect him from the penetrating blasts of the winter winds. His neck is creamy white, with a long mane hanging from the throat; the flank and belly also are white, his back and sides are more or less warm grey, varying greatly both in colour and tone. So thick is the coat that the long hair forms regular



Showing the jaunty air of the stag during the mating season. A great contrast to the dull-looking animal of a few weeks later.

vertical ridges on the sides and neck and irregular ridges across the flank, giving it the appearance of a very deep plush or imitation fur. On the neck just below the ears and also under the throat are large glands, which are swollen only at this time of the year. In some instances, these glands are so large as to distort the neck and detract greatly from the appearance of the stag.1 (This will be noticed in several of the illustrations.) All of these signs proclaim the mating season. Another sign is the curious habit the animal has of standing for long periods in an attitude of absolute dejection, the object of which is difficult to understand. At such times his head is held low, so that from the bent neck the long fringe of hair practically touches the ground. As a rule, the ears droop and the hind quarters are drawn slightly forward, almost like an animal standing tail to a snowstorm. Occasionally,

<sup>1</sup> Whether these visible swellings are in any way connected with the glands which are described by Mr. J. G. Millais in his "Newfoundland and Its Untrodden Ways," I do not know; his own words should, perhaps, be given so that the reader will understand the subject more clearly:—

"In 1906 I (Mr. Millais) made the interesting discovery, which is, I think, new to zoologists, namely, that the Caribou stag sometimes possesses a sac containing hair in the throat skin. On October 20th, I killed a very large old stag near Shoe Hill, and whilst removing the neck skin, my knife slipped and disclosed a very curious sac about five inches long and two broad; this contained growing hair on the inner skin, and the cavity was full of a mass of compressed hair soaking in a watery mucus. This skin bag was situated in a thin vellum of the inner skin in the region of the upper throat. The Indians call the little bag 'Piduateh,' and the few white men who know of its existence, the 'Toler' (i.e., crier or bell), so that it may have some affinity to the long throat appendage found on the Moose and known as the 'bell.' In the case of the Caribou, the hair sac is internal with hair growing inwards, whilst in the Moose the ornament is a long piece of hardened skin covered with hair, which hangs from the centre of the throat. The Indians told me that this sac is only found in one in fifty Caribou, generally in the males, and that it is sometimes found in the inside skin of the cheek. The existence of this curious attachment has not been previously noticed. It seems to be useless, and can possess none of the functions of a gland,"

the head shakes sideways in an impatient manner, but often the animal stands immovable for as much as an hour seemingly oblivious to all that is going on. A doe may suddenly attract his attention, when a great transformation takes place with startling rapidity. With head held high, nostrils dilated, and eyes flashing, he regards the fair one intently. At such a time the Caribou stag should be seen to be thoroughly appreciated, for then he is truly an object of beauty, altogether different from the drawings we so often see or the miserable, sick-looking specimens which from time to time appear in Zoological Gardens, where they linger a few months growing more and more ugly, until they succumb to conditions which they find intolerable and which always lead to illness.

As the subject of the mating is gone into with such detail in the following chapter, I shall not dwell too long on it here. The season of the rut usually lasts about two or three weeks, beginning under ordinary conditions during the first week in October. Unless a heavy fall of snow takes place unduly early or some other cause beyond our knowledge intervenes, the Caribou remain somewhere near their summer quarters up in the higher lands until this season has passed. It is on this account that so few men ever see the animals at their best, as most of the hunting is done during the migration or soon after. In the mating season the stags become masters of small bands of does, numbering from two or three up to a limit of about twenty; the common number for a mature stag being from eight to twelve. Several stags often keep possession of a herd together, so that the common belief in the inevitable antagonism of the stags is without foundation. Fights do take place, very often perhaps, but they are by no means so frequent as some people



During the mating season. Stag wandering in search of does,

believe. Throughout this season of love and battle the fawns nearly always stay with their mothers and continue with them for some months afterward.

With the first severe snowfall that occurs after the middle of October the great southerly migration begins. snow may not come before the middle or end of November, but it is usually expected about October 22nd. former days, I am told by the older guides and others, they always had heavy snow by October 15th, but during the last eight seasons which I have spent on the island there has been nothing like regularity, so that migration has begun anywhere from early October (1912) to the first week in December (1908). These two dates are of course extremes and similar conditions might not occur again for many years. In a general way the first of the migrating animals should be seen crossing the railroad between Grand Lake and Howley or Gaff-topsail between October 23rd and November 1st and from then on for several weeks according to the season. During this time they come in herds of from two or three to over a hundred, single individuals seldom appearing except when the herd has been disturbed by hunters. In nearly every case the herds are led by a doe, frequently one that has no fawn, or what is called in Newfoundland a "dry" or "barren" doe. She seems more alert than the stags and therefore better able to guide the herd past the many dangers which threaten it during its long southerly march. The stags, now forlornlooking creatures of dejected mien, keep to the middle of the column. Occasionally one brings up at the rear or follows some distance behind, but only on rare occasions does he assume the lead. It is noticeable that he is not much of a success at that rôle, for he will often walk blindly into the most apparent danger. This peculiarity is shown

in the picture facing this page, where the does are seen clearly suspicious, while the stag walks on blindly to within close range of the camera, not even paying heed to the warning snort of the more timid does that are so much more careful. But however unsuspicious the stag may appear to be, he never fails, so far as I have been able to observe, to take alarm at the scent of man, and with the wind in the right direction they notice that scent at incredible distances. It is interesting to see how they are affected by the slightest taint of man-scent. The Caribou stag may be walking along quietly, apparently not taking heed of anything, suddenly his sensitive nostrils are assailed by the alarming scent, he immediately jumps sideways as though a bomb had exploded directly beneath his body so high does he bound from the earth; then he usually stands still for some seconds, staring in the direction from which he believes the danger may appear in more tangible form. If the scent reaches him again, he will make several more bounds and then go off with a long deliberate swinging trot, throwing his legs high as he makes his way through the bog, but when very badly frightened, he will gallop at full speed. If no further suspicion of scent comes to him, he will circle round, keeping a safe distance until he gets down wind of the place where he was first alarmed, then he will remain for a long time standing still and throwing his head up frequently in his efforts to catch the wind-borne scent of danger. The stags jump more often than the does at the first moment of fear, but the does are more painstaking in working their way down wind in their efforts to determine the origin of the danger.

It is difficult to say what will frighten the Caribou and what will not. I remember once trying to "spoil" a lead so that the animals, instead of following it, would come



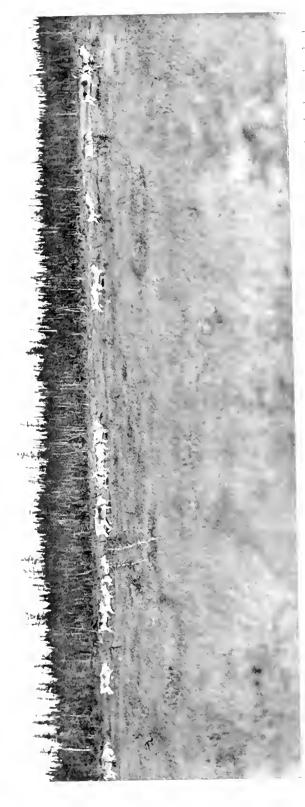
With him A young stag with a very pretty, but rather small head of about thirty points, with the bross and is noneably far apart, were three does and a fawn; they were following behind the stage a very unusual occur inco.



along the one near which I was watching. To do this, I hung a white handkerchief in such a way that it would blow freely directly over the path. Instead of causing alarm, this simply aroused their curiosity and several herds, after watching intently for some time, deliberately walked towards it and actually passed it within a few feet on their southward journey. Profiting by this experience, I have frequently tried to attract them to where I was hiding by a similar device, but it has never proved successful. As the handkerchief failed to turn them from the lead, I took a tin and hung it on a stick, with a large nail dangling, so that with each gust of wind it would make a noise, but even this did not deter the persistent creatures and they passed it by just as they had passed the blowing handkerchief, whereas if I had shown the top of my head at a distance of two or three hundred yards, they would have rushed away at full speed; at least, that is what I have nearly always seen them do. However keen of sight they may be, and it is a much-disputed point whether their sight is keen, it is rather to their sense of smell that they so frequently owe their safety. Not only do they detect the presence of a man a long distance away, but the trail he has left appears fresh to them for many hours, if not washed away by rain or destroyed by snow. They have also a deep-rooted objection to passing over the place where one of their kind has been killed. At one time I was on a lead near which a stag had been shot; the body, from which the horns had been removed, was buried, so that the lead—an extremely good one—should not be spoiled. But though I watched for several days and many herds came along the path, they always took alarm at the scent and turned back badly frightened. The natives say that the ground is "poisoned" by a carcase and that no Caribou will go near it. This

may not always be the case, but it certainly was, the only time that I have tried it.

The food of the Caribou during the autumn, just as in the summer, consists largely of lichens and mosses, but they also seem very partial to the leaves of many of the shrubs, such as the alder, willow and certain viburnums which grow along the banks of streams and rivers. I do not think they eat the twigs, except possibly the extreme tips of the willow, but the leaves are pulled off and eaten with evident relish. One of the most delightful sights in the country is to be seen on the rivers when, if one goes noiselessly along in a canoe, the Caribou, young and old, does and stags, may be seen enjoying their meal of browse. They make their way through the thickest brush which overhangs the water in a tangled mass through which no man could go, scarcely making any noise, stopping here and there to nibble off the smaller leaves. At such times they often allow the canoe to approach within a few feet before taking fright. When they first catch sight of the canoe, they usually stare at it a moment and then vanish quickly in a very noisy fashion; but before they are disturbed they present a wonderfully beautiful picture, for the rivers of Newfoundland are at their best in September and October and even without the animals they are worth seeing. The glowing scarlet of the maples, the birches with their gleaming white trunks and foliage of pure golden yellow sprinkled with green and brown, the restless poplars, whose trembling leaves become a most intense yellow, less varied perhaps than the many shades of the birches, but none the less bewildering, form a shimmering mass which flickers in the sunlight. Behind all stand the deep, quiet greens of the firs and the spruces, relieved here and there by the spun gold of the tamarack or juniper. In the foreground along the edge of



Over the barrens the herds of Caribou, during the southerly migration, travel in long lines composed or as many as a hundred or a hundred and fifty head. In the herd shown in this picture there were about seventy-five, including several large stags.



the water, there is the profusion of crimson and orange hues of the viburnums and myrtle, coloured as though by rich wines. In the water all these myriad colours are reflected, a vibrant mass which so well sets off the simple greys and whites of the feeding Caribou. Yes, it is well worth seeing, for even if it does not last long, it leaves an impression which comes to life each time the memory is stirred by the mention of Newfoundland and its fascinating waterways. Those who have lived all their lives in England know nothing of autumn colours save the sombre yellows and browns, and they find it hard to believe the stories of the gorgeousness of the north. Even if one suggests a touch of the scarlet maple in a painting, the sombre-hued person calls us to task, not believing that such barbaric beauty can exist in wild nature.

During this period of wonderful colours, the Caribou are partial to a form of food which, so far as I know, has never been recorded as part of their somewhat limited diet. I had noticed, when canoeing up and down the rivers, that the leaves of the spatter-dock and its close cousin the water lily were seldom to be seen, but that the stems were extremely abundant. Not believing it to be the work of beavers, for they eat the roots and lower shoots, I decided to watch the river closely. On the second day, a herd of several Caribou swam across the river near where I was hidden, and coming to the lily pads, immediately began eating the large leaves. The water was over four feet in depth so the animals could not touch bottom. They bit off the leaves as they swam about, frequently putting their heads entirely under water in their efforts to get possession of a submerged leaf. For over half-an-hour they continued their feast, unconscious of the man who was watching them so intently. They reminded me strongly of a herd of moose,

except that they did not ever go completely under water, and, of course, they swam much higher and with even less This then was the solution of the many leafless stems. I have told this to several guides, none of whom knew that the Caribou fed on these leaves. On three other occasions I found them engaged in similar feasts, so I am fairly sure that it is not an exceptional food. Unfortunately I never succeeded in obtaining a photograph of the animals thus engaged owing to the darkness of the weather. The intelligent animals seem to know better than to go into the small bog ponds which are so numerous all over the barrens, not even the most succulent leaves having sufficient attraction to coax them into the treacherous pools. The bottom of these pools is somewhat indefinite, just as in the bog-holes in Ireland; the banks also are crumbly, so that it would be difficult for an animal to get out if he should once venture in.

During the migration, the Caribou are almost entirely diurnal in their habits. They feed by day, chiefly during the noon hours, when they may be seen wandering slowly over the savannas or barrens, grazing on their favourite food, the reindeer moss (Cladonia rangiferina) which tinges the bogs with its curious lemon-grey colours, in such beautiful contrast to the deep purple browns and orange greens of the mosses, and the crimsons of the dwarfed shrubs. The warmer the weather, the more time do the deer devote to feeding during their journey. In fact, on really warm days they do not travel, but spend their time enjoying the sunshine, feeding and sleeping the hours away in a delightfully lazy manner. Let the cold north-east wind blow, bringing with it stinging flakes of frozen snow and feeding becomes a secondary consideration. The call to the south is strong. There is no time to sleep during the day and no time to



A CARIBOU FAWN.

One that swam up river by the side of the cano, for over half-a-mile for no apparent reason and without that

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			t.	

eat. Onward they go, increasing their speed, under the able leadership of the older does, while the advance guard of winter whitens the country as though anxious to conceal the trails of those that travel.

This brings us to the Third Period in the lives of our animals—the period of desolation and suffering, when Nature in her stern way thins out the weakling, prunes the Caribou tree of all branches that are not strong and healthy. The gates close behind the travelling herds, lakes and rivers are frozen, the treacherous bog pools become more treacherous as the ice forms and is covered with snow, so that no animal can see where the safe road winds its way across the open country from forest to forest. As the winter continues the snow lies deeper and deeper covering all things, levelling the irregularities, and making the life of the wild a hard and terrible fight from which only the strongest and cleverest emerge. On the flat land conditions are entirely unfavourable for the Caribou; the snow has covered their ground food, so that nothing can be found except the tree mosses. In the higher lands, therefore, they must live until the approach of spring. A dreary prospect, but one to which they are accustomed by the inherited experience of countless generations. In the high lands the wind helps the animals by sweeping the snow from the ground and thus exposing their food. The cold accompanying these fierce northerly gales must be intense, and any animal less well suited to the conditions would soon succumb, but the Caribou has been well provided by Nature to withstand even the keenest cold. Their coats are extremely thick, and though they have but little oily wool next to the skin, the hair is so constructed that it offers the greatest possible protection. Not only is the hair long and very close, but it is hollow, like miniature quills, so that a

more perfect form of insulation could scarcely be devised. It is therefore probable that these animals do not suffer to any extent from the actual cold. Their suffering is caused by the difficulty of obtaining sufficient food, and even here Nature has developed the Caribou with special reference to the conditions under which it must live, by providing it with hoofs which are capable of digging away the snow even though it be many inches deep. The hoofs are not only very large, but keen-edged and thoroughly well adapted to the purpose. During the winter, the frog is almost entirely absorbed to still further fit the foot for its purpose, while the hairs which grow between the hoofs protect the inner edges.

In examining the feet of various northern animals, one is struck by the extraordinary manner in which they are designed to meet the special requirements of their owners. Where snow is continually deep for long periods the animal must be able to walk without sinking too deep, therefore size is of great importance. The lynx and the northern hares offer, perhaps, the finest example of the soft-padded foot. The former has all four feet thoroughly developed for snow walking. The latter has only the hind feet so arranged, because the animal carries most of his weight on them; the front feet are fairly small and comparatively lightly clad, to allow for digging or burrowing into the snow. The Caribou's feet, though in complete contrast to these, are equally well fitted for their purpose. Instead of the foot being enlarged by an extra growth of wool and hair to gain a supporting surface, they have extra-large and widespreading hoofs which act as snow-shoes. According to Mr. E. Thompson Seton, the reindeer (whose feet are nearly identical with those of the Newfoundland Caribou) "has about one square inch of foot support for each two



A small herd travelling by water in preference to land.

pounds of his weight, while the moose, in standing, is under a pressure of eight pounds to the square inch." It is therefore no wonder that the Caribou can travel with such ease over snow. In the winter the hoofs grow larger than in the summer, the ground being soft there is not so much wear for them. Thus cause and effect are worked out to the animal's advantage; the larger hoof is needed more in the winter, therefore by this simple action is it produced. The hairs of the feet, which are long and stiff, grow downward, and evidently assist in preventing the animal slipping when travelling over ice or frozen snow. While on the subject of their feet, perhaps the most

interesting part of their anatomy, let us see how thoroughly they are designed for walking over the bogs or marshes which form so large a part of the animal's home. These marshes are in many places so soft that they will not support a man. When I say they will not support him, I mean that a man would be drowned if he attempted to cross the more treacherous places. Then there are many parts where a man can get through only with the greatest difficulty and danger, sinking over his knees at every step. The Caribou usually avoids the very soft and seemingly bottomless bogs, but walks over the fairly soft places with no apparent trouble, not sinking more than an inch or two where a man would go over his knees. The idea that they never get bogged is not entirely correct, for I have seen a large stag go down so deep that for fully five minutes he floundered in vain; finally, after making frantic efforts as he saw me approach, he managed to extricate himself. A thoroughly frightened animal he was, judging from the way he made off. I examined the bog, and found it to be so soft, that even on the tussocks of grass I could find no support. I do not believe that any other large creature

would have escaped, not even a moose, which, next to the Caribou, can get through a soft swamp as well as any animal I know. Besides being, as we have seen, a snow-shoe and bog-walking device, the foot of the Caribou facilitates walking on ice, and is so well adapted to swimming that it propels the animal through the water at a speed which must be seen to be appreciated. Certainly no large animal can compete with it. Single-handed in a light canoe, with no wind to be considered, I find that I can with difficulty overtake a Caribou; it means straining to my utmost and going probably about six miles an hour. How long the Caribou could keep up such speed, I cannot say, but I believe we both would get exhausted about the same time. Allowing them to go at their regular speed, which is rather over two miles an hour, they do not seem to tire any more than when walking. They have no objection to taking the water and will often swim in preference to going on land. It must be a large lake indeed that will cause them to change their route. Five miles is about as far as I have ever heard of them going by water, though personally I have never seen them do anything like that distance. The fawns at the age of three or four months enter the water, no matter how cold it may be, just as readily as the old ones. The picture facing page 32 shows one that swam up river by the side of the canoe for over half-a-mile, for no apparent reason and without fear, so long as he did not get wind of me. No animal swims so high out of the water as the Caribou, as may be seen by some of the accompanying photographs, their coats act as a life jacket, owing to the air-filled, quilllike hair which supports them. When in the water, the tail is always held erect, like the white flag of the Virginia or white-tail deer, when the animal is alarmed. Indian file is the rule of formation for swimming if there is any distance



Carnon swimming across Sandy River. This shows how buoyant thay are in the water, owing to the bollow quillely, here of their



to be travelled. Even in crossing a small river where there is much current the Caribou go in single file, each close to the one in front, so that they present an unbroken line with heads and raised tails to mark off the individuals; they go without sound unless frightened, when the calves frequently give a curious grunt at regular intervals.

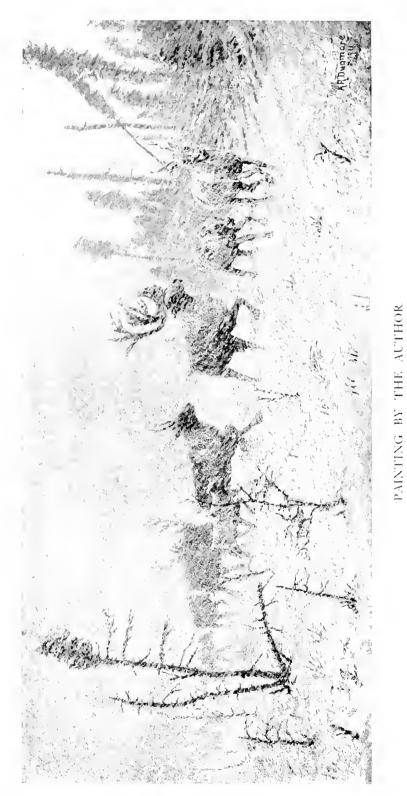
All of this is taking us away from the Third Period, the reader must pardon the digression, which seemed to come so naturally; but we must now return to the cold snow-swept hills where we shall find that Nature has been busy preparing the animals for the season of short days.

To reduce the hardships of the Caribou during the severe weather, she kindly relieves the stags of their heavy horns before the snow becomes deep—the larger the horn, the earlier it is discarded. We wonder, therefore, why anyone should ever have spoken of the brow antler as a snow shovel, for under no condition would it be used for that purpose. For some reason which we cannot explain, the does carry their little horns throughout the winter, but as they are not large enough to cause any annoyance, there is no particular object in removing what might prove to be a useful weapon of defence for herself or her fawn.

To make the animals conform to the colour of the whitened country Nature has caused the Caribou to become almost entirely white. There are exceptions to this rule, but the majority are either quite white or very nearly so by the beginning of winter. What the object of this change may be it is difficult, in fact I might truthfully say impossible, to discover; it can scarcely be for protection. The fact that the animals mass themselves together in such large and therefore conspicuous herds would take away any advantage that would be given by the white coats. Besides which, their only natural enemy, the wolves, which

are almost if not quite extinct in Newfoundland, do not hunt by sight any more than other wild creatures do. We can readily understand the advantage which the white colour is to the hare of the north, for as they sit quietly for hours at a time, the scent of their tracks becomes cold, and they are as inconspicuous as one mound of snow is among others. Also the weasel, by turning white, has much advantage in stalking his quarry. It seems to be always the same, one object pitted against another, the balance being maintained as closely as possible, so that neither the hunter nor the hunted shall gain any great advantage. When we build guns to penetrate the strongest armour and then build armour to resist the most powerful guns, we are but copying Nature in our individual fight for supremacy and greater perfection of power. The more one studies the question of white as a winter garb for animals, the more hopeless are we of discovering any solution. One thing contradicts another with discouraging In the far north we find that the somewhat persistence. defenceless musk ox retains his greyish-brown coat, while the powerful polar bear remains white at all times. But the Caribou of that Northern region as well as some of the smaller animals change to white each winter, whether they hunt or are hunted. Perhaps some day we shall discover that white is a protective pigment against cold or that in some way the animal at this season is incapable of supplying the necessary colouring pigment. Either of these would be a happy solution of the puzzle and would be welcomed by many who have worried over the subject.

The life of the Caribou during the winter is regulated almost entirely by the food supply. So long as the weather is fairly "open" they continue to eat the various ground mosses and lichens (the principal kinds



Caribou travelling in a snowstorm

being Cladonia rangiferina, several species of Cornicularia and Cetraria, Stereocaulon pascale and Bryopogon jubatum). These, when not too heavily covered with snow, are obtained by digging with the hoofs and not by using the nose for a snow shovel, as some people claim. During the very heavy falls of snow all ground food is hidden from them, they must then turn to the tree-growing mosses, such as Sticla pulmonaria and the common Usnea, or Old Man's Beard, which hangs from the trees in graceful wind-blown festoons as though arranged especially for the hunger-driven creatures—a manna in the time of greatest need.

The long winter passes slowly enough; the herds, large and small, have little excitement save when a party of islanders come to them for their supply of winter meat. A picturesque sight these men present, usually clad in white so that they may stalk through the snow without being seen, armed with every conceivable kind of firearm, from old-fashioned sealing-guns to modern rifles. Bullets, shot, or even nails are used, I am told. The method of hunting is as simple as it is effective. When a large herd of Caribou is found, the men conceal themselves along a line some distance apart, while other men drive the herd toward this line of hunters. The main part of the herd is allowed to pass before shooting begins, so that each man helps to drive the creatures on to the next gun. As every native is allowed three Caribou, the drive has usually to be repeated several times before each one has his full complement. The great horror of it is that in the wild shooting which takes place far more animals are wounded than killed. The wounds inflicted by the irregular missiles must cause untold agony, but winter is in some ways merciful and death comes quickly to those who lose their strength in the winter night. The wounded Caribou unable to keep up

with his fleet-footed companions is soon left behind, alone in the great snow-covered waste, his only companions the ravens and perhaps a stray fox. They are the gainers, the bad shooting is a boon to them, and what was a tragedy to one becomes a joy to the other.

Of course the thing is butchery, but that is what it is intended to be. Many of these people never taste fresh meat, except that of the Caribou, so they cannot be blamed for getting what meat is allowed to them by the easiest and surest method. I believe each member of a family old enough to shoot is entitled to his three deer, and as Newfoundland families are quite respectable in size, it may be seen that a goodly supply of meat leaves the wind-swept highlands each winter. These expeditions are regarded somewhat as "larks" and are looked forward to with pleasurable anticipation by the families; but though they may produce great fun, they involve much very hard work, for all the meat must be taken out on sledges, frequently over long distances and through the roughest sort of country.

Whether the Caribou travel far when they have once run this gauntlet of fire I do not know. They are dull animals during the winter, so probably on reaching the next suitable feeding ground that will satisfy them they stop, even though it be but a few miles away from the battle ground. Occasionally, they are obliged to make forced marches owing to a "glitter" or ice storm, which will imprison all the food, both on the ground and on the trees, in its icy grip throughout a large area, so that it is a question of move or starve. There are wonderful stories of these great treks, when men have declared that "hundreds of thousands" of deer have passed in a single day—one long, unbroken column taking a day, or even two days, to pass a given point.



PAINTING BY THE AUTHOR, Migrating Caribou crossing the barrens on a frosty morning.



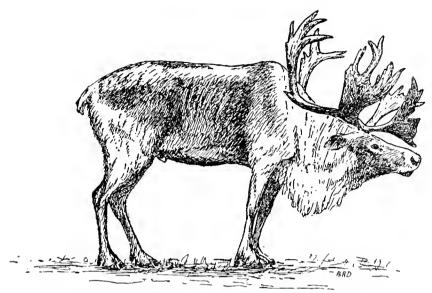
Never having seen these great treks, I simply tell what others have told me.

Gradually the winter begins to break; days become longer, nights less bitter. The Aurora Borealis which has lighted up the long dreary nights with its scintillating shafts of ever-changing lights is no longer seen. The sun takes on a warmer hue, the snow softens and the ice breaks away from the banks of the pools.

The Fourth Period has come. It is the season of hopefulness and promise. The Caribou become restless, the large herds break up and in ones and twos the does begin the long return journey to their summer homes in the north. The stags, less in a hurry, having no expectant young to think of, follow along in small herds. This spring travelling is quite different from the conditions found in the autumn. great mass of snow is melting, rivers are clogged with loose ice which piles up along the banks, tearing away the overhanging bushes and scarring the tree-trunks as it works its way down stream. Rivers that were a couple of feet deep in October may now be seething torrents, fifteen or twenty feet in depth, so that the great cakes of ice fight their way down, creaking, groaning and splashing madly. They pile up like small mountains against obstructions, then suddenly breaking loose, fling themselves into the foaming water, bearing everything before them in their tempestuous haste to reach an outlet. In this way are the rivers kept open. This is the pruning by water and ice of the bank vegetation, merciless but thoroughly effective. It accounts for the marked difference between the rivers of the north and those of the gentler south, where there is nothing to clear away the fallen trees which choke the waterways large and small. Occasional freshets may move the débris from point to another, but there is no grand spring-cleaning of the rivers such as the north indulges in with unerring

regularity.

It is fortunate for the Caribou that they are so nearly amphibious, as the greater part of the country they traverse in the spring is water covered. Barrens which were dry in the autumn are now vast lakes of shallow, ice-cold water and the hillsides are glittering streams and cascades. paths through the forest where the snow lies deepest and longest are woodland brooks; everything is wet during the early spring, when during the months of April and May the heavy does splash their solitary way north. There is no great rush of animals, but a slow and scattered moving of the survivors of the herds which hurried southward six or seven months before. No longer are they a well-groomed lot, with long, heavy, smooth coats, for as the weather warms, the long hair no longer needed falls off, leaving the animal rough-looking and untidy, as it makes way for the finer summer covering. The does are hornless by this time, and the stags are showing signs of the great antlers which will adorn their heads later on. During May all the migratory division of Caribou will have reached their summer homes in the northern hills and in doing so they close the cycle of the Four Periods which, let us hope, will be repeated each year for many generations to come.



Attitude of dejection assumed by Caribou stag during the mating season.

## CHAPTER II.

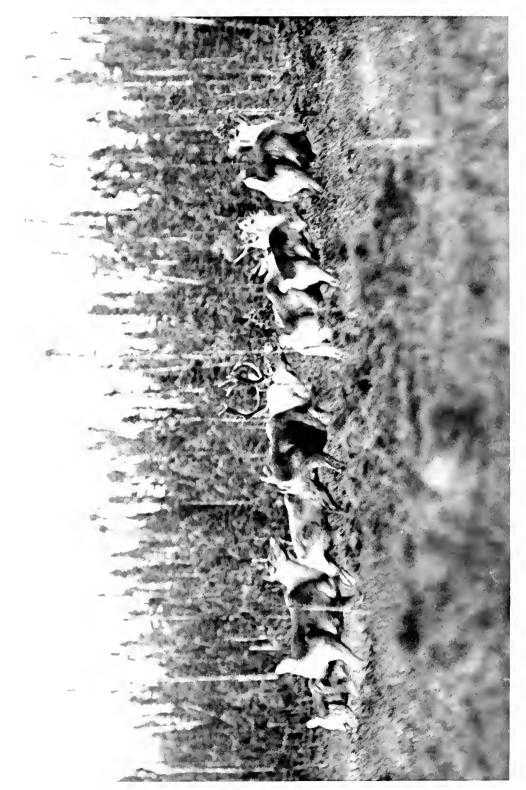
## THE MATING OF THE CARIBOU.

The life of the Newfoundland Caribou, as already stated, may be divided into four principal periods, of which perhaps the most important, and certainly the most interesting, is the mating season. Unfortunately, this is of such short duration that all efforts to study the animal at that time must be difficult. In fact the question of luck enters into it very largely; that is, the luck of finding the animals at the time when they are possessed of an extreme restlessness, which causes them to wander in an apparently aimless way. It will be noticed by anyone who attempts to read about Caribou that the writers, whether sportsmen, naturalists or that happy combination of the two, scarcely make any allusion to the breeding or, as it is commonly called, the rutting season; evidence undoubtedly that the subject is more or less unfamiliar. Yet when one stops a moment to

consider, the mating is the all-important step in the lives of animals. So important that Nature arranges everything in such a way that months are devoted to preparation. We can scarcely help wondering why the subject has received such scant consideration.

If you would see the stag at the only time when he is a really majestic, high-strung, superb creature, keen-eyed and in perfect condition, the culmination of the months of preparation, you must select two, or perhaps three, weeks of October—that is, the week before, and two weeks during the season. Then, and then only, does the splendid beast do himself justice, a striking contrast to the shy, retiring creature of the preceding months; and yet even greater contrast to the woebegone, miserable beast of the succeeding weeks, when he no longer acts on his own initiative, but is content to follow the more wideawake does, whether of his own band or mere strangers. It is indeed difficult to believe that this is the same animal, so great is the change. And yet the sportsmen who hunt the Caribou usually see them at no other time. How then can we wonder at the low opinion that has been formed of this reindeer of the western world, and how can we wonder at the wretched drawings so frequently seen supposed to represent the mighty stag, but which in reality show the animal at its worst, thin and illshapen, with drooping head and fireless eyes, a sad imitation of the real stag?

During October of 1912 it was my good fortune, after having spent nine successive seasons in Newfoundland, to meet the Caribou and be able to stay with them throughout the mating period. It was due to a combination of good luck and much hard work—usually the principal factor in what we call luck. The luck lay in the fact that an unusually early fall of snow had driven the northern herds



During the mating season. A fine stag with his herd of does.

down to the lower country north of Grand Lake. As a rule it is impossible to count upon a big southerly trek much before October 23rd, frequently very much later, as described in the chapter on migration. Whether it was the early snowfall, or some unknown cause, I cannot of course say for certain, but the result, which interested me more than the cause, was that on October 4th several hundred Caribou coming along the great migration leads appeared suddenly only a few miles east of Sandy River, where I was devoting my time to studying the works of beaver. examination of these herds showed pretty clearly that the mating season was still a week or two away. The stags showed scarcely any spirit of restlessness, in fact I was much surprised to find that they were distributed among the does without attracting the slightest attention, and there were several full-grown ones to each herd. As the weather was rather warm, the animals were somewhat lazy, spending much of their time lying down and sleeping. Occasionally a young stag, whose passions were beginning to develop, would become restless and walk slowly among the herd, but the larger stags paid not the slightest attention to the disturbance. They slept on in peaceful security. The stags' horns were practically clear of velvet, only a very few showing trace of the dried shreds still adhering to the horn and blowing scarecrow-fashion in the wind. Many of the does, however, were still in the full velvet.

It was quite evident that if I wished to see much of the animals, I must move camp further up Sandy River in order to be directly in the line of travel, for it was more than likely that the greater part of the herds which would pass through the district on their way south had already left the northern hills, and was collecting on the open marshes preparatory to the usual southerly migration. Here, then,

the mating season would be spent, and the chance of perhaps a lifetime would be offered for studying the animals, without having to make long and very difficult marches to the northern and more or less inaccessible hills-hills which are away from navigable streams. In Newfoundland the only easy mode of travelling is by canoe. When heavy photographic and sketching paraphernalia is added to the outfit which is necessary for camping in even comparative comfort during the cold autumn weather, one does not relish having to haul heavy loads single-handed (I nearly always go entirely alone) across the spongy bogs and through the marshy and tangled forests of fir and spruce, and other obstacles, discouraging even to the most ardent enthusiast. It will therefore be readily understood how thoroughly I welcomed the prospect which so fortunately offered itself. Accordingly I moved to an old camp site up Sandy River, where during previous years I had spent many weeks watching and studying the Caribou. On arriving at this part of the river, which was directly in the main line of travel, I was glad to see that not many of the herds had crossed the water. In most of the marshes, rather to the eastward of the usual migration route, scattered herds might be seen. Each day the stags became more and more restless and excited, so that I felt sure the hopes of many years were to be realised and that perhaps after all I might have the good fortune to witness a fight between some master stags.

These fights are not very often witnessed. The few men I have met, however, who were lucky enough to see them, have described the event in most glowing colours; their enthusiasm carrying them into the easily attained realms of imagination—that dangerous enemy to accuracy—the enemy which leads the unwary naturalist so often far



Caribou on the hills.

from the paths of fact and renders "hearsay" of so little value when plain facts are required. Were I to have swallowed but a small percentage of the stories related to me by well-meaning guides, sportsmen and others, my digestion must have suffered seriously, and my opinion of wild animals become sadly perverted. One fact seen and recorded is worth volumes of "hearsay."

It was noticeable that whenever a guide told me that he had seen stags fighting, he would always discourage any suggestion I made that he should show me any such sight, and when I declared my intention of going in search of a really good fight, I would be greeted with a smile which clearly indicated the utter hopelessness of my quest. I was always told that the task would prove extremely dangerous, for the stags would attack anything and anybody. Altogether, I received enough discouragement to nearly, but not quite, deter me from my purpose.

On this trip luck was with me and from October 7th to the 21st I had ample opportunity of studying the Caribou. Scarcely a day passed without several being seen. On some days from five hundred to a thousand would pass within sight of me. The season was an abnormal one, the mating and the migration taking place together, a most unusual occurrence, and one that proved very discouraging to the many sportsmen who went north and east along Sandy River and Sandy Lake; for by the time the shooting season opened on October 21st, practically all the Caribou had passed—all but the very late herds. The sportsmen's ill wind proved a very good wind for me, because it afforded me opportunities as unusual as they were interesting.

I was very much surprised by the extraordinary wildness of the Caribou, for nearly every account I had heard agreed

in the one point, that at this season I should find them extremely tame—perhaps even aggressively so—instead of which I had the utmost difficulty in getting even within fair camera range of any, except on one occasion when a small herd with one three-year-old stag took several steps towards me after I had stalked to within twenty-five yards of him. But generally speaking I found all, stags, does and fawns, remarkably wild, and even though I took every advantage of the wind and whatever cover there was, the herds would bolt at the slightest suspicion of what they believed to be danger. Never have I tried to stalk with greater care, and seldom have I met with less success. When I hear people tell me how they have had to throw stones at Caribou to make them get out of the way I have to content myself with the thought that on those occasions they never happened to have a camera handy. Maybe it was the camera that frightened the animals I saw!

It is not my intention to pretend that I know all about the breeding habits of Caribou. I don't. And for that matter no one knows very much about the subject. I can simply tell what I saw, letting the reader use his own judgment and form his own conclusions. It always seems entirely wrong to indulge too freely in the gentle art of generalising. Because one happens to see an individual animal do something which seems peculiar, it is not the part of wisdom to state that this particular something is the regular habit of the species. There is just as much individuality in animals and birds as there is in people perhaps even more. We, as well as animals and even plants, act on certain definite lines, but under peculiar conditions we are all likely at any time to depart from these lines and allow the individuality to come forward. In this way do the habits of men and animals gradually change

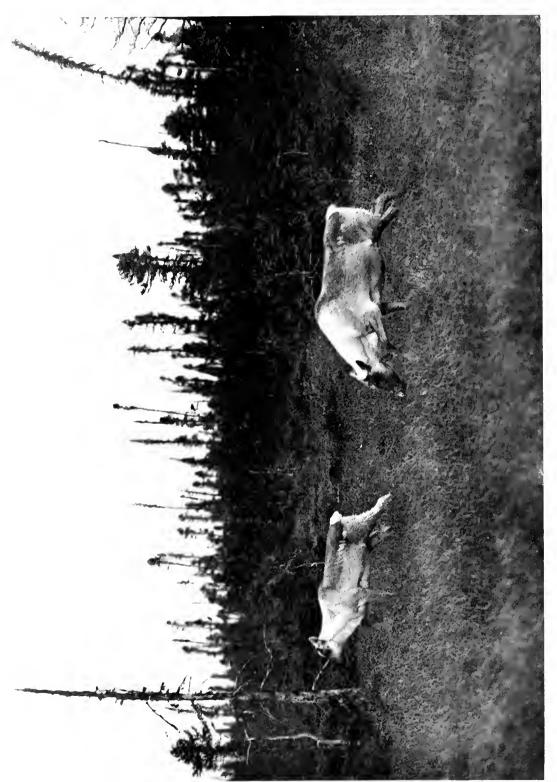


A stag that is more interested in the does than in me.

and development takes place in order that new conditions may be met. Innumerable instances could be given of this, but the one that will perhaps best serve the purpose is that which is so frequently observed by sportsmen: the way animals learn the efficiency of modern fire-arms. to a place where the natives have been in the habit of using smooth-bore guns, which will throw a large ball perhaps seventy-five or even a hundred yards with fair accuracy. The animals have learnt the range perfectly, and always bolt if they have the chance, immediately before the hunter is within that range. Now, let a man appear with the modern high-power rifle and the animals are killed with ease at distances which they previously regarded as being outside the danger zone. Then some of the cleverer ones realise that a new condition has arisen and that their old methods are of no avail in saving them from this strange weapon. They soon impart this knowledge to those less alert than themselves, and before long the species has changed its habit, making sure of its safety by never, if they can help it, allowing any man to approach within the newly-considered safety range. It is, however, unfortunate for the animals that their quickness of understanding does not quite keep pace with man's inventive genius, and so they must continue to fall before the superior intelligence and power of their enemy, man.

To get back to the Caribou and their love-making, let me first state that the stag believes in a plurality of wives—a great plurality; in fact, as many as he can or thinks he can keep under his control. Some writers contend that the Caribou stag is true to his own band of does. How they arrive at such a conclusion I cannot see. It may possibly apply to some of the species (one writer states that in the region near Abitibi the stags do not have more than

two does), but certainly not to the Caribou of Newfoundland. I have seen several cases of stags leaving all their does and taking possession of an entirely new herd. By way of an example, let me tell of one occasion when I was watching a very fair stag that had eight does, some of which had their fawns with them. For several hours they were within a few hundred yards of where I lay concealed, hoping all the time that they would come within photographic range. The stag was in a very excited condition, perpetually grunting and never quiet for a moment, except when watching a doe that appeared to be thinking of taking her departure. Immediately she moved away, he would rush after her and force her back to the herd. Suddenly the stag looked up and snorted loudly. Across the barren, over a quarter of a mile away, was another stag of about his own size with nine does. For some time both stags continued to stare at one another. The further does did not stop, however, but continued to come slowly across Before long both stags started forward at a fast trot, the newcomer soon overtaking his herd. On they came, and I felt sure there was going to be a fight, as both stags appeared to be very irritable. Sometimes they would hold their heads high so that the sun glistened on their antlers. Sometimes their heads would be held down close to the ground, their heavy necks almost dragging on the moss. Nearer and nearer they came, both grunting and both seemingly full of fight, the does in the meanwhile evincing but the scantiest interest. A the stags were within a few feet of one another. stopped a moment regarding each other intently and then, strange as it may sound, they passed on in the direction they had been going, and each took possession of the other one's herd of does. How to explain this curious behaviour



When on the march the doe is usually careful to look out for any scent of danger.

I do not know. It was all so deliberate and done in such a matter-of-fact way, as though it were the ordinary course of procedure. Apparently all concerned were perfectly satisfied with the change, and yet it did not seem either right or in accordance with the general custom of animals. Had the stags not been evenly matched and the number of does in the two herds entirely different, one could readily understand the more powerful stag taking possession of the larger herd. For in the animal world, just as among our own kind, might is right.

It must not be imagined for a moment that a single stag has undisputed and sole right to a herd of does. In most cases that came before my notice a small herd of from five or six up to about fifteen would be in the charge of at least two stags, usually stags of different ages, the older ones being without doubt the controlling power. In larger herds I have frequently seen fully half a dozen mature stags, to say nothing of a number of yearlings and two-year-olds, whose antics were very amusing to watch. Their indiscretion frequently got them into serious trouble when they attempted to make love to a youthful doe and lure her away from the herd.

On October 16th I had by far my most exciting and interesting day with the Caribou. An account of it will, I trust, give some idea not only of the animals' habits, but of the keen sport which hunting with a camera affords, and show in what way it is superior to the rifle in giving opportunity for animal study. The day was bitterly cold, the wind blowing hard from the northern, snow-covered hills numbed one's hands, so that without gloves manipulating the camera was decidedly difficult, while the alternative of using clumsy gloves placed one equally at a disadvantage. The water-soaked ground was covered with a hard crust of frozen moss, which

crackled loudly as one walked over it, and made stalking extremely difficult. About half-past eight, I entered a small barren, and while examining the surrounding growth of scrubby firs, saw with delight a Caribou doe coming through the trees along one of the northern leads. Soon she was followed by another and still another until no less than forty-two were in sight. Among them were two quite good stags and a number of smaller ones. was also one unusually large and very white fawnless doe. In fact she was the first to come into the open barren and was evidently the leader of the herd. At the time I was not particularly interested in her, except for her unusual whiteness, as it was rather early in the season for this full winter covering, but soon my interest developed, as I discovered that she was uncommonly alert and keen-eyed, for even though I squatted behind a dwarf spruce tree, she detected my presence while still about three hundred yards away, and having done so, she positively refused to let me out of her sight. Try as I might, she would keep her eyes upon me, blowing occasionally to let her companions know that danger lurked ahead. Every time any of the herd ventured to come in my direction she gave the sound of alarm and drew them back. For nearly an hour this continued. The stags in the meantime were watching one another and the does, and each time a doe strayed she was promptly brought back, often at the point of the horn if she did not move quickly enough to satisfy her exacting master. There were splendid opportunities for pictures if only I could get closer, but apparently that was impossible. The big white doe thoroughly objected to my presence, and under no consideration was she going to allow me to approach. At last she stopped staring at me, and I thought I might make a dash for a nearer clump

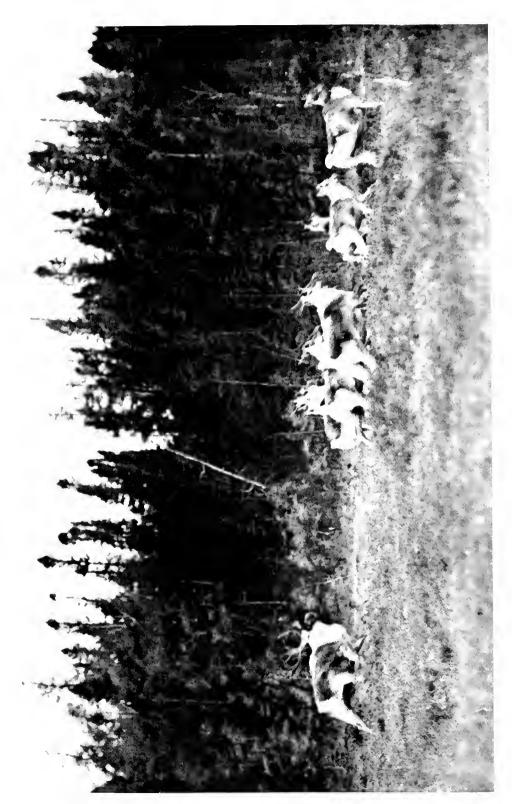


The big white do, that did so much to prevent my getting petarcs of the large nerd and the highting stage

of bushes, but just as I began to move she looked up; evidently what she saw made her consider her suspicions fully justified, for she promptly gave a loud snort and started off to the eastward, and the entire herd followed at full swing, not even waiting a moment to enquire the reason for this sudden departure. From the direction they were going there was every reason to believe that their destination was a barren I knew of, about a mile and a half away. As the wind made it impossible to follow them without great danger of their getting my scent I returned to the canoe, which I found to be surrounded by thin ice, which though apparently so fragile is treacherous to those who do not understand, for even though it be but a fraction of an inch in thickness, it will quickly cut through the canvas or wood sheathing of a boat. Carefully cutting my way through, I proceeded up the river to a place where I could enter the barren, in which I expected to find the herd, from the leeward side. On arriving I found my surmise to be correct. Not only was there the herd of forty-two that I had previously seen, but another and still larger herd was joining them, and to my delight it contained one really magnificent stag, and several more than ordinarily good ones.

For some time I stood on the hill overlooking the swampy barren watching the animals and wondering how I could possibly get within photographic range of the big stag, for of course the larger the herd the greater is the difficulty of stalking it. If shooting had been my object what an opportunity this was, for they were scarcely two hundred yards away, an easy shot for the rifle, but an impossible one for the camera. While trying to arrange some plan which would offer even a slight chance of success, I was disgusted to see my old white friend start back in the direction from which

she had come, and of course, the combined herd followed without the slightest hesitation. Evidently I must do likewise. So slinging the camera over my back I went after them, not directly on their trail, for that would have taken me through an almost impassable swamp, but parallel along some fairly open hills. To my annoyance I discovered that a river lay directly in my way. As it was too deep, too rough, and, I may add, too cold to wade I had to search for a better way across. A fallen tree offered the chance and in fear and trembling I crossed the slender bridge in safety, camera and all. This delay, which at the time I considered unfortunate, gave the animals a chance to get far ahead, perhaps even they had already crossed the barren, in which case the hunt would be at an end as the whole country was so thoroughly cut up with tracks; there would be no way of telling which way they had gone. Fortunately the long years which I have spent alone in the woods, studying animals, have taught me to go as noiselessly as possible, never stepping on a dry twig if it could be avoided, and never letting branches strike my clothing. This habit of years proved a friend to-day; I had no idea that the animals were within half a mile or more of me and was therefore going along at a pretty good speed, when suddenly I caught sight of the white flank of a Caribou not more than twenty feet away. It was a lucky escape, for had I gone a few steps further, she must certainly have got my wind and given the alarm. I quickly walked back a little distance to be sure that I had not passed any others, but the one already seen was evidently the last of the herd, all the others being scattered through the woods ahead. It is needless to say that the utmost caution was necessary if I would avoid any chance of arousing their suspicions. Each step forward had to be most carefully considered and every bush scrutinised to see whether or not it concealed a



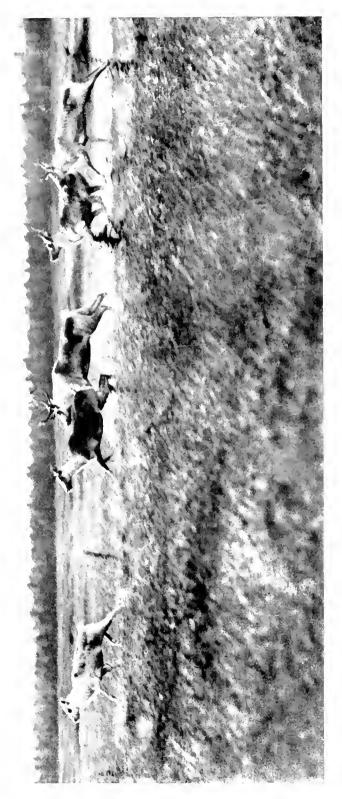
Stag following his herd of does that have taken fright.



Caribou. Progress was, under these conditions, painfully slow and tedious, and continued so while covering the half a mile to the barren where I hoped to have the opportunity of securing a photograph of the big stag. On we went, the hunter and the unsuspicious hunted, sometimes within a few feet of each other, for the does were wandering in a rather aimless way, feeding as they went, and frequently going back on their tracks. There were young stags, does and fawns in plenty, but no sign of the big fellows. The woods were so dense that no animal could be distinguished at a distance of more than about thirty yards. Later on, much to my delight, a many-pointed antler caught my eye, and though it disappeared almost immediately, it left me happy in the knowledge that without doubt there was one big stag near by. Several times my white friend came in sight to my great consternation and joy; for it is always a source of satisfaction to outwit any animal, especially one that has proved itself unusually clever. After what seemed an interminable time the barren could be seen ahead. I would have greatly liked to go forward and watch the herd as they emerged from the woods, but the wind prevented any such plan being carried into effect. To stay down wind of every Caribou in the herd was imperative if one could hope for any chance of success. At last the entire herd were in clear view straggling over the barren, and among them the large stags showed with delightful clearness. I could see that besides the very large ones there were five that carried heads of from twenty-five to thirty-five or more points, one of these having extraordinarily long, spindly horns, and a number of small stags with about twenty-point heads—over a hundred animals of all sizes and shades from almost white to dark Altogether it was a very wonderful sight and one which filled me with hope. Seeing them and photographing them

were, unfortunately, very different and I could see no possible way of attaining my object, unless by good luck the herd should return toward me; a very improbable occurrence.

The barren was perhaps four or five hundred yards across and nearly half a mile long. It was extremely wet and boggy in some parts, and there was very little cover of any sort to help in stalking. At the upper or windward side was a scattered growth of much stunted spruce trees which at first did not particularly interest me, but in which I was destined to spend many delightful and exciting hours. The herd was dispersed over the greater part of the entire barren, so that stalking the stags, especially the larger ones, was impossible, as they appeared determined to keep pretty near the centre surrounded by the does. As there appeared to be a tendency to work to the windward, I ventured out of the woods and crawled (and that is the only word which expresses my action) out of the barren, seeking the shelter of whatever I could find. Near the largest stag stood my friend the white doe most keenly and aggravatingly alert. Evidently she was going to protect him from me and my camera at all cost, so I made my way very slowly toward another stag of smaller size that was standing head down in a most dejected attitude, gazing at a small bush. Not far from him was another of about the same size that seemed to resent the attitude of the bush-admiring stag and after watching him intently for some moments decided to break in upon his reflections. He charged him from rear with a suddenness that was truly surprising, but scarcely as surprising as the suddenness with which the object of the attack came to his senses and wheeled round ready to receive the unprovoked onslaught. lowered heads they met, horn striking horn, the crashing sound echoing through the surrounding woods.



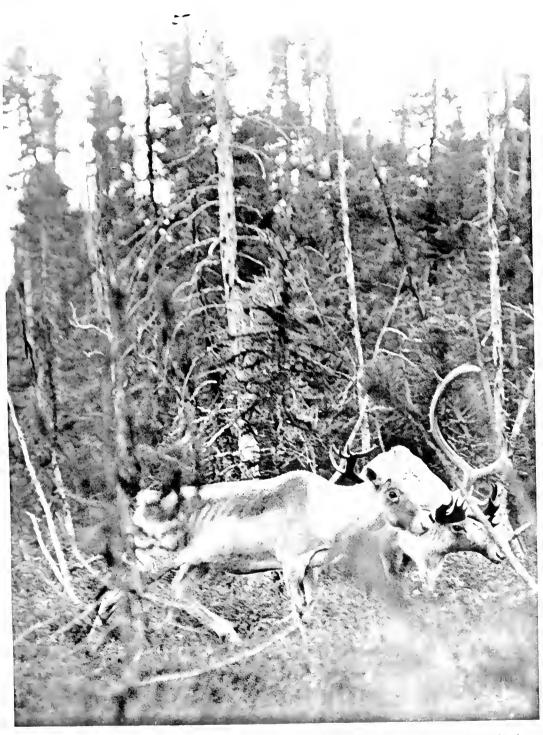
Alarmed by the seent of man, this herd is making off at good speed.



together they stood, each striving to force the other back, but neither moved for they were evenly matched. After a few moments they drew apart and the bush-staring stag resumed his apparently foolish attitude. This provoked the other to a second attack with exactly the same result. Half a dozen times this was repeated without any advantage being gained by either one. Throughout these encounters there was always a small cluster of dwarf trees which effectually prevented my taking any photographs of the same for I gained by either one. Infoughout these encounters there was always a small cluster of dwarf trees which effectually prevented my taking any photographs of the scene, for I dared not make even the slightest move because the white doe was suspiciously watching in my direction. How I disliked that doe! Yet I could not help admiring the persistent manner in which she did her sentry work. Any herd with a doe like that could feed, sleep and travel in peace, satisfied in the knowledge that they were being carefully guarded against the possible approach of enemies. Before the day had passed, however, I had the pleasure of outwitting her and I don't know of anything in the way of animal stalking that ever gave me greater satisfaction. Eventually the two stags lost all idea of fighting and, contrary to all that I have ever heard, quietly began feeding. Every account that has come to my knowledge either by reading or hearsay agrees, without qualification, that during the rutting season the stags entirely refrain from eating, the only form of nourishment they are supposed to take being muddy water or even soft mud. What gave rise to this idea I cannot understand, because nearly half of the stags (I speak only of the mature ones, for the youngsters feed just as the does do) I watched for any length of time did eat to a greater or lesser extent; but in no case did they eat as greater or lesser extent; but in no case did they eat as persistently as did the does and fawns. During this season, while the rut is in full swing, the large stags do not appear to sleep nearly as frequently as the rest of the herd or at

least they don't lie down so much. As the two stags fed at frequent intervals, they, together with the rest of the herd, worked their way gradually toward the scrubby growth on the windward side of the barren. Slowly I followed, keeping my eyes on every one, especially the big white doe, to see that none went down wind, for the does have an exasperating habit of going away from the herd and suddenly appearing in some unexpected place where they catch the scent of the hunter. On and on we went, the nearest ones being sometimes within forty yards or less of me, till the herd distributed itself among the stunted trees. Carefully creeping over the last bit of open ground I, too, found myself in cover. Once there I felt more comfortable, for I could then stand erect and get the stiffness out of my joints.

By moving very cautiously I soon got into the midst of the herd. They were everywhere to windward, stags and does and beautiful soft-eyed fawns. Of course, in the nature of things, the biggest stag was among those farthest away; but there were several good-sized ones quite close, within ten or twenty yards, and about twelve yards away was the big light coloured stag with the long horns which has already been mentioned. I had a splendid chance to examine him as he stood with lowered head gazing intently at the base of a small tree. What this particular habit means nobody knows. For hours at a time a stag will stand in this curious position almost without moving, sometimes with the head nearly touching the ground. This is done I believe only during the rutting season and then as a rule only among the mature stags, particularly those that are fairly old. This stag was undoubtedly a veteran, if one might judge by the extreme length of the horns and the absence of points; the illustration facing this page shows their form and is a better description of them than I can give in words. In colour these



The very old light-coloured stag with long spindly horns. For a long time he had remained almost motionless, in a dejected attitude, staring at the base of a stunted tree.



horns were rather a light warm tone of yellow, almost a dull saffron, quite different from the rich reddish-yellow which is usually seen on the horns of the seven or eight year old stag. This one had the curious Roman nose so frequently observed in the Newfoundland stags when very old. It is the ugliest type and is claimed by some people to be the characteristic of a different species. But this scarcely seems plausible as every grade of the Roman nose development may be found. The extreme light colour of this old stag was very marked. He was not white, but a light yellowish grey, the neck, usually so very white, being of a rather dirty colour. For nearly two hours I watched this creature, and during that time he scarcely ever moved and never once raised his head, even in reply to the challenging snorts of some of the other stags.

A few yards away, perhaps seven paces, the brilliant yellow horns of a fine young stag showed above the low scrub, the head and body were hidden from my view by a thick bush, but the horns could be clearly seen; it was a thoroughly aggravating sight as by no possibility could I see any chance of securing a photograph, even though he was so unusually close. All around me, except to leeward, were does and fawns and young stags. One doe slept peacefully within five yards of where I stood. She was lying down in the richly-coloured moss and as her eyes closed the handsome head would gradually drop lower and lower until it struck the ground, when she usually woke with a start, opened her eyes for a moment and then resumed her quiet, yet alert, sleep.

It is difficult to give any idea of the pleasure that may be derived from watching wild animals at such close quarters. There is a delightful and exciting suspense which cannot be described. No sport equals it, and as it is the camera which leads one into such intimate relations with the wild beasts, I

claim that it far exceeds the rifle as a sporting instrument, while as a means of studying the habits of animals and birds it is absolutely without a rival.

In the thicker woods fifty to a hundred yards away the big stags were assembled. Their frequent bugling showed clearly that they were in a somewhat excited and nervous condition, so I continued to hope that I might see a fight before the day passed, for surely with so many stags, there must be some ready and anxious to do battle on slight provocation. It was decidedly amusing to watch the young They seemed to feel themselves so important, as they strutted about going from one doe to another, scarcely heeding the almost inevitable rebuffs or the absolute disdain with which the fair ones met their advances. Once in a while, a foolish doe would look with favour on one of these youngsters and off they would go side by side, the stag uttering repeated grunts of satisfaction as he coaxed the doe further and further away from the herd. Their attempts were in most cases discovered before they had gone more than a few yards and then a larger stag would instantly make for the young buck and, after driving him away at the point of the horn, would chase the erring doe back to the herd where she belonged. Sometimes the young pair would refuse to be separated and then followed a long chase which usually resulted in victory for the smaller and lighter stag as he could run faster. In no instance did the stags of very uneven age fight, for the young fellows evidently believed discretion to be by far the better part of valour.

The length of horn plays a very important part in fighting, more so even than the weight of the animal as the encounter is, or should be, head on. It stands to reason therefore that the long horn can easily pass the guard of the one with the shorter horns. Knowing this the youngsters steer clear of



A young stag keeping a sharp look-out for does,

a fight which must necessarily be onesided. Well-developed bays and brow antlers are of the greatest advantage as they offer very effectual protection to the head and neck of their possessor. In rare instances the horns become so firmly entangled that they cannot be disengaged. The result is of course inevitable death to both animals, unless by good luck it happens late in the season, when the horns may fall before the animals succumb. A few pairs of locked horns have been picked up, but in every case I know of they were still attached to the heads. In all probability it frequently happens that horns are knocked off during a fight. Whether or not this ends the fight I do not know, as I have never seen it happen and do not know of anyone who has, but it is a common thing to see even large stags during the rutting season carrying only a single horn, the burr being badly inflamed as though the horn had been wrenched off by force before it was ready to drop.

One might be tempted to ask why the animals fight. But the question cannot be answered, because no person knows for certain. Apparently it is the desire to acquire the does, utterly regardless of the number already possessed. Perhaps it is simply that the animal is in a passionate condition and so highly irritable that the sight of a possible rival in a similar frame of mind and body inspires a desire to fight. Possibly it is only an exuberance of spirits or animal strength seeking outlet, but whatever may be the immediate cause, it is in all probability Nature's method of selecting the most powerful animals to be the progenitors of the species; just as man improves a breed of domestic animals by careful selection of the sires, so Nature demands among some species that certain qualifications shall be necessary in order that the race shall be strong and vigorous enough to hold its own in the great battle of life

which offers no place to the weaklings. They die off usually by natural causes, being unable to withstand the hardships which are encountered by all wild animals or in some cases they are killed by the more powerful members of their own species; and so the weakling almost invariably falls an easy and usually an early victim. In most, if not all species of deer, the stags do not fight for their mates in every instance, but only when occasion demands that they shall prove their claim to be worthy of the right to perpetuate their race.

Nature apparently regarding this to be of such great importance, has provided for the condition more with the deer family than with any other of the large mammals, I believe. In fact, it seems as though the greater part of the stag's life were arranged with this one idea in view. During about five months, or nearly half of the year, the horns are being grown; the Caribou stag usually begins to show indications of new horn in May or early June and from then until September the horns are growing; such immense growth of bone means that a large proportion of the nourishment taken by the animal is devoted to this purpose. The growth is complete in September, then comes the hardening process during which the velvet or soft protecting coat, designed to keep the horn at the right degree of moisture, dries, and has to be peeled off. During all these months animal has had absolutely no use for its horns. They have, on the contrary, been an impediment to his freedom of action, always tender and demanding care lest they be injured. The velvet is removed chiefly by rubbing the horns against the rough bark of a tree; trees are often seen which have their bark scraped off for several feet by the vigorous action of the antlers. As some parts cannot be reached by this simple method, the animals use



A TRAGEDY OF THE WILDS.

This stag died from a bony growth on the horn which penetrated the brain. The photograph was made without disturbing anything. Foxes had eaten the meat and carried away some of the smaller bones.



their hind hoofs, which are very sensitive, to remove the velvet from the more inaccessible places. Seeing the animals do this has given rise to the belief that this is a method of oiling the horns, as there are certain glands in the foot which exude an oil or grease. I do not, however, think that there is the slightest ground for believing that this oil is used on the horns. The oil serves quite a different purpose, which I have dealt with in another chapter. The wonderful rich colour of the newlycleaned antiers is generally attributed to their being rubbed on certain trees, the juniper (also called tamarack and larch) and the alder being said to produce the most brilliant colours. Perhaps it would be wrong to say that this is untrue and entirely without foundation, yet I am inclined to utterly disbelieve the theory; rather do I believe that the brilliancy of colour correlates more or less with the age and vigour of the animal, those in the prime of life and bearing the finest horns being usually the ones to show the richest and brightest colour. Perhaps it is because there is a greater horn surface, and consequently the colour appears more conspicuous, but even that explanation is not altogether satisfying, for I have watched the horns of many different stags at very close quarters and almost always have noticed the lack of colour, or perhaps I should say the lightness of colour, of the long spindle horns of the very old stags, while the colour of the younger ones' horn's appears to be rather dull, scarcely ever showing the wonderful orange so noticeable on the fine, large, well-developed heads.

Why should animals grow these great horns if not for the purpose of proving their power? And there seems to be but the one answer to the question. As already stated, the horns are worse than useless during the months of their growth, and almost as soon as the

mating season has passed they are shed, those on the old stags going earliest, then the largest horns, and last those of the young stags. By November 10th, few good heads are to be found, while the young stags carry theirs until well into December, or even later. The does that carry horns retain theirs to the end of winter and sometimes into the spring. Theirs, however, mature later than those of the stag, the velvet frequently being seen on them until the middle of October.

To return to the big herd of Caribou which I was watching, wondering whether there would be a fight, and if so, whether it would take place before the light became too weak for photographic work. The restlessness of the herd, especially among the stags, was becoming more and more noticeable; perhaps they considered the two or three hours' rest had been long enough and the more energetic ones were trying to arouse those who were lazy and preferred to doze. Even my old spindle-horned friend was getting uneasy and had moved his position. It looked almost as though I might have attempted to take a photograph of him, but it would have been a hazardous proceeding, as the slightest movement on my part would have probably attracted the attention of the many animals which were so close to me.

The stag whose horns had been tantalizing me for so long suddenly got up and stretched himself, behind a tree of course, and moved off still keeping that tree between us, so that I could make no picture. I could plainly see that he was a good-sized beast, and carried a handsome and very symmetrical head of about thirty-five points. The greater part of the herd appeared to be working away from me, which was bad luck, but the worst of it was, at least so I thought at the time, that several

does remained behind and therefore I did not dare follow the main herd. In fact one of those does with her fawn started back and it certainly looked as though she would pass me and so get my scent. With the utmost care I crept backwards a few yards, then she turned and passed in front, scarcely four yards away, walking almost on the very place where I had been standing. How she missed discovering me I cannot understand. watching her and her beautiful fawn, I was suddenly surprised to see that many of the Caribou were returning. Now I was in a predicament. If they should pass to leeward all chance of securing any pictures would be at an end, for of course they would go faster than I could, but fortunately they turned slightly and passed on the windward side. It was an irregular movement, the whole herd being very much scattered; my old friend, the white doe, was as usual the leader. It seemed to me that the herd had grown a great deal and that there were several stags which I had not previously observed. One very fine one, carrying a good head, appeared among the low trees about fifty yards away. Whether or not he belonged to the herd I could not tell. He stood facing them, apparently much interested in each one that passed, but not attempting to offer any attentions to the numerous Nearly every one stopped a moment to scrutinize him and then pass on. Suddenly there was a snort, the new stag became more keenly alert, then like a shot from out of the trees came the big stag, the master of the herd, and almost before I could realise what was happening he had struck the newcomer a frightful blow and knocked him clean over. Here then was the long looked-for fight for which I had waited so many years. But how could I possibly take advantage of it. There were does and

young stags all around, and the slightest mistake would cause my presence to be discovered, ending all my chances, and in all probability I should never have another opportunity of being within range of a real fight between two such splendid animals. It is unnecessary for me to say that I used the utmost caution in moving forward to where I might possibly succeed in getting a picture. My heart was beating so violently that I breathed with difficulty and my hand trembled so that I could scarcely manipulate the camera. Among small scattered trees I could distinguish the two big stags, the fallen one had picked himself up and was now making strenuous efforts to withstand the onslaughts of his powerful antagonist. With lowered heads they came at one another, crash succeeding crash without advantage to either one.

How shall I describe my sensations as I watched this magnificent battle? To say that it was exciting does not express it at all. Here I was alone in the great wilderness. Perhaps I even regretted having no companion, for it seemed selfish to enjoy the spectacle by myself, yet in that way only can such a scene be watched to the greatest advantage. Another person would not only have divided my attention, but would have more than doubled the risk of discovery. The knowledge of such risk would have made me nervous, therefore it was perhaps just as well to be alone, free to concentrate my whole mind on the animals by which I was almost surrounded, free to move or keep quiet according to the movements of the keenly alert creatures; and so I strained my eyes to see without being seen, taking advantage of the low, scrubby cover which separated me from the mighty stags.

How their horns startled the stillness of the wilds! Each

strike was echoed by the encircling woods which formed a perfect amphitheatre, surrounding the open barren as though arranged especially for the purpose of hiding the primitive fight from the eyes of man. The stunted spruce trees, from whose gnarled and twisted branches hung wind-blown festoons of grizzled moss, were fitting accessories to the scene, for had not they also been engaged in fights since they raised their wiry heads from the many-coloured mosses? They had fought for six months out of every year of their lives against the driving storms of snow and ice which sweep this northern country from spring to spring, tearing away with merciless strength each weakling branch and leaving only the toughest, well-pruned twigs to carry the necessary weather-hardened leaves. As these dumb witnesses of the ways of the wild had fought for survival, so were the great stags now following out Nature's law—the pruning of the weakling branch—for the weakling must go and the stags fought to see who was the weakling and who would be the trunk of the parent tree, responsible for the future Caribou. The most powerful had that right and he must prove his right by victory. For that reason alone were his splendid horns given to him and he must be true to his trust. coward, no matter how large his horns or powerful his limbs, would have no place in the order of things. He must lose in the game of life just as he would in the fight for supremacy, for so it has been ordered.

As I watched the two creatures, each striving with all the power of his strong-limbed body, I could not help wondering at the merciless test which is demanded by Nature in order that the best and the best only shall survive. All else must be weeded out, or advance and improvement would cease. Retrogression would commence and the end would be in sight.

The pair of fighting stags seemed to be well matched. The master of the herd had the advantage of larger antlers, while the newcomer, who was darker in colour, appeared to be a rather heavier beast, they were both magnificent specimens and both intent on victory. At times their horns would be locked together in such a manner that there appeared to be danger of permanent entanglement. Then with heads lowered they would try to force each other backward. Every muscle was strained to its utmost, and the eyeballs gleamed white with the intensity of their passion. First one would gain a slight advantage, when the other, fearing defeat, would strain with renewed vigour and regain his loss. So they went back and forth, occasionally separating only to charge more furiously, each apparently hoping to get a better hold, or to strike a blow at the body of his adversary. But the spreading antlers are designed equally well for offence and defence; so long as the two animals are able to maintain the head-on position neither has much chance of gaining any great advantage unless there is marked disparity in point of The brow antler, or snow shovel as it is sometimes erroneously called, (this subject has been treated in another chapter) is certainly an effective protection to the front of the animal's head and eyes, for it is practically impossible to pass this natural guard. At the same time, if this brow antler is well developed it can be used to lift the other stag's head. I noticed that this happened several times during the fight, but on no occasion was there any opportunity to take advantage of it.

In watching the two animals I was very uncertain how to act, whether to wait and see the fight to the finish, or risk disturbing it by trying to secure a photograph. I might never again have a chance of getting such a



"The pair of fighting sage comed to be well matched . . . with head-lowered they would try to force each other lateward. Then muscle was strained to its atmost and the eyeballs gleamed white with the intensity of their rass on."

picture, but then I also wanted to see how it would end. Decision had to be made quickly, as the fight might stop at any moment, and I decided to try for the picture. It would be exceedingly difficult to use a camera under the conditions. Not only was there much scrub which would prove a serious obstacle—as you cannot photograph through bushes—but the herd of does and stags was scattered around three sides of me. If they detected the slightest move my chances would promptly end, it may therefore be easily understood that my position was an exceedingly difficult one. The first thing to do was to find my friend the big white doe; she proved to be in a clump of firs about seventy yards away, so that I was fairly safe from her prying eyes; then the immediate vicinity had to be examined in order that I might know where each animal was and be able to keep my eye on them all, moving only when all heads were down or turned away. This may sound easy enough, but I found my two eyes woefully inadequate, and it was only with the greatest difficulty that I managed to move a few inches at a time without being discovered by my nearest neighbours, some of which were not more than ten or twelve yards away. How different from the stalking required for shooting! From where I crouched, both of the stags could have been killed by even a poor shot, while practically speaking, the camera could not be used without a complete change of position. Immediately I began to move on hands and knees, a young stag that had been hidden by a small clump of bushes appeared so suddenly that I was caught as I was about to clamber over a fallen Fortunately, I saw the stag at exactly the same moment that he saw me, so I remained immovable with one foot raised. In this very uncomfortable position did I remain "frozen" while I was duly examined by the

wretched stag. At last, after what seemed an interminable time, he appeared to be satisfied that I was only a rather peculiar stump, and he turned his head. Instantly I dropped—only just quickly enough—for at almost the same moment he glanced in my direction again and was apparently rather bewildered at not seeing me. This was a critical moment. If it had been a doe she would without doubt have come forward to investigate, but the stags are much less curious, and after staring intently, he walked away, leaving me to continue my very difficult stalk. In due time I succeeded in working my way past the worst of the obstructions to a place which offered me a fairly good sight of the two stags. There was only one small dead tree to interfere with the otherwise clear view. Now it was necessary to stand up very slowly and carefully, so as to bring the camera above the immediate foreground. perhaps fifty caribou within sixty or seventy yards, this was risky; however, I finally stood up and had the pleasure of seeing the two big fighting stags on the ground glass of the camera. It was a shame to disturb the two in their great struggle for supremacy, but there was no time to lose, for with so many animals about me I was bound to be discovered before long, so as soon as the focus was correct and everything examined, I pressed the button.

What a pity it is that shutters are not silent in their working. The slight click that was made was easily heard by one of the nearer does; for her it was sufficient information that something was wrong; what it was she did not wait to find out, she simply gave a loud snort—that aggravating signal of alarm—and the whole herd was on the move as though a bugle had sounded the charge, scampering as fast as they could towards the doe. On they came at full speed, trotting and jumping, some coming straight towards



Stag watching his does, which appear to be thinking of running away.



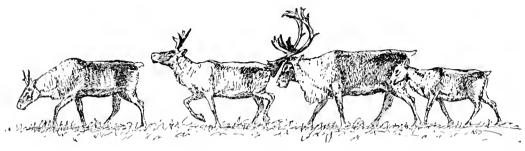
The herd of about 150 Caribou which took alarm when the two fighting stags had been photographed.



me, others going near the fighting stags, who, of course, took the alarm at once, forgot their grievances and each other, and trotted off with the herd. All of this took but a few seconds, so quickly did they rush past and so close that I forgot, in the excitement, to reload the camera. late did I get my wits together and put in a plate, then I rushed out a few yards clear of the trees and made an attempt to secure a photograph of the white-flanked herd, now thoroughly frightened, as they splashed across the wet barren, filling the air with sparkling drops of water and pieces of moss and leaving a trail as though a regiment of cavalry had passed. There must have been fully one hundred and fifty altogether, as nearly as I could estimate; evidently the main herd, unknown to me, had been joined by many others during the hours I had been so intently watching those nearest to me.

Now it was all over. Once more everything was as calm and quiet as we expect the wild land to be. The pent-up excitement of the past minutes (or was it hours?) was gone and there remained no visible evidence of all that occurred, nothing but the latent image on the photographic plate and the sense of great joy and satisfaction in having obtained at least some sort of picture of a real Caribou fight with real, well-grown stags. Now, indeed, I might snap my fingers and laugh at those well-meaning people who had tried so hard to discourage me. That I should ever be fortunate enough to again witness such a sight was doubtful, so I was particularly careful of the precious plate on my way back to camp. It was late in the afternoon, and I had far to go, but that long walk seemed short, the difficulties of getting over the soft bogs were unnoticed, and as I paddled down stream to my solitary camp I came to the conclusion that camera-hunting was a fine game, notwithstanding

the remarks to the contrary which had been indulged in by some of my friends who still consider it a namby-pamby form of sport. It was altogether a day to be remembered, a day to be marked with a big red star. Everything appeared in attractive colours, the gaunt grey trees which lined the banks of the river seemed to be old friends who nodded their grizzly heads at me as I passed along the quiet waterway of the wilderness; even the low murmuring of the wind through the firs seemed to congratulate me on my good fortune. The day was almost at an end. setting sun left the river in deepening shade, and as I slowly passed the homes of my beaver friends, the little fellows appeared in their noiseless way on the surface of the water, their small bright eyes staring intently at the drifting canoe, until a current of air carried the scent of hated man to their nostrils, when the silence of the evening was instantly broken by the terrific signal of alarm—the striking of the water with their heavy muscular tails as the animals dived and sought the protection of dark waters. they reappeared I was landing at my camp, where I was soon busily engaged in making ready for my evening meal over the crackling fire, the delight of which can only be properly appreciated by those who live alone in the woods, for to them it is the cheerful companion of the long autumn evenings, the last thing to be seen or heard as the healthilytired body drops off to sleep, the undisturbed dreamless sleep found only in the land of pure unspoiled air far from the haunts of man.



On Migration.

## CHAPTER III.

## THE AUTUMN AND SPRING MIGRATIONS.

In no way is the Newfoundland Caribou so well known as by its peculiar and much discussed habit of migration. Many stories by those who know and those who do not know have appeared from time to time, in which the question of cause has been discussed. But after all is said, we do not know very much about the reason for the great semi-annual trek, except that it does take place with fair regularity every spring and late autumn. Not on set days, as some people imagine, but with the arrival of certain conditions of weather which appear to affect the animals.

Before going into the question it would be well to look at the map of the island on page 138, on which I have marked the approximate course of the Caribou. The northern peninsula is mostly high country—rugged mountains—parts of which have as yet scarcely been explored. A great deal of this mountain region is very bare and exposed to the frightful storms which blow down from the arctic regions, storms of driving snow and icy rain which must sweep the unprotected hills with appalling force and render life difficult, if not impossible, for animals which feed chiefly on the ground mosses. The severity of the storms is beyond

all belief; for days at a time no living creature would dare venture away from the protection of the woods which, unfortunately, are not over abundant. The snow, piling up from these relentless storms, covers the land to a depth of many feet, so that much of the wild pasturage is lost to the Caribou, except in the woods and on the ridges where no snow can lay, for no sooner does it fall than the howling winds pick it up and carry it headlong into the valleys. must be a wonderful thing to see these whirling snow imps dancing over the bleak mountains, but for the Caribou it is a sight to inspire dread, for it spells hunger. Not only is the deepening snow a source of danger to them, a worse one lurks about these open wastes, and to a lesser extent the woods: the "glitter," as the Newfoundlander calls it, freezing rain which ties everything up in its icy grip, vegetation and all that goes to sustain life for the Caribou is buried securely in a shroud of glistening ice too smooth and too hard to be broken by the hunger-driven beasts. This is a possible if not a probable reason for the animals going south as the winter approaches. South to where the kindly influence of the Gulf Stream tempers the cold and makes life more endurable to the great herds of hungry creatures. How do they know what is going to happen, or that by going southward they will find better conditions? It was not learned in a day or a year, but gradually, during the many hundreds of thousands of years that have passed since the Caribou first wandered into Newfoundland. Then it was not an island, but part of the mainland, joined to what we now call Labrador, and from which it is separated by the Straits of Belle Isle.

Before the island was formed, it is more than probable that the Caribou spent the summer months further north, in the region where to-day we find the vast herds of the



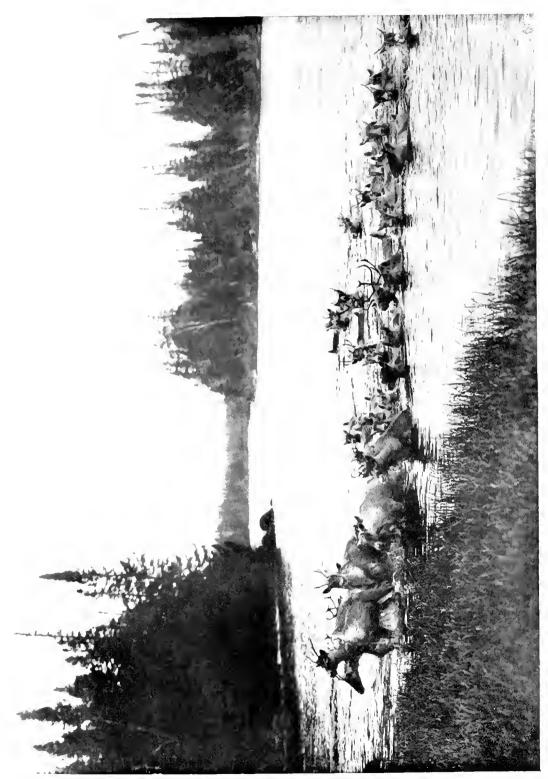
I. SWIMMING.

Part of the herd of forty-one Caribou which are shown on the following pages.

Labrador species. Perhaps what is now Newfoundland was then the great winter resort for immense herds. One cannot say for certain, because the weather conditions which prevailed in those days are not known with absolute certainty. The past is wrapped in so much mystery, and our theories continue to change as we investigate more carefully; what to-day seems a certainty is to-morrow thrown aside for newer and more advanced ideas, and we never know what is the final decision. Such being the case, we must be satisfied to study the migration chiefly by existing conditions, and for lack of a better reason we are practically forced to the conclusion that the search for food is the cause of the southerly migration. But what about the return journey? Why should the animals go back to the north? So far as we can judge from appearances, the conditions in various parts of the island do not show any great differences during the summer; the food in the more southerly parts is about the same as in the north, it is certainly abundant, and there is no doubt that it is what the Caribou want, for otherwise so many of them would not remain scattered over the country which is abandoned by the northern herds when winter has passed. The theory advanced by some writers that flies play an important part in the cause of migration is I believe utterly without foundation, because the black fly is found in practically every part of the island during the summer months, and the northern peninsula has its full share of these pests. Even on the highest ridges, rocky and with only the scantiest vegetation, miles away from the forests, the black flies have been so numerous that they made life miserable, so that when the migratory herds leave the south they do not escape the warm weather pests. the very few places where the black flies are scarce, there are but a few scattered Caribou during the summer.

It is not my wish to upset anybody's pet theories, but the migration subject is of so much interest, that as many facts as possible should be accumulated from some definite knowledge may be derived. For my own part, I have found it impossible to advance any explanation which will stand even my own cross-examination, and I am almost forced to believe that the conditions which originally made the semi-annual migration a matter of necessity have passed, but that the animals having acquired the habit are slow to give it up. If all, or practically all, the Caribou in the island took part in the great movement, this theory would have very little to recommend it; but when we consider that a great many animals spend the winter in the north, almost to the extreme end of the peninsula, and also that a great many spend the summer in the more southerly portion of the country as far as the coast line, there seems to be some reason in its favour, and I feel almost sure that there is no natural cause which would prevent the animals living permanently in any part of the island, provided, of course, that they did not concentrate and thus deplete the food supply.

When first I took up the subject about ten years ago I was told by many people, including sportsmen and guides, that all the Caribou left the northern peninsula on the appearance of the first snow. A trip to the north soon proved to me the incorrectness of this, for not only did residents of the region in question—trappers and others—tell me that the animals stayed all the winter, but I found a fair number of very fine shed antlers to prove that the large stags were there at least until the middle or end of November, and as some of the antlers were those of small stags and does, the former of which do not shed till well into December or even later, while the latter carry theirs till



II.—ABOUT TO LAND.

The herd is about to land, without detecting me as I crouched in the grass scarcely twenty yards away.



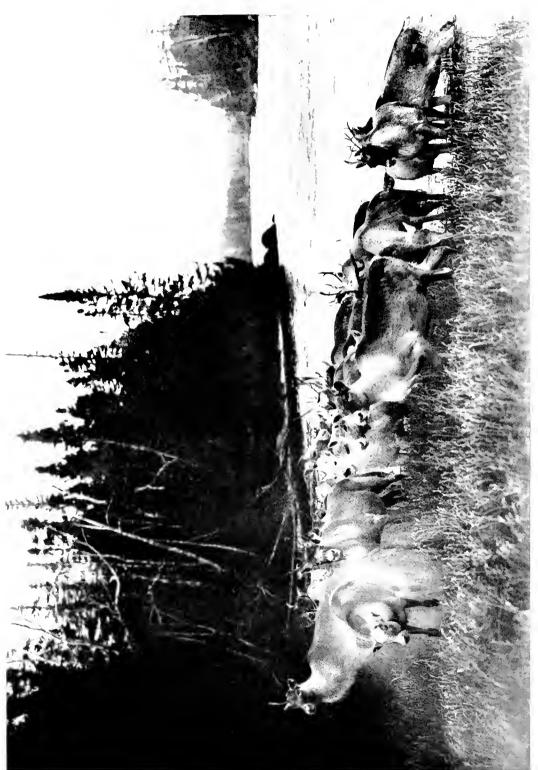
almost spring, there was no question of the existence of the Caribou throughout the winter. The proof that they stay in the south during the summer is equally good, though I have not seen them myself, never having been along the south coast, but I have been told on thoroughly reliable authority that such is the case, and I have actually seen the Caribou during August south-east of Grand Lake in the magnificent high country back of "Old Harry." All of this goes to prove that the migration is by no means general, but is only indulged in by a part of the animals, I should say probably the larger part. Now whether these are creatures which are slower to change their habits no one

can say, but such may possibly be the case.

The idea which seems to exist pretty generally that the autumn migration begins between October 15th and 22nd must not be relied on too implicitly. The season is extremely variable, ranging from October 12th to almost the middle of December, though it may usually be expected between October 20th and November 5th, depending almost entirely on the weather. A heavy fall of snow appears to be the signal for the start; if, however, it is followed by a prolonged spell of good weather, the animals either remain scattered about the flat country near Sandy Lake, or they continue slowly and in a very irregular way towards their winter quarters. With the advent of cold or snows the movement invariably becomes more or less general, and is extremely precipitate when the cold is intense or the snowfall unusually heavy. The sudden freezing of the waters spurs the animals on at a terrific speed, and wonderful stories have been told of how the stillness of the night has been broken by sounds like thunder, as vast numbers have crashed through the frozen lakes and rivers, impelled by a frantic desire to escape

being caught by winter in the flat country where the snow lays so deep that food would be buried and travelling made difficult. It has never been my good fortune to witness any of these stampedes, though I have gone to the island year after year in the hopes of being present at something of the sort; still it does not require much imagination to picture the scenes. I have several times watched herds breaking through the small ponds, which were coated with ice half or three-quarters of an inch thick. They scarcely notice it as they make their way through, their sharp hoofs cut it without difficulty, and as their legs are well covered with thick hair they are well protected against being cut by the knife-like edges of the ice; but when the ponds are covered with a heavy coat of smooth ice not quite strong enough to bear the weight of the animals, it must cause great trouble, especially if the water be deep and swimming necessary. Whether or not they go in single file as they do through deep snow I cannot say, but it would be reasonable to suppose that they choose the easiest method unless they are in a hurry, when probably they crash through in a body. I judge this to be the case from the accounts I have received which state that the path through the frozen ponds or rivers is a broad one, and that the ice is broken up to an extraordinary extent.

The great path of the migration is between Sandy River, where it flows into Grand Lake, and about fifteen or twenty miles to the east. Here it is that the great mass of the animals pass, and here it is that a few years ago, shortly after the opening of the railroad and before the enactment of good game laws, the awful slaughter occurred which gave J. G. Millais the opportunity to make his well-known very humorous sketch showing sport in Newfoundland. It is said that as the train came along, immense herds of



III.—LANDED.

The herd landed within less than ten yards of me, and as they shook the water from their coats I made the exposure. The sound of the shutter revealed my presence, and the badly frightened animals rushed about in every direction, some passing within arm's length of me.

Caribou appeared, and as there were many sportsmen and so-called sportsmen on the train, a grand fusillade commenced, which resulted in the most ghastly butchery. I do not recall the details, and anyhow they are better left unwritten. But great good resulted from the bloody affair, for it caused the passing of splendid game laws and the making of a reservation that included the whole region through which the herds were most closely concentrated before they separated to find their winter quarters on the higher lands. Not only is no shooting of any sort allowed now on this reserve, but I am glad to say that even camping is forbidden. This was a most important improvement, because so long as men were allowed to camp there they could (and frequently did) shoot without much fear of being caught. This is not said in criticism of the game wardens, because in a country like Newfoundland the natural conditions offer every protection to the poacher. He could kill within a very short distance of the wardens or rangers and still escape with little or no difficulty.

Before exhausting the reader's patience by this long-

Before exhausting the reader's patience by this long-drawn-out chapter on migration, it might be well to tell something of the habits of the animals during this period. In the previous chapter it was shown that the mating usually occurs immediately before the animals start south, so that everything is in a peaceful condition. Jealousies and fightings have passed and are forgotten, truculent stags have become as quiet as old cows, and all are friends once more. The first fall of snow has warned them that it is time for the start, and so they head in a general southerly direction, going fast or slow according to the weather conditions. Usually they come at a very rapid walk, in herds numbering from three or four to about one hundred and fifty. There is absolutely no foundation for the

statement that has been made that the herds never number more than twenty or thirty. In a single day I have often seen four or five herds containing between fifty and seventy-five, and have frequently counted a hundred or more going along together. Most of the travelling is done by daylight; in fact, except during a storm, they seldom move about much after dark. I should say that the best time to see the Caribou passing is between sunrise and half-past ten. During the noon hours they usually keep fairly quiet, but there is frequently quite a movement about an hour before sunset.

Sitting on the banks of the river, one can often hear the almost continual splash-splash, as herd after herd enters the water to swim across. It must not be thought that the migration means the moving of all the animals together. Each herd keeps pretty well to itself, though two or more small herds frequently merge together. It is barely possible that, at the actual start, the herds are of immense size and that they break up as they proceed. suggest this theory because on some days a great many herds appear along the same leads or paths, as though they had all started together, while other equally good leads will not be used for many days in succession. So noticeable is this that in watching for the animals I often select a place where I have either seen one or two herds pass, or where there are very fresh tracks, and remain there for the entire day, with results which frequently justify such a course. sees a slight change in the route selected by the greater number of animals. What is a first-rate place one year may be entirely unused the following season, the general trend being perhaps less than a mile further to the east or west. The cause of this is unknown, but it may be accounted for by the rising or lowering of lakes or rivers, either by



Caribou lead through dry bog-land.



Caribou path down the river bank; the cutting, which is fully two feet deep, is the result of years of use.

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natural causes or by the dams built by beavers. The roads made and used by the Caribou prove that they have been in use for countless years. In some places the rocks are worn away to a depth of one or two feet by the thousands and thousands of hoofs which have passed over them, each hoof wearing away its minute particle, just as drops of water will gradually eat into even the hardest stone. Over the softer barrens, the paths, though equally distinct, are far more numerous, as the herds do not always travel in single file; to do so would cut into the soft bog and the trail would very soon be converted into a stream, for water abounds almost everywhere on the island. So it is that the barrens on the line of the migration are cut up by the innumerable paths which converge where the land becomes harder, or in the immediate vicinity of a river-bank where the deep-cut paths are conspicuous. Through the forests the leads, though clearly defined, are very devious, for if a tree blows across the path it causes the animals to swing to the right or left, with the result that the following of a Caribou road causes one to twist and turn, until one's sense of direction becomes very much confused, and it is a clever man indeed who can follow the same trail twice.

How the stags with their large horns ever make their way through the dense tangled woods is very difficult to understand, for a man has all he can do to get through by twisting, bending, and even crawling; yet the Caribou seem to experience absolutely no difficulty. They keep up their rapid walk, and pass through the thickest forest scarcely making a sound, unless they happen to be frightened, in which event they sometimes crash through, making a frightful commotion, scarcely even following the leads—each animal going along regardless of his companions, all bent only on escaping the object of their fear.

As already stated, the weather plays an important part in the Caribou's progress. The colder and more forbidding the weather the faster and more steadily do they travel. Their speed is not less than five or six miles an hour when they walk, which is their usual gait; only under rather exceptional conditions do they trot for any distance, while they seldom resort to galloping unless they are frightened. On warm days they take things easy, travelling in a most leisurely fashion, and spending the greater part of the day in resting and feeding, particularly between the hours of nine and three. Then it is that one sometimes sees the beautiful sight of many hundreds of animals scattered about the open barrens in herds of various sizes. At such times they feed and sleep, but never for a moment do they relax their everlasting vigilance. Usually each herd has its sentry, which in most instances is an old doe, whose sense of duty is so highly developed that she feels it incumbent on her to watch over the welfare of her herd with unremitting care. She is the one to give the signal for moving at the slightest intimation of danger. To the constant watchfulness of these does I owe so many failures to secure photographs, and I confess to a far from friendly feeling, even though I am lost in admiration for them.

The migration season is, of course, the best time to see Caribou in greatest numbers and with the least possible trouble. It is only necessary to examine the country for fresh tracks in order to determine which are the likely leads, and provided that normal conditions obtain there should be a practical certainty of seeing anywhere from fifty to several hundred animals in a day, while on days when the migration is at its height a thousand or more may be seen. To the man who is interested in the creatures *alive*,





Where the Caribou leads from many marshes converge at the river bank.

Caribou paths, or leads, through the grassy barrens.



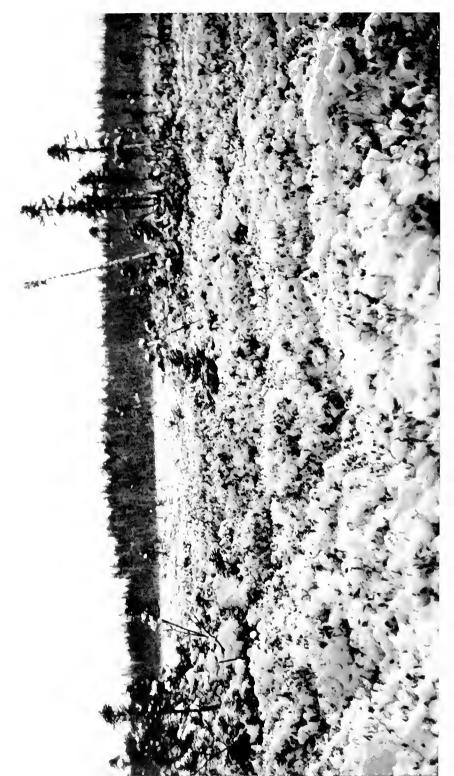
the sight of these marching herds is wonderfully beautiful, especially if he has the good fortune to see them at really close quarters, a perfectly possible condition if proper care is taken in selecting a suitable hiding place.

The first rule for success is to avoid leaving trails to windward of where you lie in wait, for the animals have an extremely keen sense of smell, and a man trail even though it be several hours old is almost sure to be detected, unless it has been obliterated by a kindly shower of rain or fall of snow. The situation which promises the best chance of success is the converging point of a number of leads. Near these, but preferably not on them, a screen of fir trees can be easily arranged so that perfect concealment is obtained. The direction of the wind is of vital importance, for the faintest breeze will carry the man-scent an incredible distance, and the slightest breath of tainted air will frighten a Caribou more than the sight of an army of men.

Some of the happiest moments of my wandering life have been spent in Newfoundland where, concealed behind small clumps of dwarf firs, I have seen the silvery-coated Caribou wending their way across the many-coloured barrens, absolutely unconscious of the close proximity of their supposed enemy, man. There is something indescribably beautiful in watching wild animals that, free from all suspicion, are behaving in a purely natural way, following their habits with no disturbing condition to influence their behaviour. There is something so peaceful and satisfying in it, that it makes a life-long impression on anyone who has been fortunate enough to have the opportunity of observing the animals under such conditions, and one cannot help wondering why some people who are really fond of outdoor life do not more freely indulge in this form of pastime. Perhaps it is because they are unable to bring home any

visible result of such a chase. Nothing to show to their friends as proof of their experiences. Yet will not these same people go to an opera and thoroughly enjoy the music, content only to have their senses satisfied without thought of having to prove to anyone that they did enjoy the transient pleasure?

Not for anything would I give up the memories of my most fortunate days in the land of Caribou. These memories will live so long as I live, while the discomforts and the disappointments—which were many—are happily forgotten, they are hidden behind the screen of fortunate experiences. Certain days stand out with delightful clearness, days when conditions were satisfactory and things happened. Let me tell of one such day even at the great risk of boring the It was after a night of bitter cold, such penetrating cold as one only finds in the northern countries. solitary camp on the banks of Sandy River had for many hours been blown about by the icy wind which found its way through the heaps of spongy moss that held down the sod-cloth. The early supper had been cooked under most unfavourable conditions as the wind-blown smoke drove me from one side to the other and filled my eyes so that I was glad to seek the shelter of the tent in which, unfortunately, Ĭ had no stove. It was far too cold to sit up, so after finishing the badly-cooked meal and filling the plate-holders of my camera for the next day's work—a difficult enough task as my fingers were so benumbed—I sought the inviting comfort of the blankets at about seven o'clock. It was too early to sleep, and I was too cold to read as the breath froze on my glasses; so I lay in thought, wondering what would be the end of the storm. Would it bring snow, and the snow bring Caribou? So far, very few had passed, though the snow further north had certainly started the

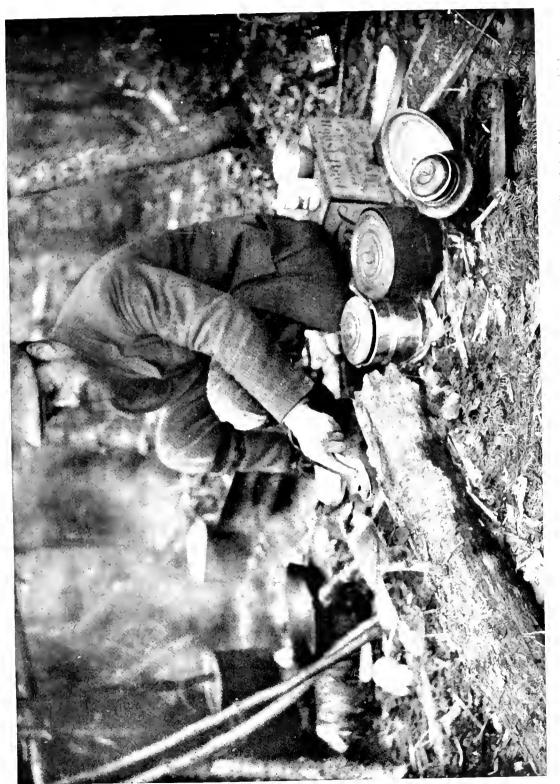


"The whole country looked almost like a perfect fairyland."

migration. Sleep came gradually, and some hours later I awoke to hear the snow gently falling on the tight roof of the tent. The wind had died away, the welcome sound of the snow filled me with hope, and once more I slept to dream of the morrow. When I opened my eyes again, the snow was no longer falling; everything was bathed in moonlight, so cold and so quiet and so wonderfully beautiful. It was scarcely five o'clock, nearly two hours before the dawn, and for an hour I waited impatiently, only too anxious to be out on my favourite leads watching for Caribou. Then no longer able to wait, I got up while the woods were still bathed in the mysterious moonlight. A fire was soon started, and in the still air the smoke and sparks rose without curve or flicker, a column of red and blue, like a ghost against the background of frosted trees.

The snowfall had been light, and had been followed by a keen frost which coated each twig and leaf. How can anyone describe such a morning! No words, however well-chosen, can give even the slightest suggestion of the beauty of it all. The curious stillness in itself was indescribable. Nothing disturbed it but the cheerful crackling of the fire, and the scarcely perceptible purr of the floating ice, as it brushed against the overhanging branches on the river bank. Amid such surroundings my simple breakfast was eaten entirely alone, as my friend and companion, the Canada Jay, was not yet awake. I missed the confiding bird, for he usually shared my porridge with me each morning. Sitting on the log by my side, he would look up into my face with his large dark eyes, and with a soft murmuring note beg for his share. I never got tired of watching him and his ceaseless energy. He would eat very little, but spoonful after spoonful would be carried away and hidden most carefully in the trees, behind the curling bark of the large birches, in knot holes, and in cracks, so that his storehouse was in every tree that surrounded my camp. Well did he know what the winter meant; the long, cold months when all would be covered with snow. No berries would then be found, for beneath the snow they were being preserved for the early spring supply. Life for many months would be dependent on the carefully-arranged stores placed well above snow level. And so my little companion continued each day to lay up his stock of winter food, nothing too small to escape his searching eyes, and anything I wished to keep had to be well hidden, for during the day while I was away from camp the jays from all the neighbourhood met and cleared camp for me, leaving no trace of food exposed. It is no wonder that the untidy camper dislikes these birds and calls them robbers, and rather than be tidy he kills the birds which are such cheerful company to the solitary man.

At the first gleam of day my canoe was in the water, after the ice near the bank had been thoroughly broken, and I was soon floating noiselessly on the smooth, dark water. Beautiful crystal snow-flowers had formed on the ice, which in some places was moving slowly with the current. The banks of the river were entirely covered with frost and snow-coated trees and grass, so that the whole country looked almost like a perfect fairyland, and one almost expected to see gauze-winged elves peeping from behind the glistening trees. Indeed, it was not long before a slight crackling among the bushes announced the approach of some living things, not fairies, but beautiful silvery Caribou, fifteen or twenty of them; snow-white fawns, whose dark eyes alone stood out clearly from the pearly background; large does, white and grey; and a whitenecked stag whose orange-coloured antlers broke the sparkling ice from surrounding bushes. The little herd



My sole friend and companion, the Canada Jay, having breakfast with me. He is sitting on the handle of the frying-pan, which

stood for a moment on the bank, examining the strange dark object which floated so quietly down stream. The commanding doe decided that it was not dangerous, and gave the order for advance, and immediately the ice which skirted the bank was being rudely broken by the animals, as they entered the river and swam silently across scarcely a hundred yards from me. On landing they stood still for some minutes, looking about them to see that all was safe, then each one in turn shook the water from its heavy coat with such vigour that the air was filled with fine spray, which glistened in the rosy light of the rising sun. Then following the leader, they all disappeared among the trees, taking a lead near which I expected to spend the day. Seeing the animals moving so early was a good omen, and I went ashore filled with hopes and the anticipation of a glorious day's sport.

The landing place I selected was well clear of the leads, so that I could make my way without fear of leaving any disturbing scent. Walking through the thick underbrush was a noisy job, as the twigs were so heavily coated with ice that they crackled loudly at every step. In about twenty minutes I found myself safely within the shelter of fir trees which I had arranged some time ago. A better place would have been difficult to find. It was perhaps a quarter of a mile from the river, on the outskirts of a very large barren. either side of the blind, or gaze as the Newfoundlanders would call it, were a number of splendid well-used leads or paths converging from many landing places; thus most of the Caribou which crossed over an area of nearly half a mile would be more than likely to come within easy range of my battery of cameras, provided the wind remained in the north. Should it change and blow from the south the place would be absolutely useless.

While I was arranging the cameras so that they would cover every lead without having to be moved, the sound of crackling ice and splashing water warned me that a herd was coming. The light was still too weak and yellow for instantaneous photography, so with a clear conscience I would be able to enjoy watching the animals. long before the deathly stillness of the morning was broken by sound of the approaching herd. Had there been no ice on the twigs there would have been no sound, save the curious cracking of their feet; but the brittle ice made noiseless walking impossible for man or beast. Soon they appeared: a small "company" of eight. By good luck there was no large stag. I say good luck, because with the impossibility of using the camera a big stag would have been a thorough aggravation. At first the animals were almost lost in the long blue shadows, but as they came clear of the low trees the pale yellow sunlight flickered across them, painting their white necks with delicate indescribable colour. One very light-coloured fawn was particularly beautiful, with his soft, almost fluffy head and large dark eyes, a real live fairy in the icy wonderland. In single file they came, with the inevitable doe at the head, nearer and nearer to within a few feet of where I stood enjoying this true natural history picture, so quick to come and so quick to go, deliciously aggravating, because there was no time to sketch it in with paint, and not light enough for even a colourless photograph, only barely time to fix it on the mind so that it could be used some day in a most inadequate painting. The picture had passed almost before I had realised the beauty of it all, and in a few seconds nothing remained but the broken, mud-splashed ice to show where the little herd of southbound animals had walked in the trail which had been used by their ancestors for countless ages.



The blind from which many photographs were made. The camera may be seen in position.



The blind, the camera, the Caribou and the author. This photograph was made with a second camera, which had a string attached to the shutter.

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That the animals had passed my blind without being frightened was most fortunate, for by so doing a trail had been established. This is very important, because any other animals would feel more secure in following the same trail. For this reason, it has been my practice for several years to allow the first herd to pass undisturbed. Often I have noticed that when Caribou (and I do not know whether this applies to other deer) are startled they leave some signal on the ground which warns every animal that comes to the place. Of course, I cannot definitely explain how this is effected, even though I am absolutely sure that it does happen, and I say this even at the risk of having some doubting Thomases say that my imagination is over fertile. Unfortunately, I have no imagination; were I thus endowed I could write books about wild animals which would appeal to the great public, and incidentally bring me large cash returns; but facts, and facts only, appeal to my prosaic nature, and I can vouch for the truth of what I state regarding the Caribou's signalling by this invisible method. Not once, but on many occasions, I have seen one or more Caribou walking quietly along a trail, when suddenly they have been frightened, either by seeing me move, by the sound of a camera being arranged, or worst of all, by a draught of wind carrying my scent to them. Whatever the cause makes no great difference. On being startled the animals have jumped; then, after standing still for a moment to examine the cause of their alarm, they have bolted. For hours afterwards every Caribou, on arriving at the place where the frightened ones had jumped, has started violently, and has on nearly every occasion turned and run in a manner that showed every indication of fear, even though my presence was entirely unknown to them. My idea is that when the animal is suddenly frightened it expels a certain

fluid from the glands in the foot, and that this fluid is a signal of alarm, a silent and invisible warning, but none the less so positive that none dare ignore it. Whether this fluid is expelled voluntarily or by a purely mechanical effort, I do not pretend to say, but it is quite possible that the sudden jumping causes the hoof to separate, and that in doing so the glands are brought into operation, so that a minute particle of the fluid is left on the ground. I can almost hear the reader say, "Bosh!" but will he give any more plausible explanation? If he can I shall be delighted; if not, let him at least be patient and not condemn my theory too harshly.

After the small herd had passed it was some time before anything exciting happened. The rising sun was slowly melting the frost and light snow, so that every minute reduced my chance of securing a picture of the animals in ideal surroundings. I pictured to myself a splendid stag standing on the glistening carpet. How beautiful he would be, and how his richly-coloured horns would stand out from the pale background! While I was thus engaged in arranging each detail to my satisfaction, a young stag actually appeared, so quietly that he seemed almost as a reflection of my thoughts. True, my plans called for a big stag with record head, while this approaching animal was a small one with insignificant horns. Still it was a stag, and he was evidently coming near enough to be photographed, and the snow was not all melted. So I accepted gratefully what the gods offered, and as the stag came within range I shot him with the harmless camera. The slight report of the shutter sounded woefully loud in the still air: loud enough to thoroughly frighten the animal, for he quickly turned from the trail and was almost immediately lost among the stunted trees, but I had secured the picture which appears on the opposite page.



"As the stag came within range I shot him with the harmless camera,"

It is in such cases as this that one realises and appreciates the difference between camera-hunting and rifle-hunting. Had I been armed with the rifle there would have been no sport for me in this incident. The stag was certainly not worth shooting, for his horns were small and unshapely, and would not have satisfied anyone but the merest novice. But the camera is not so particular; interesting pictures are made of the most simple subjects, and though a record stag would have caused very much more excitement, this little fellow gave me great pleasure, as he completed a picture which was beautiful in itself, even without any animal at all, but still more interesting with this touch of wild life.

For some time after this small stag had passed I sat waiting for another visitor to my outdoor studio—the studio for which no landlord clamoured for monthly rent, and which was not restricted in size. The walls were the forests, the roof was the sky; no dusty rugs covered the floor-my carpet was the moss, whose colours were more varied and pattern more complicated than the finest weaves of Persia. And it was all mine. My models came without knocking at the door, and departed without leave. In such surroundings who would not be happy, who would not be grateful for being alive and well? And, above all things, free to enjoy the fresh fir-scented air, the primitive beauty of it all. What more could man ask? Sour indeed must be the disposition of him who found fault with such surroundings. Some might say the air was unduly keen. Perhaps it was; but only when I wanted to use my fingers to manipulate the camera or pencil did I realise that they were numb.

An approaching herd of Caribou made me almost painfully conscious of the fact, for suddenly from every direction they appeared, breaking their way through the fringe of alders and low spruce trees. Something must have frightened

them as they were crossing the river, for not until they left the trees did they shake the water from their dripping coats. Then on they came, some trotting, some walking, all in a hurry and most of them heading straight towards my blind. What a beautiful sight it was! Fully a hundred of the splendid deer splashing through the snow and ice. Unfortunately, a heavy cloud hid the sun so that the light was bad. But there was another handicap still more serious. My hands refused to do their work, the focussing screw of the camera would not respond to the senseless touch of my numbed fingers. It was maddening. Animal after animal passed, some good stags among them, and they were within fifteen or twenty yards, while the camera was focussed for nine yards, and unless any of the animals came within that range I should be unable to get a picture. At last, a rather small stag, with about thirty-point horns, came along the lead which was directly in front of me. Closer and closer he came, and I watched the ground-glass intently as, from a dim blur of grey, he gradually took shape, becoming more and more clear and defined. He was rapidly filling the plate, and it seemed as though I should not be able to get him all in by the time he reached the point of focus. There was no time to spare, for at the moment that he showed sharply in focus he exactly covered the plate, and I pressed the button. He was scarcely nine yards away. Never have I seen a more thoroughly startled animal. the stillness of the morning the sound of the shutter was alarmingly loud, and the stag apparently believed himself shot. He nearly tumbled over backward as he jumped clear of the trail. Then he stopped a moment and stared at me. The rest of the herd also looked in my direction. a splendid chance it was for another picture! But my hands were too cold to work quickly, and in vain I fumbled



"He was scarcely nine yards away."

at the plate-holder and shutter. The herd stood but a few seconds, and satisfied that I was a very dangerous person, armed with a very formidable weapon, they speedily vanished, kicking up great lumps of snow as they galloped off. Some of those furthest away, not knowing where the source of danger lay, came crashing past within a few feet of where I stood in the shelter of the spruces.

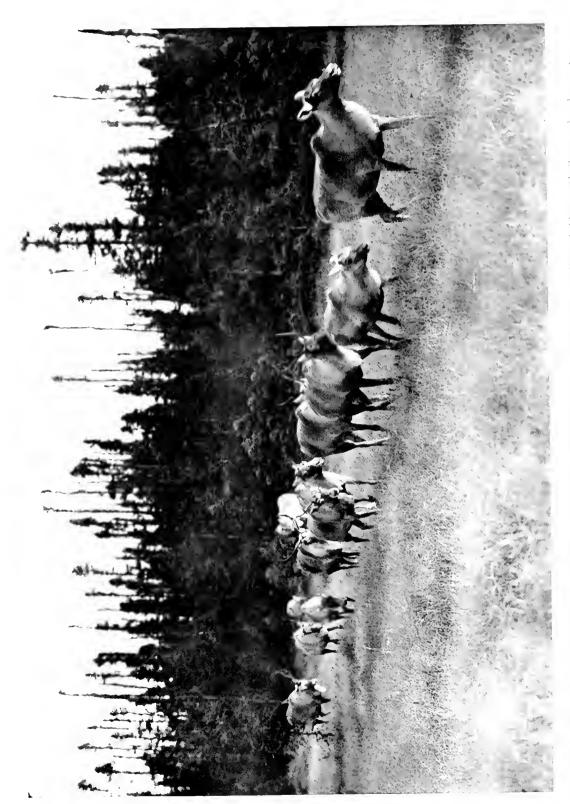
The light was becoming very uncertain. Great clouds were rolling up so that the sun was obscured most of the time. In Newfoundland this often happens on mornings which are unusually bright and clear. From a photographic point of view it is most unfortunate, as very quick exposures are impossible without sunlight, and it always happens that the animals appear at the very moment when the sun is hidden behind the heaviest clouds. There seems to be a fate about it.

An hour or so passed before my next visitors appeared: a doe and a fawn this time—the finest pair I have ever seen. I have mentioned elsewhere how much variation there is in the appearance of the Caribou. Many of the does are heavy, square-built, and lacking grace of form; but this doe was nearly as finely built as a wapiti, and the fawn was a picture of grace and beauty, a perfect harmony of soft grey tones. They approached slowly, and when within about sixteen yards I gave a snort to stop them, and as they stood still I secured the photograph which appears facing page 100. Scarcely had this pair disappeared than a large herd, numbering perhaps seventy animals, came in sight. Evidently the migration was in full swing, and the slight snowfall had hurried the animals on their journey. It was a pity that the light was not better, for though the herd contained no very large stags it would have been a splendid opportunity for making an interesting picture, as they were well bunched and coming at an easy walk. A picture was secured, and then they all passed close to the blind without being aware of my presence, for the noise of their hoofs had drowned the inevitable click of the shutter. No sooner had this herd reached the open barren at the back of where I stood, than there was a sound of animals crashing through the trees about a hundred yards away. Leaving the blind, I hastened to a high knoll from which I should be able to see them. As they came into the open I counted about fifty Caribou; among them were two magnificent stags, with horns that would count fully forty points. They were going too fast and were too far away to photograph, and as they joined the part of the herd which had passed me, I could not help experiencing a feeling of regret that the big stags had not been among those I had photographed. As it was, I had to be content with what I had secured, and with the pleasure of seeing such a splendid pair.

About half-an-hour later the sound of six shots in quick succession reached my ears from the direction which the animals had taken. Had either of those two stags fallen? Perhaps so. Then no one would ever have a chance of photographing them in all their glory of life and vigour. It seemed a pity. Camera-hunting makes us uncharitable enough to hate the man who shoots, for he kills our models. Perhaps, on the other hand, the man with the rifle despises those whose weapon is the harmless camera. I know for a fact that in certain places (names are best left unwritten) camera-hunting has aroused strong opposition among both guides and hunters, for they claim that the animals are so badly frightened by the persistent chasing done by the camera-hunters that they become wild, and consequently shooting grows more difficult. I contend, however, that too much camera work will finally have the effect of making



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"When I had realised the hopes of years in securing a sunlit picture of a perfectly typical line of thirteen Caribou under the most favourable conditions, showing them on the migration."

the animals over-confiding. They will discover that even when a man happens to get within a few feet of them it does not always mean death, and then perhaps they will not discriminate between those who are armed with the camera and those whose weapon is the rifle. However, that is the dream of the future, when the camera has to a greater extent superseded the rifle.

A sound of splashing in the river aroused me, and I returned to my stand to make ready for possible visitors. It was not long before a small herd came into view; there was a young stag with a very pretty but rather small head of about thirty points, with the brow antlers noticeably far apart; with him were three does and a fawn. Curiously enough, they were following behind the stag, a very unusual occurrence which I have only seen three or four times out of the many thousands of Caribou I have watched travelling. The little band came along until they were within less than thirty yards, when the does stopped as though not quite certain that all was right before them. The stag continued to approach, walking slowly and without sign of suspicion until the click of the shutter awakened him to the possibility of danger. The does took the alarm and made off to one side, and almost before the sound of the shutter had died away they had all disappeared among the trees.1

This was evidently one of the lucky days, at least so far as numbers went. Over two hundred and fifty Caribou had passed, and many had come unusually near. Dame Fortune was kind in all but the matter of light, which had been most unsatisfactory. However, it might have been worse, for I had been able to secure some reasonably clear pictures. The day was still young, the light might change for the better and more Caribou might come. Perhaps even

<sup>&</sup>lt;sup>1</sup> See illustration facing page 28.

another great big stag would come, like the monster I had photographed once before. What a morning that had been!—when I had realised the hopes of years in securing a sunlit picture of a perfectly typical line of thirteen Caribou under the most favourable conditions, showing them on the migration, travelling as they are supposed to do, and at exactly the right angle to the camera. No one can believe how much pleasure that experience had given me. It was what I knew could be done, if only one had the luck to be on hand and ready at the proper moment. How many times it had nearly happened! But some little and seemingly insignificant detail had each time prevented success; and then, as though that was not enough for one morning's work, had not the immense stag come along while the sun was still shining! How excited I was when I realised that within sixteen or seventeen yards was a real stag with horns carrying full forty-five points. What would not any guide have given to have been able to offer his sportsman such an opportunity! I scarcely dare think what their opinion of me would have been for only shooting with the harmless Surely they would have regarded it as opportunity utterly wasted. But that day was one to be remembered, to be treasured up in the storehouse of happiest moments, the storehouse which is never filled.

This day of many Caribou, though not yielding extraordinary chances, was, everything considered, one of the most interesting in all my experiences, for I was seldom left long without at least a sight of the animals. True, I did not get any startling pictures, but before the day had passed I had used up all my plates, and secured nearly a couple of dozen photographs, many of which were of particular interest, as they showed good types of Caribou, some unusual horns, and the earlier ones depicted the animals travelling on the snow - covered ground, a condition which I had not previously succeeded in getting. Altogether, I saw over five hundred Caribou before returning to camp, surely enough to satisfy even the greediest of hunters. Had the sun only been a little more generous, the pictures would have been better, and no apologies would then have been necessary for the dullness of some of them.

This day's work, though an exceptionally lucky one, will give some idea of the southerly migration, of how the animals travel and how abundant they are; also of the great pleasure that may be had in watching them. It is a form of sport which all may enjoy to the utmost, free from the necessary restriction of game laws, for with the camera, the game bag is never filled. There is always room for more.

The migration is so irregular that anything like a rule for procedure must be so full of exceptions as to be of very little value, but in a general way it may be said that once the start is made, the movement continues with more or less interruptions, according to the weather, until all the animals which intend seeking the winter quarters of the south have passed the Sandy River region, and that usually happens by the middle of December. The earlier herds consist chiefly of does, fawns, and younger stags, then more stags appear, and these are, as a rule, the larger ones. Supposing that the migration started on October 22nd, and that ordinary weather conditions prevailed—that is to say, some snow and fairly cool days and cold nights—we might expect the big stags to be crossing Sandy River between October 26th and November 15th. Later on, I am told, great herds of stags come unattended by does, but these I have never seen, even though I have waited until December 5th; that autumn, however, was exceptionally mild, and practically no animals

passed before the last of November. A heavy snowfall on December 6th brought immense numbers, both stags and does coming together in one great rush. Unfortunately, I just missed the sight, and therefore cannot give any firsthand information. A late season is most unsatisfactory, because the stags lose their horns very early, the big stags seldom carrying theirs later than the middle of November. By the end of that month the migration, under ordinary conditions, should be practically at an end. may continue to come for several weeks later, but, unless the weather is unusually mild, one cannot expect to see any large number after December 1st. In the autumn of 1912—an exceptional season—conditions prevailed which caused the animals to act as they have seldom been known to do. Not only did the migration start very much earlier, as already mentioned, but it lasted only about two weeks, which is quite unusual for an early The guides refused to believe that the great mass of Caribou had passed before October 21st; they even laughed at me for suggesting such a thing; they had never known it to happen before, therefore it was not possible. In vain did I tell them that the immense numbers which had passed over the region where I was working represented most, if not all, the animals that could be expected to pass during the whole season. I suggested that they should take their camps southward, following the herds rather than going to meet them as they usually did, in order that they would be in the vicinity of their game when the shooting opened. This advice was disregarded, but subsequently heard that scarcely any of the hunting parties that went to meet the migration were lucky, while those who went south of the railroad had good sport.

All of this goes to show how uncertain are the ways of



"How excited I was when I realised that within sixteen or seventeen yards was a real stag, with horns carrying full forty-five points."

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wild creatures, or perhaps I should say, how dependent they are on conditions which we do not understand or appreciate. The autumn of 1912 did not appear to be different from an ordinary season, yet undoubtedly there was something which we did not observe, but which had its effect on the Caribou. When we hear anyone say that animals *always* do this or that, we may be sure that the speaker's experience is small. For safety's sake, it seems wise to qualify statements so as to leave a loophole for escape. We might just as well be modest and own that our knowledge of wild animals and their ways is exceedingly limited; the more we study them, the more are we convinced of this, unless we are blinded by conceit and preconceived notions as to what the animals should do. The man who said that the Black Rhinoceros of East Africa is usually found singly or in pairs and that more than three never go together (I have seen five in a herd) is an example of the man who does not know quite as much as he would wish to have people believe. It is in every way better to state simply what one has seen (using one's eyes very carefully), instead of laying down the law and saying that such a thing always happens because we have seen it occur on one occasion.

Having followed the Caribou past Sandy River on their way south, let us see what becomes of them. A glance at the map shows them distributed over the interior of the island south of the railroad. This is a region of high hills and deep valleys, open country and dense forests, rocks and marshes, rivers and lakes—in fact, a country of infinite diversity, yet all suited to the needs of the Caribou. The herds will keep moving slowly from one feeding ground to another, restless at all times, for the Caribou is probably the most truly nomadic of all the deer; his food is slow to

grow, so he must not denude his pastures, though this would seem to be impossible, owing to the abundance of the different mosses which furnish the necessary nourishment. But whether this is the cause of his restlessness, I cannot say; there must be some reason for his roving habits.

Unfortunately, I have never visited Newfoundland during the winter months, and so all I write about this season is only the result of conversation with the trappers and guides. They tell me that the Caribou are found in herds numbering anywhere from half-a-dozen animals to several hundred, the larger herds being most often found during the severe winter storms when the snow lies deep on the ground for weeks in succession. Unlike the Moose, which "yards," the Caribou, so far as I can learn, keep more or less on the move, going from one valley to another in their everlasting search for In this way the winter is passed, and as the snow melts they begin the northward journey, not in concerted action or in large herds, but slowly in straggling twos and threes. They do not appear to be in any hurry, for there is no dread of being caught by winter's awful storms. does, heavy in fawn, are anxious to reach their summer homes where they may bring forth their young in a region of plenty, above the flat lands where floods might injure the fawns; and so, during the months of April and May, slowlytravelling Caribou may be seen repassing, on the leads over which they had hurried in the autumn.

No longer is the stag a mighty, overpowering beast with spreading horns, or a spent creature following patiently the lead of the does. No longer has he the smooth, new, heavy coat of dazzling white and grey. He is a different creature. He is quiet and hornless, his light-coloured coat is rough and shaggy; the long hair which has kept him warm during the bitter cold is no longer



"My next visitors appeared—a doe and a fawn this time; the finest pair I have ever seen, . . . . this doe was nearly as finely built as a wapiti, and the fawn was a picture of grace and beauty, a perfect harmony of soft grey tones."

needed, and bit by bit it falls to make room for the thin summer dress. The does are in much the same condition, except that some are still carrying their small horns. They do not keep with the stags, but prefer either the company of their own sex or a solitary life. Whether or not the fawns of the previous year return north with their mothers I have never been able to ascertain. It is probable, however, that they do so, and are separated immediately before the young are born. The object of the northern or return migration has never been discovered, and we are still in the dark regarding both its object and its cause. We will therefore leave the subject of migration, after having watched the strange animals follow the example of their ancient ancestors, watched them treading in the footsteps of millions that have gone before. With slight change in their appearance we have seen them cross the same barrens and swim the same rivers just as they might have done countless ages before man walked the earth and became their enemy, once for the necessity of food and now for sport. If present indications may be relied on, we may hope that the same paths will continue to be used for very many years to come; yet, with the rapid changes of modern times, it is not safe to predict the future of any animal. The day may come when the migration will be a thing of the past sooner than we believe possible, and we shall have nothing to show that it ever existed except the paths cut in the weathered rocks and the modern recorder of facts—the photograph.



A Newfoundland Stag.

## CHAPTER IV.

## NEWFOUNDLAND CARIBOU FROM THE SPORTSMAN'S POINT OF VIEW.

It is probable that this volume will be read more by sportsmen than by naturalists, and those interested in a more general way in the lives of wild animals, therefore a chapter on the Caribou of Newfoundland from the sportsman's point of view may prove of some interest, even though more has been written on these animals as quarry for the hunter than from any other standpoint.

Perhaps I shall shock some of my friends who believe that, because I have done so much hunting with the camera, I am absolutely against shooting. On the contrary, I am thoroughly in favour of the sport, provided it is done decently, and that it is not made too one-sided. If the

balance between the hunter and the hunted is close enough, so that the chances are about even, the sport is greatly increased, but when everything favours the hunter, and the animal has practically no chance of escape, I cannot see where the sport or the fun comes in. For example, releasing tame pigeons from traps is certainly not sport, no matter what anyone may say to the contrary. It has none of the advantages resulting from good, healthy out-in-thewoods hunting which, though perhaps a survival of ancient savagery, does much good in stimulating our senses and making healthy men of us. The killing that is done is only an incident, often regretted the next moment by the man who does it. But killing is universal, from the highest to the lowest; it has been arranged in the general order of nature, so it cannot be quite so bad as some people would have us believe. Of course, man, with his inventive and mechanical genius, is able to put the advantage too much on his side, so that if he wishes to enjoy sport to the utmost and make it a fair competition between man's brains and animal's instinct he must avoid the most deadly weapons, otherwise the killing becomes so easy that it is no longer sport. If the hunter has true sporting instincts and the game laws are conscientiously respected, there is no reason why, within certain limitations, shooting should not be regarded as a wholesome sport. From my own point of view, the camera is a better weapon than the rifle, as it gives far more pleasure, requires infinitely greater skill and patience, not only from the technical ability to use the camera efficiently, but in the art of stalking, and it gives results that are far more satisfactory. There is no close season for the camera, no restrictions as to the size of the "bag," and no animal or bird is too small or too big to be worth photographing. I have tried both shooting and camera hunting, with the

result that I now find shooting to be almost child's play. However, others whose inclinations run along different lines will continue to derive great pleasure from the more primitive sport, and to these I offer the following suggestions and information.

In dealing with the subject, I shall endeavour to show in what way the best sport may be had, not how the animals may be most easily killed. The Caribou is not like the antelope of Africa, which is so keenly alert that practically only one way of hunting is possible for the sportsman. constant fear of the larger carnivora has made them so cautious after the countless generations of alert ancestors, that they take no chances, but live a life of nervous anxiety which alone can save them from annihilation. The Caribou of Newfoundland, on the contrary, has but few enemies, and consequently is not a really difficult animal to stalk to within shooting distance. In the past, wolves may have been fairly numerous, although there is nothing to prove such to have been the case. A few there certainly were, but even those, however long they may have inhabited the island, have almost, if not quite, disappeared. But when Newfoundland was part of the mainland, the ancestors of the present-day Caribou learned to fear these persistent hunters, and the fear has passed down through numberless generations, and an inherited tendency to watchfulness still exists, though to a rather less extent than is noticeable with the other large deer. Man from his earliest days has hunted them, with the inevitable result that the scent of the human being is held in dread. Nevertheless, the man who has hunted other big game will find that, though the Caribou stag offers a splendid trophy, this trophy can be obtained with less difficulty than any other of similar size and beauty. In fact, I might venture to say that difficulties have to be



One of the few cases in which I have seen the stag taking the lead. The stag's head is noticeable for the lack of brow antlers, one of the Caribou.

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made in order that the sport should appeal to those who care for a trophy chiefly in proportion to the hardships endured and skill demanded in earning it. No one cares to catch fish when they rise so freely to the fly that no knowledge of fishing is necessary. The fun is found in having to outwit the object of the chase, whether it be fish, flesh, or fowl, and the usual method of hunting Caribou is lacking in most of the essential elements of real sport. Still, as it may appeal to those who for some reason or other are unable to do much hard walking, or whose time is so limited that they are forced to the easiest and quickest method, I shall endeavour to describe it.

The average guide is, of course, only too anxious that his "sport" shall have good luck and get heads with the greatest ease, so that his reputation shall grow. He therefore advises the migration as the best season for the shoot. giving this advice he means well, because his experience has shown him that most of the people whom he has guided are not over-anxious for hard work, and if they can get their allowance of heads without having to walk a mile, they will be highly pleased. Then there are a few guides who are inclined to be lazy, and who for their own sakes give the same advice, as it saves the work of "packing in" the necessary outfit, and so they camp on a lake or river and select a lead within easy distance of the tent, staying there in hopes that the deer will come to them. am glad to say, are not common in Newfoundland, as the guides are usually a good lot and full of energy, never saving themselves in their efforts to give satisfaction to their It is also a great matter of pride among them that their party shall bring back good trophies—in fact, I often think that they are even more interested than the sportsmen in the results of the trip.

In the chapter on Migration, there is a more or less complete account of the conditions which govern the animals, so I shall not go into details of the state of affairs which prevails during that season. It has been seen that towards the latter part of October the northern Caribou begin their journey southward, and that they follow certain definite leads or paths. Along these leads the hunter takes his stand, selecting, of course, one which seems to be much used. If possible, his position should command an extensive view; then all the approaching herds may be scrutinised with a fieldglass before they are too near. They walk at such a rapid rate that this must be done quickly. Each stag is carefully examined to see what is the size of the horns he carries, and whether they meet the requirements of the hunter. this is done from behind a screen of firs or spruce, which the Newfoundlander calls a "gaze." If all goes well, the desirable stag comes along among his does—his place is usually about the middle of the line, for they go more or less in single file—he is not very alert, but relies on the does to keep a sharp look-out and guide him past all dangers in safety. Everything depends on the wind in this style of hunting, and if the gaze is not placed well down wind of the leads there will be little chance of success. greatest care must also be taken to avoid crossing the leads in front of the ambush. Many a good chance has been lost by not paying attention to this precaution. Men have watched a herd approach until it was almost within range, when suddenly, without any apparent reason, the animals have taken fright and bolted before a shot could be fired. But if care has been taken in choosing a suitable position, and the leads have not been defiled by the scent of man, the Caribou come on without hesitation or suspicion. The hunter, if he be a novice, usually becomes wildly excited as



A solitary doe crossing shallow river.



he watches them get nearer and nearer, and even though the stag happens to be one of only fair size, it appears to be the largest ever seen. He probably whispers to the guide that it must have at least fifty points, but is assured that thirty would be nearer the number. Perhaps the leading doe will stop for a moment when still rather far away, and the novice thinks she is about to turn back. With difficulty the guides restrain him in his desire to shoot. A moment's hesitation, and once more the grey line resumes its journey. does pass, perhaps thirty yards away, or even closer. after the other they go by-with each one that passes the stag with the gleaming horns comes nearer. Imagination is running riot in the novice's mind, and he decides that of course the guide must be wrong and the stag must be a record, for there are certainly nearly sixty points; but he says nothing, for at last the animal is almost opposite. The guide, afraid to let the novice attempt shooting the animal as it walks, gives a sudden whistle, and the whole herd stops. This is the chance. The stag presents an easy mark, yet the excitement makes the novice nervous, and as often as not he will pull the trigger without taking aim. Even at the sound of the shot the startled animals may not run more than a few yards before they will wheel round and stare in the direction of the sound. At this point the hunter will show what manner of man he is. Perhaps he will become still more wildly excited, and fire off every cartridge in rapid succession so wildly that, beyond frightening the Caribou, no harm is done, except to the guide, who considers that he has not been rewarded for his careful selection of the Probably, however, after firing the first ineffectual shot, the novice loses his attack of buck fever, and taking proper advantage of the opportunity brings down his stag with a well-placed shot.

The question is whether or not this is a sportsmanlike method of hunting big game. That it has in it a certain pleasing element of excitement there is no doubt. The hours of patient watching, then the first glimpse of the grey creatures, the anxiety as to the size of the stag, whether or not he is large enough to shoot, whether he will come near enough, and, finally, at just what moment the shot should be fired. To the man who has never stalked big game this seems ideal; he can, perhaps, think of nothing better, and his heart will beat wildly as the object of his trip to the wilds comes nearer and nearer. To the older sportsman there is excitement only if the stag is a really fine one. Then he, too, may become as nervous as the greenhorn, with the result that he sometimes loses his head, and the Caribou's head too. Still, I rather question the sport of this method of shooting from ambush; the game is far too one-sided, for the man need know nothing of the art of hunting, and if he is even a reasonably good shot, the killing of the animal, if it comes within fair range, is a matter of absolute certainty. Unfortunately, it is indulged in to such a great extent that the man who selects his position frequently finds that ahead of him, on the same lead, there may be several other parties, both meat hunters and sportsmen, who take their pick of the stags before he has a chance. Mr. Selous had this experience, and in writing on the subject he says, "I must say that I felt thoroughly disgusted with the whole business. In the first place, to sit on one spot for hours lying in wait for game, is not hunting; and, although under favourable conditions it may be a deadly way of killing Caribou, it is not a form of sport which would appeal to me under any circumstances. But when pursued in competition with, and in the midst of numerous other gunners, I could see no redeeming point in it whatever."

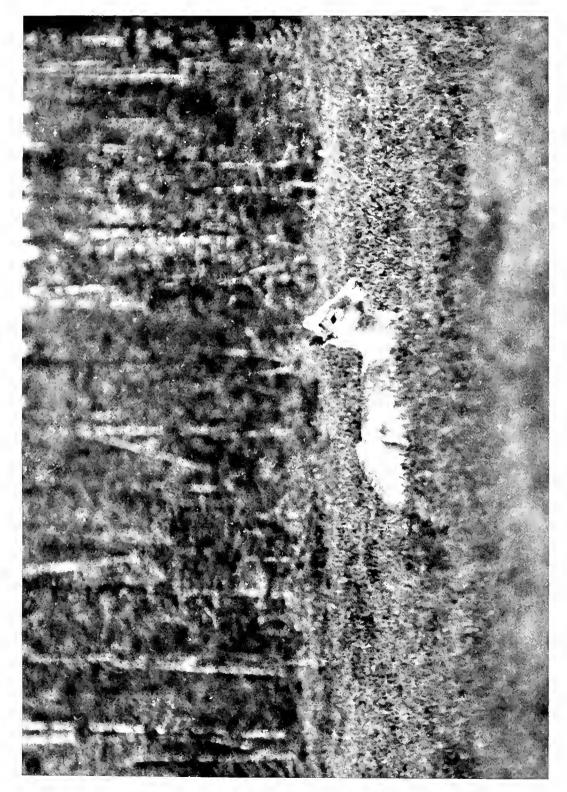


The day being fine, this herd is taking it casy, travelling in a leisurely fashion across the barrens. The stag is, as usual, near the centre of the line. In the far distance another herd may be dimly seen.

Further on in the same book ("Hunting Trips in North America") he says, "As my experiences of the previous day had thoroughly disgusted me, I told my guide that he must take me for a long day's walk through the country, as I would not again sit on a 'lead' and wait for Caribou to come to He acknowledged that it was a poor form of sport, but said that at this time of year it paid better than walking and looking for Caribou, as the animals were all travelling, and so seldom gave an opportunity for a stalk," etc. This is true enough. During the migration the guides are thoroughly averse to any unnecessary walking being done, not only because the chance of getting good shooting is lessened for the man who does the walking, but because the crossing and re-crossing of the leads puts the animals on the alert. They know that their enemy, man, is about, and they proceed with extra caution, or even turn back to await a more propitious time. All of which upsets the plans of other hunters who have taken up their positions on good leads. I remember hearing a guide describe a sportsman who had refused to sit still and wait for the animals to come. He insisted on keeping on the tramp all day long, and as the guide remarked with bitterness, "he spoiled all the best leads for many miles." This shows that if a man wants to hunt during the migration, he can only retain his popularity by following the customs of the country, or choose his hunting-ground away from where the leads are being watched by those who like the easiest and surest methods that are allowed. Killing the Caribou in the water would be the surest of all ways, but, fortunately, it is absolutely Were it allowed, rifles would not be necessary, forbidden. for the wretched beasts would be followed with a light, swift boat, and easily killed with an axe.

In order to make Caribou-shooting a really splendid sport,

the hunter should select the season immediately before the rut, or as soon as the stags have lost the velvet covering of their horns. At this time the animal has to be stalked, and the stalking will be found to offer plenty of excitement, and test the endurance of the hunter to its utmost. As stated elsewhere, the country is a difficult one to travel through, owing to the softness of the innumerable bogs, and the extraordinary denseness of the forests, which severely try the patience of the man and the strength of his clothing. Occasionally one comes upon a stretch of fine, hard, open country, over which walking is a pleasure; but that is not where the best shooting is to be found. If I were going after Caribou, I should take the latter half of September; then the stag is at his best. He is so keenly alert that the most careful stalking will be found necessary; good shooting will also be called for. Unlike the watching from blinds when shots usually range between thirty and forty, and seldom at distances over one hundred yards, long shots are often the only ones to be obtained. Quick work is demanded, and in every way the hunting is of a kind that appeals to the real sportsman. J. G. Millais declares that the best shooting is to be had along the banks of rivers, as it calls for such quick action, not only in the matter of shooting, but in deciding whether or not a head is large enough to be desirable. Sometimes at first glance the horns appear to be first-rate, both large and having many points, when a closer examination reveals a lack of weight and symmetry. As three stags only are allowed, it is advisable to select heads which are worth taking home-worthy trophies-though there is such a thing as being too particular and letting everything go by till the day comes when packing up becomes a doleful necessity, doubly doleful if no horns have been added to the outfit. Rather than go back empty-handed, some men will take



While this fawn was lying down on the open barren. I succeeded in crawling up to within about nine yards and the photograph.



anything, even though it may be nothing better than a twelve or fifteen pointer. That is their look-out. But even though they have it beautifully mounted, it will never be an object of either interest or satisfaction, except as a reminder of the I have known both of these things happen. sportsman was determined not to fire a shot unless a really large head could be found—nothing less than a forty pointer would satisfy his requirements. During the first two weeks of his trip he saw a number of fairly good stags, carrying heads of from twenty-eight to thirty-five points. These he let pass, notwithstanding the warning and importunities of his guide, who considered it a shame not to take anything over thirty points. But my friend was decided in his view, and refused to be coerced. When the last week came, he would then take those smaller heads, if nothing better offered. He never saw another stag, small or large, and came home empty-handed and very much disappointed, while his guide was utterly disgusted with him, for the trip had been a very hard one. Another man, having heard of this bad luck, made up his mind not to be caught in a similar way. had a month at his disposal, and during the first two weeks shot two small stags, both with considerably under thirty points. This left him with one still to get, and he decided that it must be a big one, or he would not shoot. Nothing fine enough could be found till within three or four days of his time. Then a splendid stag was seen. It was very shy, and after spending many hours in attempts to approach within reasonable range, he finally had to be content with a very long and unsuccessful shot. So the stag got away, and on the last day he had to be satisfied with a miserable little twentytwo pointer, as he was determined not to return without his full allowance of three.

It is scarcely possible to offer advice as to where the

best September shooting is to be found. The choice of country rests usually with the guide, who, if he knows his job, can nearly always give helpful suggestions. If I advised going to the upper part of the northern peninsula and your guide had never been there, and consequently was not familiar with the country, he would make objective that the country is a superconditional to the country. tions and tell you of a much better region. Nevertheless, that is a splendid district, although hard to reach. The stags are fairly numerous, and, not having been very much hunted, the large ones are still there. Some men say there is no country like the Gander River region. This also is rather difficult to reach, but some of the finest heads have come from there. Millais justly calls it a "Hunters' Paradise," his enthusiasm being based on the excellent luck he had in getting fine stags. The Exploits also calls seductively to those who have enjoyed good shooting near its banks. At the lower end of Grand Lake some fine heads have been taken, so also at the back of Harry's Mountain, east of Grand Lake, there are many stags during the September season. I do not care to take the responsibility of saying that any one place is the best in a country so large and so little known. Seasons change, and what is the best country this year may be the worst next year. If your time is short, be all the more careful to get a first-class guide, and follow his advice. If your time is not limited, and you care for the hardships of exploring, leave the beaten track and go in search of new ground. It will be far more interesting, even though you do not find record heads. But remember what has been written in the chapter on Camping, and "go light"; take not an ounce that is unnecessary. With a compact and light outfit you will go further and fare better.



The same fawn as the one shown on previous page photograph,d as it got up and started off,

In hunting the Caribou, quietness is essential. Never break a twig if you can avoid it, for a cracking branch makes a noise which carries far and may give warning of your approach to the very stag you particularly want. Equally important is it to keep a sharp look-out *at all* times, especially when entering a barren, where a stag may be sleeping, for under such conditions they are hard to see. Among the numerous grey dead stumps and mosscovered low trees, the colour of the Caribou is so inconspicuous that the untrained eye will fail to detect the animal even at close range. The first intimation will be a glimpse of a disappearing patch of white, as the Caribou vanishes into the woods. The success of big game shooting largely depends on seeing the game before the game sees you. When the stags are feeding on the open barrens they may be stalked with comparative ease, provided no movement is made while they have their heads up. No matter what may be your position, keep absolutely quiet until feeding is resumed, for when the head is down they do not see much beyond the food they are eating. Always be sure that the wind is in the right direction, otherwise there is no chance of success, for the animals are very keen of scent. So, also, is their hearing acute. Where there are does with the stag, stalking is always far more difficult, as one will nearly always be doing sentry duty while the rest are feeding; and to circumvent a watching doe requires very careful calculation and clever stalking. All things considered, the Caribou of Newfoundland is not as alert as any other deer that I know of, and is therefore more readily approached. There is, of course, great variation among them, some being extremely alert and difficult to stalk, while others are so absurdly tame that they will allow a

man to walk right up to within a few yards before taking fright. Curiosity is often a noticeable failing with them; when once it is aroused they will go to almost any lengths to satisfy it. I do not, however, advise the hunter to count too much on it, for the very thing which you imagine will tempt this curiosity will as likely as not frighten them away. Sometimes a strange noise will make them very inquisitive, and they will come within a few feet to find out what it is. Then, occasionally, a white handkerchief will have the same effect.

Immediately before the mating season the stags may be called by a peculiar low grunt, which must not be repeated too frequently; just often enough to arouse but not satisfy their curiosity. I have never seen an instance of them coming any distance in reply to the call—a couple of hundred yards at most—and it does not appear to excite them to any great extent, so in this respect they are quite unlike the Moose. Calling is not much resorted to, except when a stag has been frightened and has started to run, then a properly delivered grunt will occasionally cause him to stop and perhaps return to investigate. If the wind is in the right direction and there are no does present, they sometimes come ridiculously near, so that shooting is really too easy to be interesting.

In advising the September season as the best for those who are keen hunters and do not object to plenty of hard work—and Caribou stalking can be as full of hardships as any shooting I know of, owing to the extremely difficult walking—there is another reason, apart from the greater alertness of the animal, which should of itself be sufficient inducement for selecting this time of the year. It always seems a pity, if not worse, to kill any large animal which cannot be used for food; not only is it a waste of life, but the primary



A suspicious herd. Something has warned them of my proximity; probably a shift of wind has carried the scent. Whether the animal on the right is a young stag or an unusually fine doe I am not quite sure.

incentive to hunting is the procuring of meat in such a way that the best sporting instinct shall be satisfied. To kill simply for the sake of a pair of horns is not altogether satisfactory to most of us. The horns are the trophy which appeal to our vanity; we like to show them to our friends, and they give us an excuse for telling how the animal was shot, and other-to ourselves, at least-interesting details of the trip. But we do like to think the need of food in the wilds was part of the reason for the killing. makes our comfortably elastic conscience more easy, so that we are pleased with ourselves. Of course, I know perfectly well we would not express this so bluntly before our friends, or even to ourselves, any more than we like to discuss the feeling of regret which so often comes when we see that we have really killed a large beast. Most of us have experienced that moment of remorse. Even guides, who all their lives have either hunted or been with hunters, have told me how they frequently would have given anything to have brought the fallen animal back to life. When a Caribou stag is shot either during (which is forbidden by law) or soon after the mating season, it is useless for food, as the flesh has such a pungent odour that none but those with the strongest of stomachs could touch it. The texture is almost like that of a sponge; the meat is feverish and so disgusting that even the sight of it is nauseating. The man who shoots these animals after the middle of October, and until the horns are dropped, must therefore not count on the stag as furnishing his supply of meat for camp use. This, of course, does not apply to the young stags, whose passions are not thoroughly developed.

The game laws, in full, will be found at the end of this volume, placed there so that any changes which may be made from time to time can be inserted without interfering

with the make-up of the book; but the sportsman should always procure a copy of the existing game regulations before undertaking a journey to the island. According to the present game laws of Newfoundland, shooting Caribou is allowed after the first day of August; it is quite a question whether so early a season is advisable. To begin with, from the sportsman's point of view, it is scarcely worth while killing the stags while their horns are still in the velvet, and soft, as they are until September. Such horns are difficult to preserve, at least until the velvet begins to dry. Then, also, during the warm weather of August, the meat does not keep for any length of time, unless salted or smoked, so that most of it is likely to spoil before it can be used. Of course, it is a convenience, when out on a fishing trip in a wild country, to be able to procure a piece of fresh meat, as fish becomes monotonous as a steady diet, and this is especially true of salmon and trout. Besides these reasons, this early season has a disadvantage in that it allows fire-arms to be carried into the woods at a time when they are better left behind, as no shooting of other game, except bear (for these, I believe, there is no close season), is allowed.

The game laws of Newfoundland are, I consider, as nearly perfect as any in existence; they are fair to every class, and give no particular advantage to those who are blessed with sufficient of this world's goods to enable them to control both shooting and fishing to the exclusion of the less fortunate whose purse is out of all proportion to their love of sport. Other countries are beginning to realise their mistake in having allowed the few, who are rich, to take up great tracts of land. In wild country, both fishing and shooting lands should be open to all, controlled by sensible laws, and maintained by the payment of reasonable licence. Not only does this method stimulate a greater interest among the



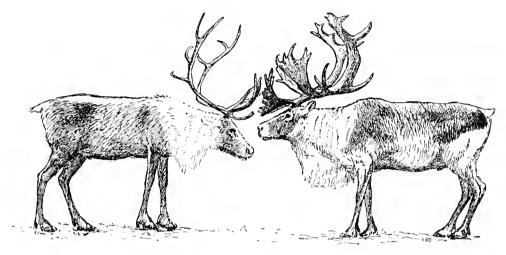
Meat hunters bringing down their winter's meat, consisting of nine Caribou; too much to be carried in the boat, so it is placed on a raft and taken slowly to where the railway crosses the river.

people for the better preservation of the game, and this is obviously of the utmost importance, but it brings more money into the country, benefiting a great many people. Provision dealers, outfitters, guides, and indirectly many others are helped. When either fishing or shooting rights are leased or sold, very few gain employment, and it frequently happens that the places are only visited by their owners or lessees once in a number of years. This is all very well for the game, as it apparently has a better chance to increase, but I believe far more poaching goes on in the private reserves than in the open free country. Newfoundland has jealously guarded her rights, and no man may own exclusive fishing or shooting. She has been quick to take advantage of new conditions and profit by the experience of others. When the railway opened up the country, it was found that during the Caribou's southerly migration people flocked to the region between Grand Lake and Kitty's Brook Falls, chiefly near Howley, and the animals were literally slaughtered as they crossed the tracks. Had this continued, it is difficult to say what would have happened. Harm, certainly, would have resulted. The migration route would have been changed, or perhaps the habit would have been entirely abandoned, so that the herds would probably have suffered greatly. The authorities made a reserve of this region (see map), and all shooting was absolutely forbidden within its limits. This put a stop to the disgusting slaughter, but men would take boats, with the apparent intention of going up Sandy River to the open country north of the reserve; instead of continuing up river, they would camp within, perhaps, a couple of miles of the railway, and do their shooting with little fear of detection. The meat was then brought down river and no one was the wiser. change was therefore made—about three or four years ago, I

think—and camping was forbidden on the reserve.¹ To make sure that the law is enforced, the district is patrolled very thoroughly during the entire season of the migration. This naturally caused a certain amount of dissatisfaction among the meat hunters, who now have to go rather further afield for their supply, but it has an excellent effect on the Caribou, as they can pursue their journey over the region where they concentrate in greater numbers with little fear of being molested; so it is probable that they will persist in the habit.

Another sensible law is that guides shall have to obtain a licence, and that they may not shoot while out with parties. Neither may antlers or skins be exported, and the sale of Caribou meat "in cans, tins, or other packages" is prohibited. Regarding the number of stags which may be shot on a licence there is some possible room for argument. If each sportsman shoots three stags, and each native is allowed two stags and one doe, the proportion of stags will eventually be too small, and there will almost certainly be a falling-off in the vigour of the herds. It is a question which should be very carefully considered. number of does born each year among all the deer usually exceeds that of the stags, so that if a proper balance is to be maintained it may be found advisable to allow more does to be killed. The meat-hunters will always take a barren or dry doe by preference, as they are in better condition than either stags or does with fawns. It is impossible to say for certain whether these does are habitually barren, or whether they are among the number that miss occasional If the former were the case, the shooting of them would not be harmful.

<sup>&</sup>lt;sup>1</sup> The authorities very kindly granted me permission to work on the reserve, as I carried no fire-arms.



Reindeer and Caribou.

## CHAPTER V.

## THE NEWFOUNDLAND CARIBOU AS A SPECIES.

HAVING devoted the greater part of my life to the study of living wild animals and their habits rather than their measurements, cranial conformations and other structural differences and peculiarities, I feel that in attempting any explanation of the specific difference between the Caribou of Newfoundland and that of other species and sub-species I shall be treading on extremely thin ice.

First of all, I might say that I do not want to hurt the feelings of those whose life-work is the determining and describing of species, and who, perhaps, never see the wild animals themselves in a live state. But I confess that the everlasting dividings and sub-dividings do not seem to me to serve any useful purpose, unless the conclusions are really based on something both tangible and constant. For evidence of the frequent slenderness of the claims we do not have to look far, for it is only too common an occurrence

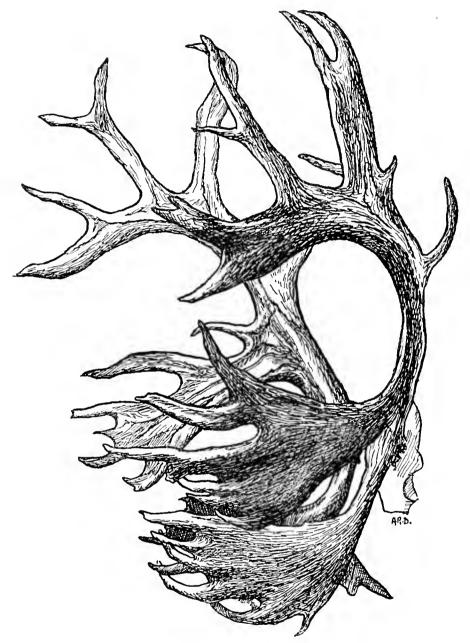


Fig. 1.

Newfoundland Stag (Rangifer Terranova, Bangs).

Picked up by H. Hesketh Prichard.

Perhaps the finest head in existence. 49 points.

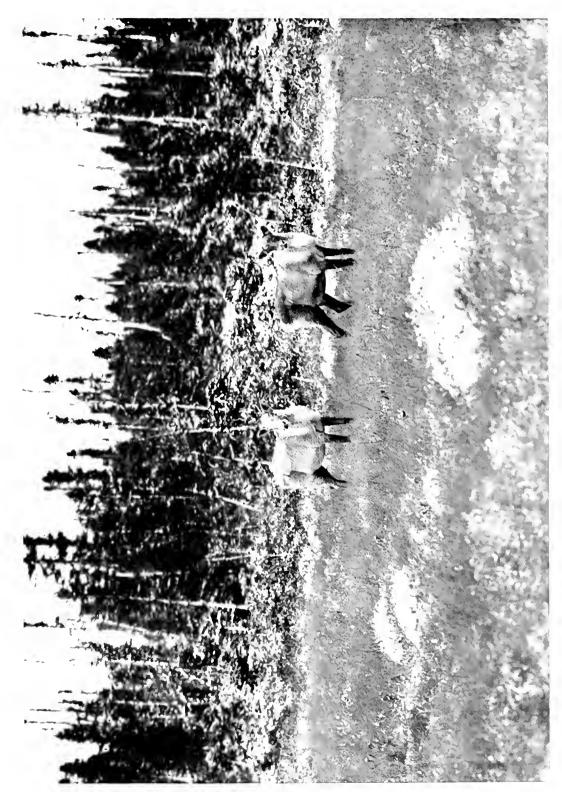
(From photo.)

to see these claims absolutely refuted. This is especially true of plants, when, according to one authority, a species will be divided into an amazing number of sub-divisions, while another equally reliable authority refuses to acknowledge the existence of more than perhaps one or two, claiming the others to be only examples of individual variation. Simplicity rather than complexity should be the rule, and reduction rather than multiplication of species should prevail. The abandoning of the positive craze for adding to the list of names without unquestionable proof would save much of the confusion which exists to-day, and when two or more animals can possibly be considered as of the same species, even though minor points have to be conceded, it is certainly better to ignore the slight differences rather than to separate them. I do not mean to say that structural differences should be ignored, for they, of course, must be considered, but geographical variations are so great and so numerous, that we may be led into most dismal confusion if we attempt to make each local race a sub-species. Yet this is what is happening, not only with the larger mammals, but also with birds and plants.

Species are, we all believe, made by geographical conditions, as animals conform to their environment to a great extent; but until the different parts of the original herd or race become separated by some natural division, the extremes of the development, even though they are conspicuous, do not entitle them to be called either different species or sub-species when animals in the intermediate stages of development may still be found in existence. In this way all the intergrades could be arranged side by side, to show how the local conditions have affected the appearance of the animals rather than how many possible sub-species may be in process of

development. If we take the American quail (Colinus virginianus) from Massachusetts, practically its northern limit, and compare it with one from Florida, we would see that there is a marked difference between the two. Then let us take a bird from every hundred miles of the intervening distance, and lay them in a row. All the intergradations would be there, showing the bird to be the same, with coloration varied by habitat. But if we examine the cheewink (Pipilo erythropthalmus) of the north, and compare it with the southern variety from Florida, we would find that, besides the slight modification in feather colours, the eye is red instead of very dark brown or black, and that their distinction is abrupt and constant. We are therefore forced to the conclusion that it is an entirely different bird, deserving a separate name.

Now, with the Caribou, from about four species a comparatively few years ago we have to-day, perhaps, fifteen more or less distinct forms, which are called species, and which are broadly divided into two classes, called the Barren Ground and Woodland. this particular classification should be made is rather a mystery to anyone who has studied the Caribou, for if a name should mean anything descriptive of the animal's habits, we would naturally expect the two forms to live according to their names, whereas they by no means always do so. Let us take the Newfoundland Caribou, which is classed among the woodland species. It spends fully as much, if not more, of its life in the open barren as it does in the forests, and I believe the same to be true of those found in Labrador. I expect the only true barren land species, so far as habitat is concerned, are those which live in the treeless country of the far north. It is



One of the many types of does-lightly built body and very dark face. The fawn is unusually large and heavy.

all very well to say that the two groups present such marked difference of horn that they can always be distinguished. I very much doubt whether such is the case. The variation in horns is so great in different individuals that it does not seem possible to state clearly what con-



Newfoundland Caribou (Rangifer Terranova, Bangs).
49 points. A perfect head, compact and even.
Shot Sept., 1904, by J. G. Millais.

stitutes the disparity between those of the Woodland and the Barren Ground groups. If we accept the difference in horns as evidence of species, we are simply manufacturing trouble for ourselves, for nothing is less constant than the so-called specific form of the antlers of various groups of reindeer. A glance at the drawings of the horns of various types will demonstrate the

danger of classifying the species by the antlers. Not only is there enormous variation in the horns of the different individuals, but each year's growth on a single animal may show marked peculiarities.



Newfoundland Caribou (Rangifer Terranova, Bangs).

The points on anterior margin of beam are seldom found.

Shot by J. G. Millais on Upper Gander, October, 1905.

Then, again, there is the question of age to consider. Are we only to compare the horns of the perfectly mature stag—that is to say, one of about eight years old, when the horn is probably at its best—or of the younger or the older animal? And how are we to determine the age with certainty from the material usually sent in to



One of the many types of does; the noticeable teatures being the heavy build, ugly horns, and very light colour, especially of the face.

the museums, and from which species are often described? It is generally considered true that the same species grows



Fig. 4.

Newfoundland Caribou (Rangifer Terranova, Bangs).

Length of main beam 29½ inches, spread 28 inches.

37 points. Very heavy type.

(From Madison Grant's Article in the New York Zoological Society's Report.)

different types of horns, according to the locality in which it lives—this assumption being often based on a couple of very good heads which have been taken in, let us say, a high region of the animal's range, and compared with



Fig. 5.

Newfoundland Caribou (Rangifer Terrænovæ, Bangs).

Shot by F. C. Selous.

A fine type, but not large.

(From sketch.)

several poor heads taken from the lower lands; whereas a series taken from both localities would, most probably, show us that the heads averaged about the same in general conformation. In Newfoundland, men claim that certain parts of the island yield very large horns, while those of the migratory herds are smaller. Such a statement, though true in itself, proves absolutely nothing, because



Newfound and Caribou (Rangifer Terranova, Bangs).
43 points. An unusually fine head.
(From photo lent by H. Hesketh Prichard.)

the greater number of stags are obtained from among the herds that so regularly cross certain well-known regions each year on their way south, and consequently the finest stags are killed off, usually before they reach their maximum

growth and development. I have seen ample evidence of this during the many seasons I have spent directly on the line of the southerly migration. In the reserve on which shoot-



Newfoundland Caribou (Rangifer Terranova, Bangs).
Red Indian Lake. Length of beam 41 inches.
36 points.

A rather unusual type, the bays being very long and straggling.

From Madison Grant's Article in the New York Zoological Society's Report.)

ing is forbidden, I have noticed that, as a rule, within half-an-hour after a fairly good stag has passed me, I have heard shots fired. This time would easily allow the animals to get clear of the reserve. In some cases I have been able to practically prove that the shots were fired at the very stags I had so recently seen. This constant weeding out of the big stags keeps down the average size of this lot of Caribou without much doubt. Yet I have seen a few heads among them which would compare favourably with the very best found in any part of the island, though of course the percentage of the big fellows would be smaller. regard to the shape of the horns, there is so much individual variation

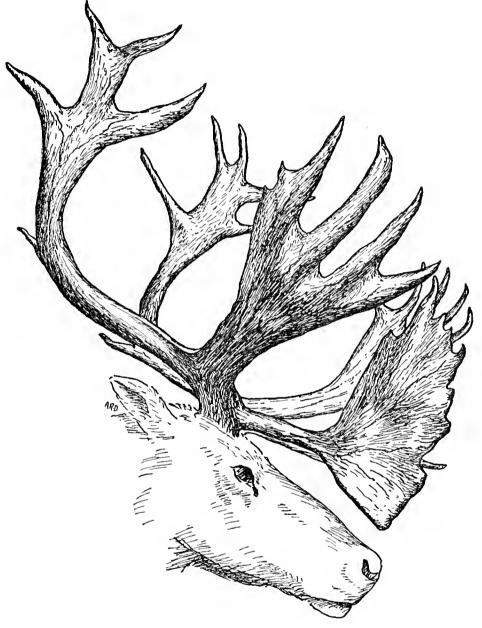


Fig. 8.

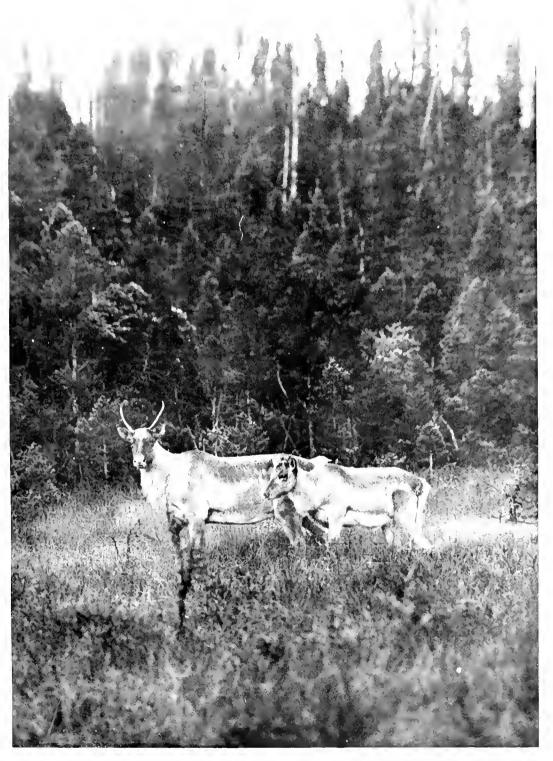
Newfoundland Caribou (Rangifer Terranova, Bangs).

Shot by F. C. Selous.

A small head with good bays and one good brow.

that any description of the type must of necessity be vague. This is particularly true of the very fine heads carrying forty points and over. It would be extremely difficult to find two which would correspond to the same description. In a general way the Newfoundland stag carries a more massive antler than that carried by even its closest cousins. The palmation is especially noticeable, as the bays are frequently very broad and flat, while the brow antlers, or snow shovels, as they are sometimes wrongly called, are of extraordinary size, extending well down to the nose and counting a great many points, yet it may be said that this is equally true of Osborn's Caribou (see Fig. 14), though perhaps the well-developed double brows are more frequently found in the Newfoundland variety.

As the animal grows old and passes his prime, there is a marked tendency for the horns to develop great length with a corresponding decrease in the number of points. Thus the horn becomes spindly and uninteresting, except in the matter of inches, for the measurement along the beam gives the idea of a very fine head. The younger stags, from four to six years of age, carry horns of greater uniformity of shape, some of them being remarkably symmetrical and beautiful, though not large, and with but few points. Many of them are so compact, that they bear a striking resemblance to the horns of the white-tail deer. It is unfortunate that photographs of horns do not usually give a correct idea of the form, for two reasons. First, because they are seldom photographed from the same point of view, so that satisfactory comparisons cannot be made; second, the length of focus of the lens plays an important part. For instance, with a short focus lens, a picture made from the front view distorts the perspective, and makes the brows and bays unduly



One of the types of does. This represents about the average build; the face is, however, rather darker than is usual.

prominent, while the tops are decreased, so that no idea of their size and length is given. To obviate these defects, a long focus lens should always be used, and the photographs should be made from at least two definite points of view, one directly in front and one from the side. In addition to these,



Newfoundland Caribou (Rangifer Montanus, Seton).

An extremely fine head.
(National Collection of Heads and Horns, New York Zoological Park.)

a three-quarter front view would also be good. In this way the respective merits of different heads could be compared to much better advantage. I may be criticised for not living up to my theories, but it happens that I have not the time or opportunity to make the pictures in the way that I should like; I have had to depend on the photographs furnished to



Newfoundland Stag (Rangifer Terrænovæ, Bangs).

This head is presumably of an old stag rather past its prime.

(From photo lent by H. Hesketh Prichard.)

me by the kindness of my friends, from which I have made

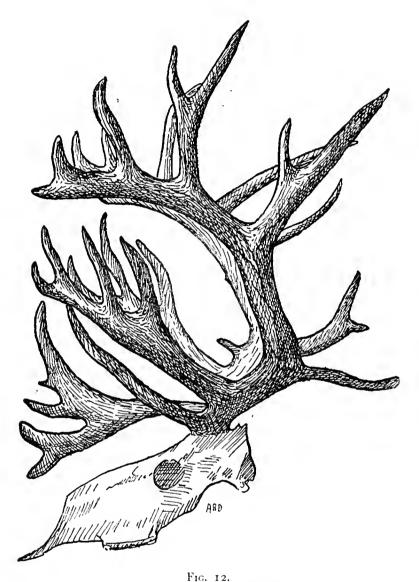
the accompanying drawings.

The number of points found on the best Newfoundland horns is between forty and fifty; a very occasional head has been obtained with over fifty points. They are, however, so rare that they can scarcely be considered normal. Their



Fig. 11. Newfoundland Doe. 20 points.

total length along the outer curve rarely, if ever, exceeds fifty inches, as compared with sixty inches of the Barren Ground Caribou (R. arcticus). The Newfoundland does have small and rather insignificant horns, ranging commonly from six to about twenty-two inches in length, and possessing from two to twenty-eight points, six or seven being the normal number.



Mountain Caribou (Rangifer Montanus, Seton).
Woodland group. Length of beam, 35 inches; points, 31.
(From Madison Grant's Article in New York Zoological Society's Report.)

Unlike most of the other species, they are frequently horn-less. Mr. H. Hesketh Prichard, in writing on the "Caribou of Labrador and Eastern Canada," *Badminton Magazine*, says, "On the barrens (of Labrador) I have never seen a

hornless doe, and, if such specimens exist, I should be inclined to regard them as freaks. Moreover, not only have

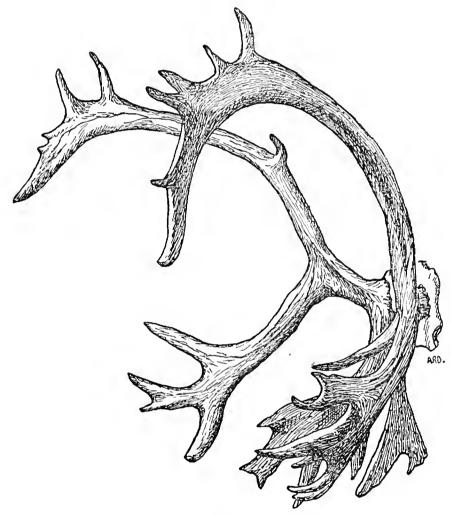


Fig. 13.
Woodland Caribou (Rangifer Caribou, Gmelin).
Southern type, from Quebec.
(From photo lent by H. Hesketh Prichard.)

the does of the barrens horns, but these horns are long and display many points. Thirteen or fourteen tines are quite common," etc. Mr. Selous states that the does of R. montanus and R. osborni are also seldom, or never, hornless. So it

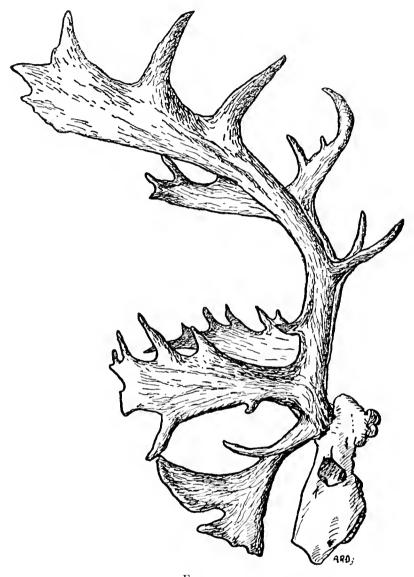


Fig. 14.
Osborn's Caribou (Rangifer Osborni, Allen).
Woodland group. From Cassiar Mountains, British Columbia.
Length of main beam, 44 inches. 36 points.
(From Madison Grant's Article in New York Zoological Society's Report.)

would seem that, in this respect, the Newfoundland Caribou differ slightly from the various other species. It would be interesting to know whether the tendency, in the way of development, is towards increase or decrease of the growth of horn; and whether, in the far distant future, the Newfoundland does will be entirely hornless. If we may judge from other species of deer, it would seem that the size of horns is gradually diminishing.

In considering the question as to which of the various groups of Caribou should be regarded as species, there is some stress laid on the size of the various geographical races; but it does not seem reasonable that size, unless it is extremely marked, should be taken as evidence of distinctiveness, because the conditions under which the animal lives must necessarily have decided effect on its growth. For instance, the Kenai Peninsula (Alaska) appears to produce types of unusual size, as, for example, the Kadiak bear, which is by far the largest of the grizzlies. So also is Stone's Caribou of that region the largest of the so-called Barren Ground group. Yet it is, probably, only a geographical race of the Osborn and mountain varieties, even though these are of the Woodland group, while Stone's is not supposed to be closely allied to Grant's, which is considered to belong to the Barren Ground lot. If this does not make a confusion of species, groups and races, it is hard to say what would.

For the possible benefit of the reader, the following tables of species are given. European classification:

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1. Rangifer tarandus typicus.
                     spitzbergensis.
                "
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caribou. 3.

terrænovæ. 4.

groenlandicus. >> arcticus.



groenlandicus.

granti. stonci.

\$\\\ \alpha \\ \

pearyi.

Rangifer arcticus.

terrænovæ.

caribou.

montanus.

osborni.

Map showing approximate distribution of the Caribou, from various Notes: Madison Grant's Articles and Map, New York Zoological Society's Report, and Seton's "Life Historics of Northern Animals."

Mr. Madison Grant, who believes in the separation of the two groups—I. Barren Ground, and II. Woodland—classifies them as follows:

#### L BARREN GROUND CARIBOU.

### A. European Species.

- Northern Europe and Siberia. 1. Rangifer tarandus ...
- spitzbergensis ... Spitzbergen.
- 3. Undescribed Siberian races Siberia.

### B. American Species.

- Greenland. I. Rangifer groenlandicus
- ... Ellesmere Island. pearyi
- Extreme North of America and arcticus ... the Arctic Islands.
- Alaskan Peninsula. granti
- Cook Inlet. stonei
- 5. ,, stone: ...6. Undescribed American races.

#### II. WOODLAND CARIBOU.

## American Species.

- 1. Rangifer terrænovæ Newfoundland.
- ... Canada, Maine, west to Manicaribou ...
- Rocky Mountains, from Idaho montanus to Central British Columbia.
- osborni ... Cassiar Mountains of British Columbia, northward.
- 5. Undescribed American forms Alaska and Arctic Canada.

In many of these species there is considerable uncertainty, which is acknowledged by those who have been instrumental in making the separations, the reasons being that, in some instances, there has been insufficient material to work on, and in others there has been difficulty in making careful examination of the country between the ranges of some of these described species. When the country has been thoroughly explored, and a sufficient number of animals taken, it will probably be acknowledged that what are now

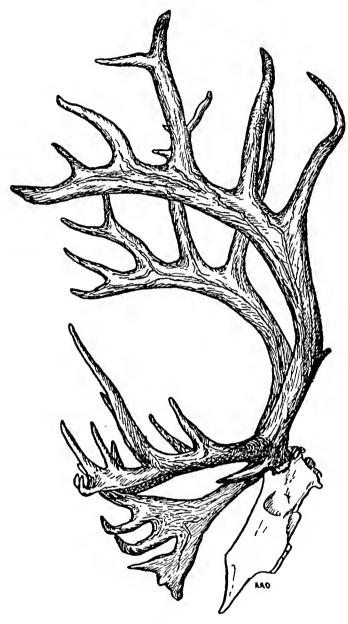


Fig. 15.

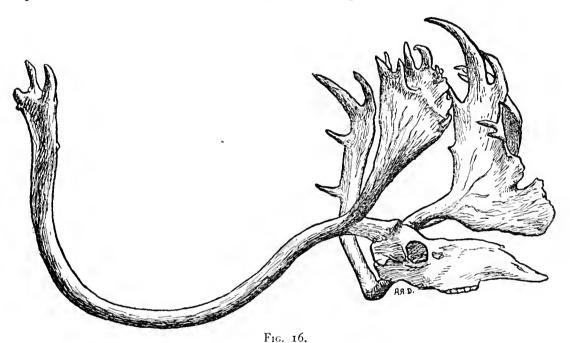
Stone's Caribou. (Type.) (Rangifer Stonei, Allen.)

Barren Ground group. From Cook Inlet, Alaska.

Length of main beam, 49 inches. 36 points.

(From Madison Grant's Article in New York Zoological Society's Report.)

considered species, in some cases, merge so gradually in their intergradations, that they will be regarded simply as geographical races. If not, what shall we call the dividing line between some of the races, which we even now believe have every intergrade between the two extremes of variation? Just as some of the antelopes and gazelles of Africa are



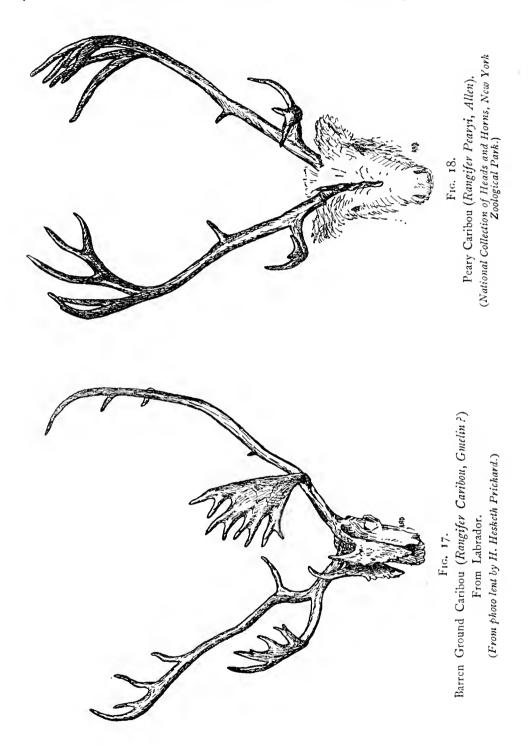
Barren Ground Caribou (Rangifer Arcticus, Rich.).

From Fort Chimo, North Labrador.

Length of main beam, 58 inches.

(From Madison Grant's Article in New York Zoological Society's Report.)

becoming hopelessly confused, through the attempt that is being made to make new species with each slight change in the curve of a horn, and as the giraffe is being divided up with each slight change in colour, so are the Caribou going to become more and more mixed if a halt is not called. In the end, it will be victory, I feel sure, for the "lumpers" and defeat for the "splitters."



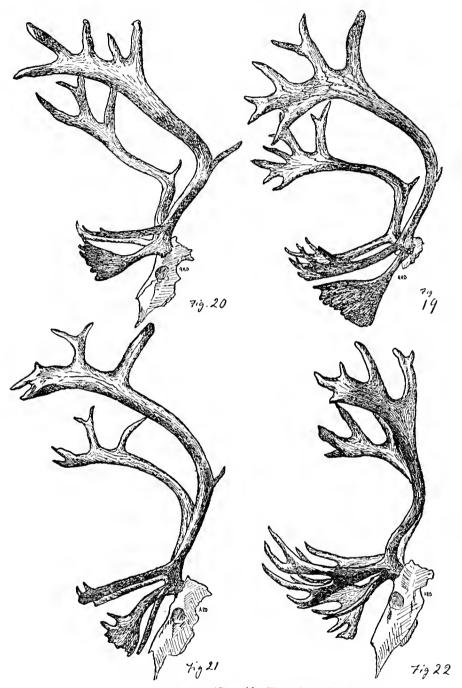


Fig. 19. Siberian Reindeer (Rangifer Terandus, Heim).

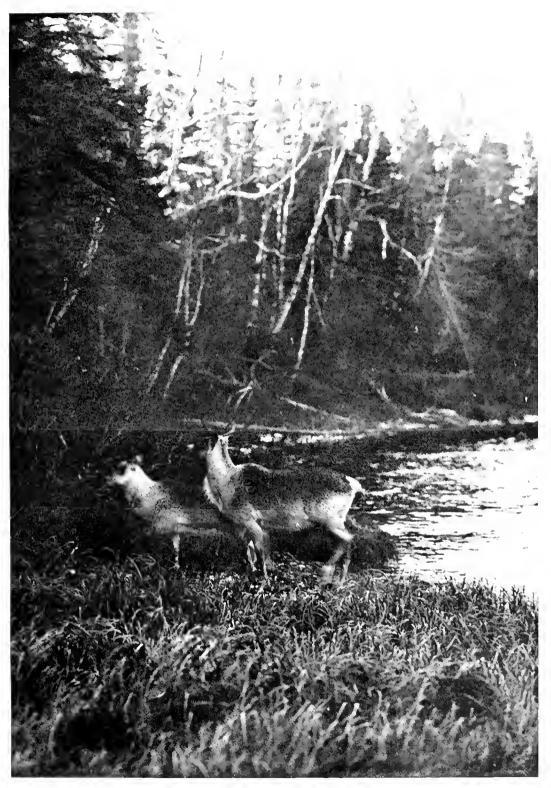
Fig. 20. Greenland Caribou (Rangifer Groenlandicus, Gmel.).

Fig. 21. Barren Ground Caribou (Rangifer Arcticus, Rich.).

Fig. 22. Grant's Caribou (Rangifer Granti, Allen). Alaska Peninsula.

(From Madison Grant's Article in New York Zoological Society's Report.)

It is conceded, by even the most extreme enthusiasts among the "splitters," that the variation in horn formation of the reindeer is exceedingly variable and undefinable, and that size is a matter largely of environment, and consequently very unsatisfactory as a proof of species. What, then, about colour? Surely this is equally It is not as if the Caribou had a patterned pelage, and that the pattern varied with the different groups, geographical or otherwise. Nor as if their colour was constant throughout the year; we know that, generally speaking, it is not, but that it turns lighter during the winter. Now, in order to describe the colour, so that it would be of any value, the animals should be compared when their summer coats are perfect, and perhaps also in the middle of winter. But, even then, would anything be proved? Possibly, but by no means certainly, for the individual colouring is so extremely variable. A glance at the photographs illustrating this volume will convince any one of the extraordinary individual difference that may be found among the animals, not only of one country, but of one herd. In a painting I once exhibited of Caribou in their autumn dress, I was severely criticised by a man who had been several times to Newfoundland for showing one of the does almost white. He had never seen one like it, and so did not believe it was correct. Yet it is a common thing to see at least one in a herd that is practically entirely white, although not an albino. This is true equally of stags and does, and may be seen from some of the photographs. Whether it correlates with age or some other condition, I cannot say, but evidence is rather in favour of the theory of age, as it is usually the stags which have spindly horns, or, at least, horns that are on the verge of "going back," that are most conspicuously white before winter has actually begun.



This shows the graceful pose of a Caribon doe, which is so different from the usual conception of these animals.

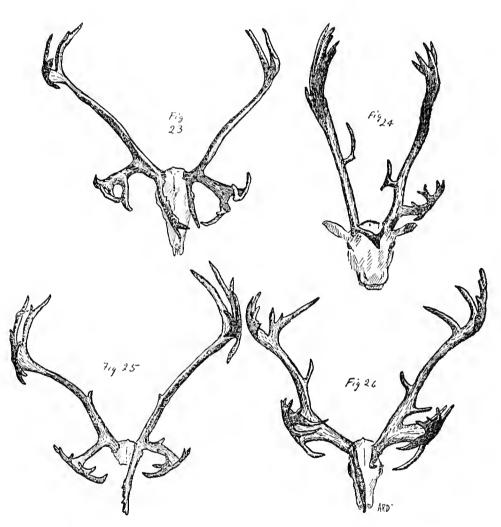
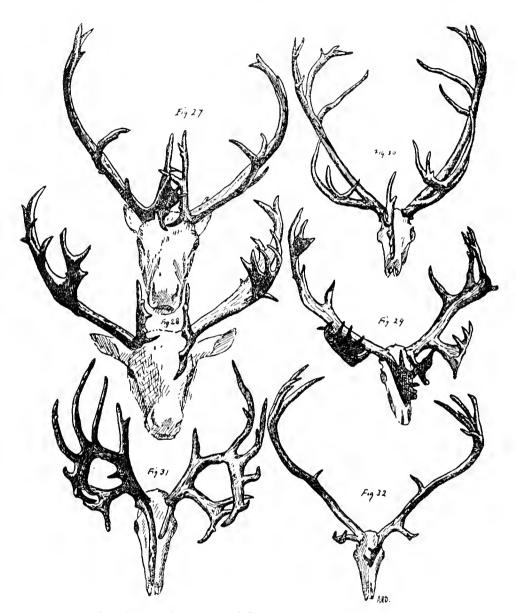


Fig. 23. Grant's Caribou (Barren ground), Alaska Peninsula. Spread,  $35\frac{1}{8}$  inches. See side view of same head, Fig. 22.

- Fig. 24. Woodland Caribou, Northern Quebec. Shot by Hesketh Prichard.
- Fig. 25. Siberian Caribou. Spread,  $33\frac{1}{2}$  inches. See side view of same head, Fig. 19.
- Fig. 26. Osborn's Caribou (Woodland), Cassiar Mountains, British Columbia. Spread, 38½ inches. See side view of same head, Fig. 14.



- Figs. 27, 28 and 29. Newfoundland Caribou.
- Fig. 30. Stone's Caribou (Barren ground). Spread, 34 inches. See side view of same head, Fig. 15.
- Mountain Caribou (Woodland). Spread, 21 inches. See side view of Fig. 31. same head, Fig. 12.
- F16. 32. Greenland Caribou (Barren ground), West Coast of Greenland. Spread, 39 inches. See side view of same head, Fig. 20.

What scientists are inclined to overlook is the remarkable individuality of animals, and this is, I think, more noticeable among Caribou than any animal with which I am at all familiar. In proof of this, I must once more ask the reader to refer to the photographs. Careful comparisons will show how true this is. In no case is it more marked than in the three different pictures of does facing pages 122, 124 and 130. The complete difference in appearance is so great that it is not easy to believe that they represent the same species. Not only is this true of the adults, but even the fawns, which are about of equal age. Both colour and form are distinctly different.



A glimpse of Newfoundland.

# CHAPTER VI.

NEWFOUNDLAND: THE COUNTRY AND ITS HISTORY,

As the home of its own species of Caribou, Newfoundland itself may have some claim to the reader's attention, and so a chapter on the island, its history, its development and appearance will perhaps prove of interest, even though it has but an indirect bearing on the romance of the Caribou.

First of all, let us see how Newfoundland is placed geographically. There seems to be a prevailing idea that it is situated somewhere in the Arctic regions, not far from the North Pole, whereas it is approximately between 46 and 51 degrees north latitude—St. John's, the capital, being on the same parallel as Paris; this will give a clear idea of the island's northerly position. It lies at the entrance to the Gulf of St. Lawrence, and is separated from the coast of Labrador by the Straits of Belle Isle, which are scarcely ten miles in width at the narrowest

point; and on the south, Cabot Strait divides it from Cape Breton and Nova Scotia. The nearest land to the eastward is Ireland, about 1600 miles away. Strategically, it is placed so that it controls practically the entire Eastward shipping of Canada, and is therefore of the greatest value as a part of the British Empire. It has the distinction of being the oldest British colony, and the beginning of her Western possessions. Its discovery by John Cabot, a Venetian, took place in 1497, about five years after Columbus had startled the world by proclaiming the existence of the Western Hemisphere. Henry VII., seeing the possibility of acquiring glory for his country, granted Cabot a charter to set up "our banners and ensigns in every village, town, castle, isle or mainland of them newly found," though history does not say that he offered any other "help" to the captain and crew of the little ship Mathew, which sailed from Bristol on its venturesome voyage to unknown regions. Instead of help, we find that he demanded in return for the valuable charter nearly a quarter of all the profits resulting from the voyage.

Cabot's first voyage led to the discovery of Newfoundland, on which island he does not record having found many towns or castles upon which to plant the banners of the King; but he brought back wonderful stories of the fish which abounded in the waters of the island. In return for the important discovery, the most generous monarch rewarded him with the sum of ten pounds. The pecuniary gains from exploration in those days were not equal to what they are now, when a single lecture on any great geographical achievement will bring twenty or thirty times as much as the bold adventurer of olden times received altogether.

Newfoundland proved a great attraction to the fishermen of Western Europe, for in no place in the world has such

fishing been found. It is still its great source of wealth, the dried cod alone bringing in nearly one and a half millions of pounds sterling; the total cod and inshore fisheries producing annually nearly two million pounds. This gives some slight idea of the abundance of the fish, but perhaps the actual amount of cod taken in a single year will show this even more clearly; 200,000,000 is the estimated number. Whether the fish are less numerous now than in the days when they first attracted the attention of the European fishermen it is difficult to say, but we can readily understand what excitement was produced by the stories brought back by Cabot and his crew, and how gladly men left the less prolific home waters for those of the West. Apparently it was only as a fishing resort that the new island was regarded for many years, so little importance being attached to the land itself that it does not appear to have been taken as a formal possession by any country, but was used as a harbour land for the vessels of many nations until, in 1583, Sir Humphrey Gilbert took possession of St. John's harbour in the name of Queen Elizabeth. Thus it will be seen that the capital of Newfoundland is actually older by some thirty years than New York.

Mr. P. T. McGrath, in his excellent book on the country, states that by "1600 there were 200 English fishing-vessels in the Newfoundland trade, employing 10,000 men and boys, and garnering a product valued at £500,000 sterling. A handsome sum in those days, when a pound sterling had much greater intrinsic value than it has to-day."

The trade in fish has, as already shown, increased to enormous proportions. In its development there have been many serious international disputes, the mention of which would be quite out of place in this volume. The whole earlier history of the island was more or less a period of

squabbles and trouble, even piracy having played its shameful part. Incessant wars added to the difficulties of those who attempted settlement of the land. Disputes arose between England and France which have only recently been finally settled.

McGrath gives to Captain Richard Whitbourne, of Exmouth, the credit of being the first to suggest the possibilities of the island for farming purposes in 1615, when he published a book entitled "A Discourse and Discovery of Newfoundland," "to induce Englishmen to settle there and develop its fisheries and farming resources; describing its climate, soil and possibilities in terms now abundantly confirmed. King James so highly approved of this book that he ordered a copy to be sent to every parish in the kingdom; the Archbishops of Canterbury and York commended it to the clergy and laity; and to nobles and commoners the name of the 'New Isle' was familiar, so that settlement there was widely discussed, as its fisheries were extensively enterprised."

For over a hundred and fifty years prior to the publication of Captain Whitbourne's book the island was most barbarously governed by incompetent and selfishly interested men, mostly owners of small vessels, who were bent on preventing any permanent settlement being made. Drastic laws were passed to this effect, such as the absolute prohibition of any one spending the winter on the land, and the forbidding of the landing of any woman. With such unheard-of restrictions the "colony" had no chance to grow, and the result of the unfair treatment accorded to would-be settlers continued to have a bad effect for many years after the conditions were changed for the better.

To quote further from Mr. McGrath's book regarding the obstructions against colonists: "The laws against the cultivation of the soil, and even against the erection of permanent dwellings, were enforced up to the beginning of the last century. In 1790, Governor Millbanke proclaimed that he was directed not to allow any right of private property whatever in any land not actually employed in the fisheries." In 1799, Governor Waldegrave ordered fences enclosing a piece of ground in St. John's to be torn down, and prohibited chimneys even in temporary sheds. Only in 1811 were permanent buildings allowed, and two years more passed before grants of land were issued. Not until 1825 was roadmaking begun, though St. John's had then 12,000 people; and within twenty miles there were probably half as many more.

The next and perhaps the most really important development was the building of the railway, begun in 1890, and completed about seven years later by the late Sir Robert G. Reid. With the completion of the railway from St. John's in the east to Port-aux-Basques on the south-west, a regular steamship service was inaugurated between the latter place and North Sydney, Cape Breton, and also other coast towns; so that the island at last had a chance of development. Here we will leave it, and go back to the original inhabitants, on whom a few words may be of interest.

Of these early people there is not a great deal known. They were supposed to be a branch of the great Algonquins, and were called Beothics. That they lacked the power and development of their mainland cousins seems fairly certain, for they never made any serious or concerted attempt to hold their own against the white man, or to work with him; and though at one time they appeared to be on fairly friendly terms, they lost all faith after having been once fired on by mistake. Later on, both the English and the French made a warfare against them; so did

the Micmac Indians, who came from Nova Scotia. In 1760, Governor Palliser is said to have made attempts to re-establish kindly relations with the rapidly-diminishing native Indians, but without satisfactory results.

It is pathetic to read of an institution having been formed, in 1827, for the purpose of "civilising of the Beothics," when the last one seen alive was in 1823, four years earlier!

So much for the history of Newfoundland. It is but a brief sketch, but more would certainly not be justified in a book supposed to be only on Caribou. I may even be criticised for having gone into the subject at all. The natural conditions of the island may, however, be said to have more direct bearing on the animals, so I shall tax the reader's patience by giving a rough outline of the principal features. A glance at the map will give an idea of the shape of the island, which is about the tenth largest in the world, being rather over 300 miles in width and length, with an approximate area of 46,000 square miles. Its coast is deeply indented with excellent harbours, some of which are of immense size, and account for the proportionately long coast-line of over 6,000 miles. There are innumerable lakes, many as yet unnamed and practically unknown, the largest and best known being Grand Lake, which is nearly sixty miles long and contains some 200 square miles. Many of the other large lakes are shown on the map, the largest having an area of about seventy square miles. A great many are not shown at all.

The rivers are both numerous and large: the Exploits being about 200 miles long and navigable for over thirty miles. The Gander is half as long, the Humber eighty miles in length, and the Terra Nova but little smaller. The more important of the smaller rivers, though too numerous to mention, are mostly indicated on the map. Most of these

rivers are rough and rocky, except near their outlet. They rise in hilly country, and are therefore of very variable depth, rising and falling to a marked degree according to the rains. In point of beauty some of them would be hard to surpass. The rich growth of trees along their banks and the boldness of the hills combine to make scenery which I have seldom seen equalled. The numberless waterfalls and cascades will cause surprise to those who, for some reason, believe Newfoundland to be a flat land of bogs and rocks. So little has the beauty of the country been exploited, that people have not the slightest idea of what wonderful scenery is hidden away in the mountainous regions only waiting to be discovered.

I have frequently been interested in watching strangers coming in to Port-aux-Basques, a dreary, little, rocky harbour, somewhat forbidding but beautiful withal, for the rich colouring of the close-fitting carpet of mosses and grasses which clothes the rocks is exceedingly fine. This is more or less what the stranger expected to see; but soon after the train starts, he begins to open his eyes as the country changes. Here the road runs along the delightful sea coast, where stretches of gleaming sand receive the everlasting pounding of the sea. Again it climbs along the rocky shore, on which the force of the eternal winds is shown in the curious growth of stunted trees, that rise from ground level, gradually getting higher till they are, perhaps, six or seven feet tall. branch protruding, clipped by the cold wintry blasts, they are like well-pruned hedges. From his comfortable seat, the stranger looks down into the clearest, greenest water he has ever seen. It is the harvest ground of Newfoundland. exclamation from the other side of the carriage makes him look to the East, where wonderful ranges of mountains hide their rocky summits in the morning mist. If it is early in the summer, he will see patches of snow packed away in the

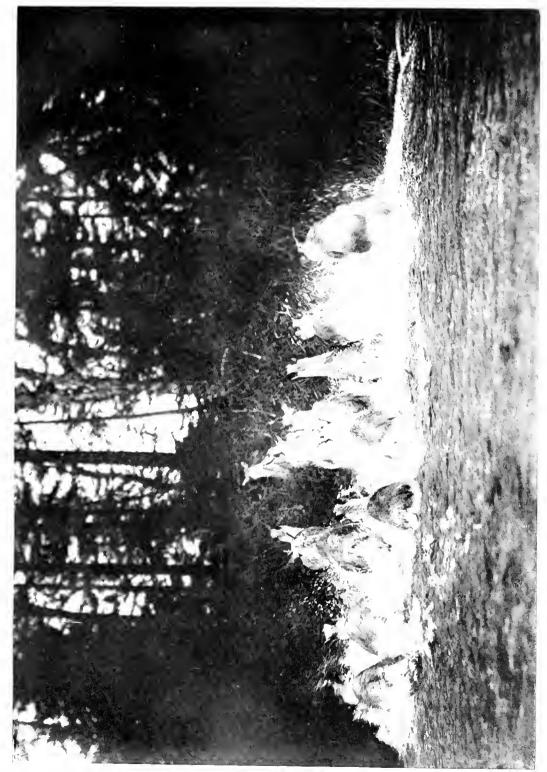


Evening on Sandy River. In the foreground are two Caribou which have just landed.

dark blue shadows, and he will give a sigh of relief as he thinks of the sweltering heat he has just left behind him in the big cities. The richly-coloured marshes and the many ponds are a splendid foreground for the rugged mountains; and the stranger looks astonished and remarks that he never knew that the island was anything but flat. Many surprises are in store for him as the train carries him along over numerous beautiful rivers in whose clear waters the salmon are working their way up to the spawning beds. Lakes of all sizes are passed in rapid succession, some surrounded by marshes and bogs, others nestled away between heavily-timbered mountains. The train goes slower, and snorts and puffs as it winds its way over the high hills, reaching an elevation of between one and two thousand feet. On reaching Bay of Islands, the stranger is again surprised, for here is a harbour of immense size with many prosperous villages along its shores, under the shadow of the protecting ranges of lofty hills. The whole scene recalls the fiords of Norway. Then comes the Humber River, probably the most beautiful of the larger rivers. Rocky mountains rise like giant walls from the deep, dark waters; glittering cascades drop hundreds of feet among the rich vegetation; and yet this is Newfoundland, not as our geography describes it, but as it really is. The stranger is astonished and wonders, as so many have done, why he never heard of the scenery of the island, but only of its rocks and fogs. As he crosses the path of the Caribou migration, should it be the right time of year, he will, if he be lucky, see herds of the wandering animals making their way southward. They will line up and stare at the noisy thing that passes them, belching such a dense column of black smoke as it goes along in its haste. The conductor pulls the signal cord three times, the engine blows in reply, and the train slows down to let

me off at the river where my canoe awaits me. I say good-bye to the stranger, and in the dim evening light, as the train leaves me alone in the wilderness, I see him gazing wistfully from the window as he sees me carry my outfit down to the canoe, for he, too, would like to be going into the woods to see the country in the way that man likes best.

Except where it crosses the base of the great northern peninsula, the railroad keeps well toward the west and north coast, for only near the sea has the island been settled. The population of little over a quarter of a million is composed largely of fishermen. Small farms are only too few, except in the extreme east. But the interior has so far scarcely been touched by man, except by the Harmsworths, whose big pulp works are well known. There are practically no roads, except near the coast, and as horses cannot be used over most of the wild country, owing to the amount of bogland and dense timber, little has been done to open up the island. farming is carried on it is highly successful. In 1901 there were perhaps eighty-six thousand acres of improved land, which yielded about three-and-a-half million dollars, nearly one-third of which was from cabbages, the other two large items being hay and potatoes. I mention these facts because they prove that the climate is not what people, outside of the island, believe it to be. summer season is short, but, as is usually the case, Nature makes up for that by causing vegetation to grow with remarkable rapidity. The temperature during the winter is cold in the north, where it is furthest from the influence of the Gulf Stream, but in the southern and eastern parts, especially near the coast, it is not nearly so severe. The summer temperature is delightful, very hot days being



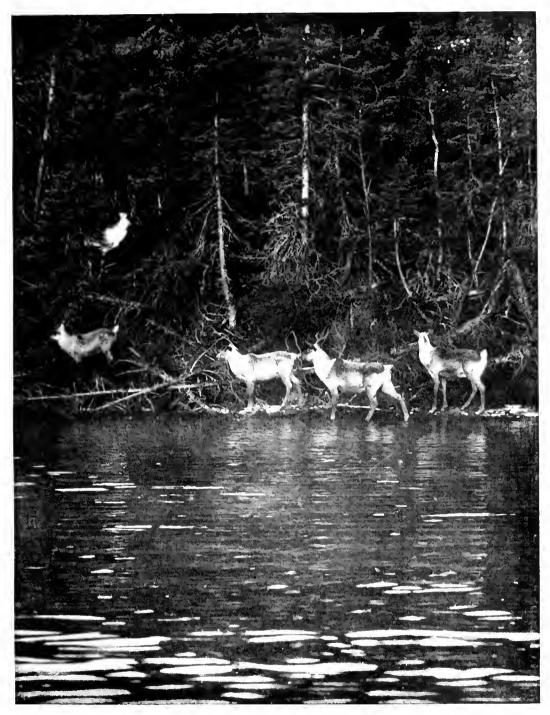
Hard of Caribou landing in a hurry, having been frightened by the canoe.

almost unknown.¹ When one hears the favourite story of the depth of snow in Newfoundland, which is, that the telegraph poles were entirely submerged, it must not be imagined that this is a normal happening, or that the whole island was thus covered; and two important points must be borne in mind: first, that the poles used are very short—I should say about twelve feet above ground; and second, that this only occurred in a place which is famous for extraordinary deep drifts. As it is a story which every stranger hears, I mention it with these explanations.

The animal life on the island, with the exception of the Caribou, is neither numerous nor are many species of the larger kinds found. Bears, never an abundant animal, exist in fair numbers. The popular idea of there being two species, known as the black and the brown, is, I think, wrong. They are probably colour phases of the same animal, which is the ordinary black bear. Lynx are scarce, and are said to have only comparatively recently come over on the ice from Labrador, as they were not recorded by the earlier writers. Captain Hardy, in 1869, says: "The presence of the wild cat is uncertain"; by wild cat it is presumed he alludes to the lynx. Wolves, which may formerly have been fairly numerous, are now practically extinct. Foxes are found in most parts of the island, and are becoming famous for the large proportion that run to the silver phase. I am told that about one in every five or six is either silver (or black as they are also called) or partly so. These dark foxes are, of course, very valuable, and every trapper's ambition is to get a really good one which would make him a rich man.

<sup>&</sup>lt;sup>1</sup> The mean temperatures for St. John's are given as 21.09 for January and 56.51 for July.

Only a month or so ago, I heard from a trapper friend of mine that a man I knew had had the good fortune to get a fine silver fox, which he had sold for seventeen hundred dollars (about £340). At first sight it would appear that trapping must be a paying occupation, but foxes are scarce, and a man seldom gets more than four or five during the season, and of course fine "silvers" are rare. Beavers are on the increase, thanks to the few years of protection which has been granted to them. Eight years ago they were scarce, so much so that a day's journey by canoe would often not discover a single house or dam in use. Last autumn, I found nearly twenty occupied houses within a day's walk of my camp, and this was on a river which but a few years ago had no signs of recent beaver. Unfortunately, this year sees the end of the close season, and we may expect these interesting little animals to be nearly wiped out during the coming winter, except, possibly, on the reserve, where, let us hope, they will not be molested, and the visitor to the island will have the opportunity of seeing them and their marvellous work. It seems to be a pity take off the protection just as the animals are really beginning to become numerous. They are so easily killed off that a single season's trapping will undo the advantages gained by the years of protection. Had they been allowed another ten years of immunity, they would have become one of the show features of Newfoundland. Musk rats are not as abundant as might be expected from the great extent of the country apparently suited to their requirements. Nowhere have I seen them in any number, and, curiously enough, they seldom appear to build lodges as they do in other countries. In all my wanderings in Newfoundland, I have seen but one



CARIBOU ON THE RIVER BANK.

Pheir suspicions have been aroused, and they are not quite certain whether it is an to cross. This clearly shows the graceful form of these animals.

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lodge, while in the States of New York and New Jersey they may be seen in most suitable ponds where they have not fallen victims to the steel trap. Otters are scarce, if one may judge from the small number taken by trappers; they are of large size and have very fine, heavy pelts. Mink do not exist in Newfoundland, neither do squirrels, raccoons, opossums or porcupines; this seems curious, as the conditions which favour them in the adjoining provinces appear to exist in the island, so far as we can judge. The varying hare is fairly abundant, but a disease is said to have greatly depleted their numbers a few years ago. Birds are not as numerous as one would expect from the position of the island. A few Canada geese breed on the marshes; ducks of several kinds are found, including the harlequin (I have found the young of the latter bird in the northern portion of the peninsula, thus proving that they breed, at least in that part of the island). A few of the waders breed there, or pass through in the course of their migrations. Of the game birds, the ptarmigan is probably the most numerous, but they are very restricted in their distribution. Unless much harassed by sportsmen, they are aggravatingly tame and can scarcely be induced to fly. This gives a rough idea of the fauna of Newfoundland, without going into great detail mentioning the minor species.

The flora, though interesting, is not very varied. The island is richest in the lower forms of plant life, such as the lichens and mosses, which are extremely abundant, and their richness and diversity of colours do much to make the beauty of the barrens so noticeable. Of the flowers, by far the most noticeable is the fire weed (Chamænerion angustifolium), whose wonderful masses of magenta pink brighten the burnt ground and line the banks of some of

the rivers, so that the eye is dazzled by the splendour of the colour. On the barrens the curious pitcher-plant (Sarracenia purpurea) is conspicuous. Its strange, deep crimson flowers stand guard over the pools nestled among the many-coloured mosses. Of the flowering shrubs, the most common are the viburnums, dog-wood, pigeon-wood, kalmia and mountain ash. Of the shrubs whose flowers are not noticeable, the alder is by far the most equally distributed. It chokes every small waterway and forms a serious obstruction to travel through much of the marshy ground. Edible fruits, as mentioned in Chapter VII., comprise the "bake apple," blueberry and raspberry, all of which are remarkably plentiful. Wild cranberries are found on most of the marshy ground, and flourish so well that one is surprised that their cultivation is not extensively carried on.

There is a prevailing idea that the trees of Newfoundland are all of stunted growth, and that large timber does not exist on the island. That there is a great amount of small growth is true enough, for practically every marsh is fringed with forests of short, close-growing fir and spruce. Nearly every pond, too, is sheltered by these small trees, but in the hilly country and protected valleys there is a vast amount of really good timber, which is attracting the lumber companies from many parts of the world, and some of the largest and most modern pulp mills have been, and still are being, established in various parts of the country. Along the more accessible waterways, both rivers and lakes, the larger trees are mostly a thing of the past. It is this that has given rise to the popular notion that large trees do not exist. The most important soft wood trees are the fir, spruce, white pine and tamarack; the latter goes



Usnea moss, which grows on trees. It is the Caribou's food when the ground mosses are deeply covered with snow.



Caribou moss, the animals' principal food.

by the name of juniper. All of them grow to a very fair size, and the timber obtained is of rather unusually good quality owing to their slow growth. Poplars are numerous in certain districts, especially near rivers. Of the hard woods the birches are most abundant. Maples are also found, but not commonly of very great size.

Just as in parts of Canada and the northerly States, the trees are covered with a remarkable growth of mosses, the most conspicuous being the usnea, or old man's beard, which clings to the trunks and hangs from most of the branches in graceful masses and imparts a curious effect to the woods, the grey colour looking almost like frost under the shade of the branches. Moss seems to grow on everything that is more or less shaded, so that the ground in the woods is a carpet of the thickest and richest mosses, which cover each stump and fallen tree, completely concealing them in a green shroud. Even stones and rocks are covered, so that moss, and moss only, is seen in the woods, and the forms of the prostrate logs and standing stumps are but faintly visible. the autumn when the golden leaves of the birches bestrew the rich, green ground, the effect is wonderful, especially after a rain, when the vividness of the colours is so greatly enhanced.

Unfortunately, walking through the woods of Newfoundland is not altogether a joy, owing to the denseness of the vegetation, the unevenness of the ground and the great number of fallen trees. Only along the erratic Caribou roads can one hope to make one's way with comparative ease and comfort, and even on these trails it is always difficult to carry a load, on account of the low-growing branches, which form a regular network of wiry twigs. The best walking may be found in the open marshes and barrens. Most of these are formed of peat in its various stages. When it is

well-formed and firm, it affords excellent though somewhat springy walking, but where it is in the watery stage it is extremely treacherous both to man and beast. It forms, indeed, one of the chief difficulties in the way of inland exploration, as it practically prevents the use of horses, except where rough roads are made. On the bogs and marshes there are countless pools and ponds which are somewhat curious in their formation. Not only are they found on the flat lands, but on the steep hill-sides, and are always full of water, which may be a few inches or several feet in depth. Below this water there is usually a light, watery peat which may be of almost any depth, its consistency being like that of very thick pea-soup. Needless to say, these pools are dangerous and are avoided by the larger animals.

Such, then, is the home of the Caribou. It is but a rough sketch of the island, but if the reader wishes to know more on the subject, the best advice I can give is that he should go there and see for himself what Newfoundland has to offer. Be he hunter, fisherman, or merely a lover

of the wilds, he will find himself amply rewarded.



A Camp in Newfoundland.

## CHAPTER VII.

## CAMPING IN NEWFOUNDLAND AND HOW TO DO IT.

On the chance that the reader will be tempted, either through the stories of others, or by what has been written in the previous chapters, to visit the land of the Newfoundland Caribou, a few words on the subject of camping may prove of use and interest. When going to camp in any country which is more or less new, one is always confronted with the very important question of outfit. What is necessary for one's comfort should be taken, if possible, but the many things which are entirely unnecessary, and which comprise the greater part of most outfits, should be left behind locked up safely in the rubbish room at home where they will not be a cause of temptation to yourself or others. This is not sarcasm, but plain common sense. For the only way to travel in comfort in the wilds is to travel

light; every useless article is an obstacle in the path of peace and happiness-first to be bought and paid for, then to be packed and unpacked every time a move is made, and, worst of all, it has to be transported, frequently under conditions when every ounce is a matter of serious consideration. Now in order to decide what to take and what to leave behind, it is highly essential that the country to be visited shall be known as much as possible, therefore let us start the (let us hope) helpful task of giving advice by an account of the country so far as it concerns camping. I have already, in a previous chapter, given a brief description of the island, but I shall repeat myself to some extent, even at the risk of bringing down the reader's wrath on my unfortunate head. First of all, please note that Newfoundland is not a land of fog and snow and nothing more, according to the popular idea. is a land of many and very varied conditions, some good and some bad, but it is large enough to take care of them all without any feelings of shame, if we except perhaps the flies and mosquitoes in certain regions. The best idea I can give of its size is to say that it is over 11,000 square miles larger than Ireland. This will help the Britisher, while the American will get a better idea when he is told that it is about the size of New York State. In some parts it is very mountainous and rugged, in others it is flat or rolling. Travelling on foot is difficult throughout a large proportion of the country, owing to the bogs and marshes which are very numerous and many of which are very soft. The open dry bogs are frequently rough and tussocky, and most trying to the man who is handicapped with a heavy load. Only here and there does one come across a fine smooth bog of hard peat and moss which offers good walking.

The woods are extremely dense, even though the trees are as a rule of low growth, but the toughness and elasticity



With the heavy load of cameras and plates, walking over the soft, spongy bogs is exhausting work.



The easiest way to travel in Newtoundland.



of the lower branches, which so often hang with their ends buried in the moss on the ground, make walking through them a difficult task, unless one happens to find a good Caribou road, when it is sometimes fairly easy. On the mountains there are many great stretches of fine open country, more or less stony, or tracts of smooth-faced rock sparsely covered with scanty vegetation. In such regions good walking may be counted on, except in the narrow valleys between the ridges, or through thickets which are in the sheltered spots, chiefly on the southern slopes of the hills, where they are protected from the biting winds. These thickets are made up of dwarf black spruce, composed to all intents and purposes of barbed wire and steel springs, warranted to tear the strongest clothing ever manufactured, and try the very best of tempers. All of this may sound as though I were trying to discourage the man who thinks of going to Newfoundland. This is not at all my object. What I want to do is to show how important it is to go *light* in a country where travelling by foot is anything but easy. Unfortunately, in the regions where the waterways are unavailable, everything has to be carried on men's backs as horses cannot be used owing to the soft bogs in which they would very soon be mired.

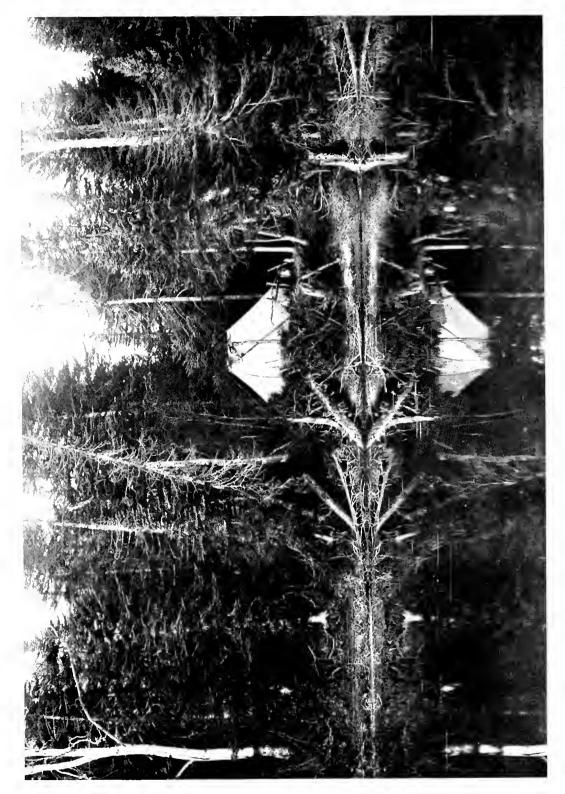
A great part of the country may be reached by water, for probably no place of its size has so many rivers and lakes as Newfoundland. These have already been described, so I shall not go into details regarding names and sizes. Some of the rivers allow of easy canceing, others are

described, so I shall not go into details regarding names and sizes. Some of the rivers allow of easy canoeing, others are too rough, and many of them are so filled with boulders that canoeing or boating in any form is difficult and somewhat risky, especially when heavy loads are carried. The lakes, which are quite large, are usually good for boating, but owing to the sudden storms, especially in the hilly districts, canoeing is likely to be unpleasant, and at times

impossible, so that delays may be experienced. This I mention as a caution regarding the food supply. It is decidedly uninteresting to be weatherbound at the wrong end of a lake without sufficient provisions.

The selection of a camping ground is important or not according to the time of year. In the summer, when on a fishing trip (and I may mention the interesting fact, well known to so many people, that the rivers of the island are wonderfully well stocked with salmon and trout, both seatrout and residents (S. fontinalis), so that the very best of sport is to be had on any of the waters upon payment of a small rod licence), any fairly level place will do, provided it has firewood, and not too many insect pests. In the autumn, however, one should be most careful to select a place sheltered from the north wind. On either the north or west bank of a river there is often to be found sufficient shelter under the fringe of trees, but never choose the east or south bank. I tried it once, when almost as soon as I had put up my tent, a terrific storm from the north broke, and for three days I was pelted with frozen snow, and life was entirely unsatisfactory. The wind blew with such violence that it was impossible to keep a fire going, even though I built a rude screen of boughs to shelter it. A more thoroughly unpleasant three days I have seldom spent, but it taught me a lesson from which I profited during the many subsequent trips.

The weather, which is so important a condition where camping is concerned, is not quite all that one might wish in Newfoundland; still, when one becomes used to it and adopts the philosophical attitude, the dull days do not count, and rain is taken somewhat as a matter of course. During the summer, fine weather prevails, as a rule, and very seldom is it too hot, except occasionally during the noon hours, when the sun makes one lazy and disinclined even to fish.



My ampronth, northbank of Saidy River,

		4

It always cools off later in the day, and the nights are never too warm. Unless one has the misfortune to strike a prolonged spell of rain, summer camping is delightful; but the best time of all is during the early autumn, when, if the weather man is kind, life in this wild island is a joy. The brisk, cool days, the chilly evenings which make one appreciate to the fullest the open log fire, and nights so keen that sleeping is an actual pleasure, and one wakes to the delicious freshness of the morning air, fit as a king and ready to do anything. Later on, towards the end of October, the coolness becomes somewhat exaggerated, the condensed milk freezes in the tin, washing is shirked, for it requires courage to break away the ice which lines the bank of the river and indulge freely in water sports. Blankets which, but a few days ago, seemed unduly heavy are now too light, and the chief attraction of the camp centres round the roaring fire, the heart of the camp. Yet this cold is exhilarating to a degree that can scarcely be described in words. Personally, I can say that at no season of the year do I get the same pleasure from camping; the colder the better, up to a certain point, even if getting out of the warm blankets in the morning does look like a hardship when there is no crackling fire outside or inside the tent as an That is the only disadvantage of solitary camping in cold weather, for the early autumn morning looks, feels, and sounds cold when the outside of one's blankets is coated with ice crystals, and there comes a sincere longing for the cheerful sound of the fire. These remarks give a hint that warm clothing is required for late camping, and so they should be remembered when I give suggestions on the subject of wearing apparel.

I take it for granted that any advice I offer is for the man who takes a guide, as I find very few who will go entirely alone. They do not altogether appreciate the amount of work which going single-handed involves, and not used to being entirely alone in the wilds, they imagine that it is dreary. I suppose no words from me will cause them to change their opinions on the subject. Individually, I like it, perhaps because it is what I have been accustomed to for so many years, and because it gives me opportunities of doing the work I enjoy, to the best advantage; for there is no question that animals can be studied when one is alone far better than if two or three people are together. Quietness is the keynote of success in such work. It is difficult enough to practise it alone, but in company it is practically impossible.

The man who would hunt in Newfoundland must make up his mind to lead a thoroughly simple life. He must not expect the comforts of an African safari, where chairs and tables are considered essential and a bath-tub is carried, where one is waited on hand and foot, and where clothes are changed for dinner, which is served on a white table-cloth. Such luxurious living is not for the northern wilds. The bare necessities of life are the only luxuries to be had, and one is very thankful for them. In place of the chair the dry side of a log is used; the table, unless in a long term camp, is one's lap; the "hot" bath is the nearest river or pond, and the bath "tent" is the great out-doors. Folding beds are forgotten in the far better couch of springy spruce boughs piled up a foot deep on the mossy ground. It is all very primitive, but it has a strong appeal to the man with good red blood in his veins. The namby-pamby has no place out in those woods and hills; he is not wanted, and for his own sake it were better that he stayed at home and found his sport among the domesticated game of old England.

It is customary when camping in Newfoundland to take a guide and "helper," or cook. A good guide makes the trip,

169

a bad one mars it; so try to engage a man who has really a bad one mars it; so try to engage a man who has really first-rate references from someone you know, if possible. The same may be said of the cook, except that good ones are the rara avis of the country, for the culinary art is of a very low order. Lucky indeed is he who finds a cook that can make decent "biscuit" (soda bread, or scones) and fry a piece of meat properly; broiling meat is seldom indulged in, as they say it loses the fat, which they regard as the most important part. The great tendency is to soak everything in grease, and it requires more persuasive powers than most of us possess to discourage this practice. The guides receive from a dollar and a half to three dollars (six guides receive from a dollar and a half to three dollars (six to twelve shillings) per day. Some of them supply a boat or canoe without further charge, also cooking utensils. There is, however, so much variety to the arrangement that it is best to have a clear understanding before the engagement is made. Helpers get from one to two dollars (four to eight shillings) per day. On the whole, the Newfoundlander is a splendid fellow, hard-working, honest, good-natured, and only too anxious to please. This was the case some years ago; now, unfortunately, many of them have sadly deteriorated since they have come under the baneful influence of a certain type of sportsman who would spoil the best man that ever lived. The hardiness of these men must always be a source of surprise to the newcomer. Water has no dread for them, and they will get soaked day after day without a murmur. This is just as well, for it is a very clever man who can keep dry with any degree of regularity in that country.

If the sportsman wishes to avoid trouble, he may engage his entire outfit from any one of the sporting camps at a given price per day all included—men, boats, tents, cooking outfit, food, and even bedding. I would, however, suggest that it is better to carry one's own bedding; it is better and more satisfactory in many ways. A definite understanding with the outfitter *before* starting will save a lot of possible annoyance, for most of the unpleasantness that does occur arises from failing to do so. It is therefore fairer to both parties that careful arrangements be made, so that the outfitter shall know what he is expected to supply, and the sportsman know what he is to pay.

Now let us see what outfit is necessary. Beginning with clothing: warmth, strength (especially for a long trip) and lightness are the essentials. First of all let us take the under-clothing. It should be of good wool and sufficiently large; tight clothes are cold, as well as most uncomfortable. Several thicknesses of thin underwear will give more satisfaction than single garments which are very thick. In cool weather, besides a woollen shirt, which I need scarcely add is advisable, three vests and two pairs of drawers may be worn and will be found most satisfactory. Two or three pairs of *coarse* woollen stockings should be worn during the autumn as the wet ground is remarkably chilly. When canoeing or watching for Caribou, one's feet are apt to get very cold, and nothing makes a man more uncomfortable.

On the question of foot-wear I scarcely know what to say. The native uses soft, thin seal-skin boots which, when good, are waterproof and well adapted to the boggy country, but they do not wear well and are a great bother to put on. The ideal thing would be light, high, thoroughly waterproof leather boots, if such an article can be found. I have tried many sorts, but though they sometimes resist the water when quite new, they nearly always leak after a little use. Heavy boots are trying for walking on the soft ground, difficult to dry if they get wet, and very bad for canoe work.

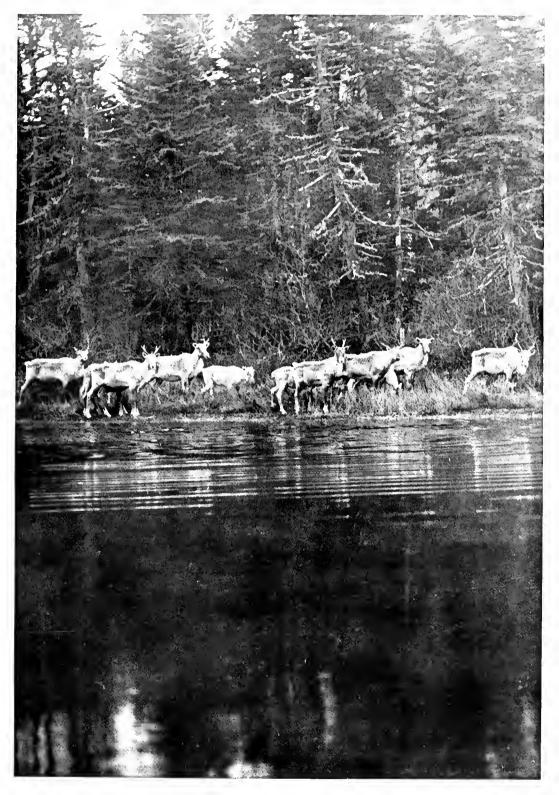
Felt-lined rubber boots are the only things that really keep the feet dry for any length of time, but, unless very thick socks are worn, the heat from the feet condenses in cold weather and makes the inside rather damp, while in warm weather they are uncomfortable and steamy. So, as I said before, it is a subject on which sound advice is difficult to give; and I say this after having tried all but the very heavy boots, which being so noisy are entirely unsuited to my work of careful, quiet, close-range stalking. During the last two seasons I used the heavy lumberman's rubber boots, and had perhaps more satisfaction with them than anything I had previously tried. These came up about halfway to the knee, so that under ordinary conditions no water got into them. Besides wearing two pairs of woollen stockings and a pair of socks (the coarser and more open the better, as they allow of ventilation and are much warmer than when made of fine closely knitted wool), I wore next to the boot the regular lumberman's felt stocking coming nearly up to the knee. This acts as a non-conductor, so that when walking through icy water the amount of condensation caused by the outside cold coming against the inside warmth from the foot is reduced. These boots, felt and stockings, must be dried every night. In very cold weather it is of the utmost importance to have the foot-wear large enough, so that nothing binds the foot. I never fully realised the extraordinary advantage of having the clothing very loose until one day on board the Roosevelt, Lieutenant Peary (as he was then, the year before he discovered the North Pole) insisted on my wearing some of his Esquimaux seal-skin clothes as we looked over the ship. was bitterly cold, and I had been shivering in my heavy winter overcoat. I discarded it with some reluctance, and was amazed at the comfortable warmth of the very light, loose-fitting seal-skins, which weighed not one-tenth as much as the overcoat.

In the way of outer garments any good, loose-fitting woollen clothes will do, provided they are strong and pretty tightly woven, otherwise they will soon be torn by the hard, rough, wiry branches through which one so often has to force a way. Corduroy, though about the only material that will withstand the roughest usage, has the disadvantage of being both cold and easily wet, and when once wet it is very difficult to dry. It is also rather noisy. I find knickerbockers preferable to trousers, as they allow greater freedom at the knees, particularly in travelling by canoe when one is in a more or less cramped position for many hours at a time. For a hat there is nothing better than a good felt, with the brim just wide enough to carry the rain-water clear of one's neck; it also keeps the irritating spruce needles from going in the same direction. Gloves may be used, but if the weather is really cold, "mits," made of pure undyed wool, are far more satisfactory. They are more easily removed and very much warmer. The best kind are homemade and double-knitted. In the summer months, thin leather gloves are useful for keeping the black flies off one's hands. The last necessary object of wearing apparel, and at times the most important, is the mackintosh. Each man has his own ideas on which is best. I have always used the very light kind made after the pattern of a shirt, so that it is opened only far enough down to be slipped over the head with ease. These are especially good for a rainy day in a canoe. To these things may be added a warm sweater, which at times is most acceptable, and for sleeping in, something loose, warm, and of wool, stockings included, and a Jaeger helmet cap which protects the back of the neck from cold.

Next we come to the bedding, an important part of the outfit, as on it so much of one's comfort depends. Lightness being a great consideration, we must try to get the greatest possible warmth with the least possible weight. Blankets are heavy, and unless of extremely fine quality, do not give warmth in proportion to their weight. The very best material I have been able to find is pure lamb's wool carded into thick sheets, but not bleached or dyed; quilts made of this, encased in a fine, smooth material, make the very finest of bedding, and next to eider down it is the lightest. It is well to remember that the same amount of bedding is necessary beneath as above, for the cold from the ground strikes upward with an unpleasant chill that prevents sleep. Two thicknesses of the woollen quilts should prove sufficient in any ordinary autumn weather; the efficacy of the quilts is materially increased if they are made in bag form, the sides being sewn up rather more than half-way, so as to allow of easy entrance. A pillow may be carried, but I find my spare clothes put into a pillow-case answers the purpose. A large bag of strong waterproof canvas keeps out the dampness from the spruce boughs and prevents the wind blowing through the quilts. If this bag laces up one side it can be more readily opened during warm weather. The canvas is much better than rubber sheeting, as it is not so heavy and is not nearly so likely to tear. Waterproof canvas bags for all camp belongings are useful; they stow well in a canoe, and are easily handled if they have a strap on one side and the end. The canvas should be mildew proof, otherwise its life will be short.

The tent problem is easily solved, and simply depends on where and how you expect to travel. If on foot, you must of necessity take the lightest available one. It need

not necessarily be very small, but the material must be thin and of the best. I use a sea island cotton, not much thicker than light shirting, it is very closely woven, mildew proof, very strong and light, and absolutely watertight; far better than the so-called "silk," or any of the materials filled with paraffin or similar dressings—these add to the weight, are dangerously inflammable, and in cold weather stiffen so that they are difficult to roll. In preference to this material I prefer the ordinary unbleached muslin or calico. The pattern of tent does not matter so very much, the great importance is to have one that can be easily and quickly pitched. If you camp in the mountains it must be low, as long poles will not always be available, and the high winds will not have so much effect on it. During the summer, one can manage without any tent, as birch or spruce bark can be easily peeled and a lean-to made in a very short time. A light portable stove adds much to one's comfort in cold weather, being especially useful for drying clothes. If one is carried it is well to see that a proper insulation ring is put in the roof for the pipe to pass through. I cannot speak with much experience on this subject, as I have only once used a stove, and even in the coldest weather, when the temperature has been twenty-five degrees below zero, I have managed to get along without one, though not without some discomfort it must be confessed. utensils may be either of tin or aluminium; they should nest together as compactly as possible, so as to portable. Enamel ware is frightfully heavy and does not stand the knocking about which it would receive, but I do like my cup and plate of this material. An aluminium cup gets so hot that one cannot drink out of it, while a plate made of this metal does not help to keep the food hot.



This herd crossed the river directly opposite my camp, and on landing they noticed the tent. The light was so bad that it required an exposure of several seconds to get the photograph.

Ordinary plated knives, forks and spoons are by far the nicest. They are cheap, easily cleaned, and not very heavy.

The question of food should be carefully considered, so that no unnecessary weight shall be carried. Let us begin by seeing what the country can offer us while we are out. In the summer, fish, both salmon and trout, can be had in abundance. By smoking these they will keep for a few weeks. In certain regions, notably in the highlands, ptarmigan are fairly numerous and may be shot after September 20th. They are extremely tame, except where there is much shooting, and can be killed with either rifle or shot gun, though with the latter it is like butchery, as the birds will not always take to flight. The Canada goose breeds in the open bogs, but is never very numerous. Ducks of several kinds breed here, the most numerous being the black duck. They are, however, always difficult to get. Bears are found occasionally, but not often enough to be reckoned upon as an article of food. The varying hare is fairly plentiful, but though he may be easily snared, his nocturnal habits keep him safe from sportsmen unless they have the assistance of a dog. In any event, there is absolutely no sport in shooting them, for they will stand within a few feet of you without showing the slightest fear. The only meat that can reasonably be relied on is the Caribou, and, early in the season, fish.

Some edible wild fruits are to be found. "Bake apples," a raspberry-like berry which grows close to the ground on the bogs and ripens in August, are good eating, either raw or cooked, and make excellent preserves. Raspberries are quite numerous and of good quality, but best of all are the huckleberries, or blueberries, which in places are so abundant that the ground is tinged with their soft blue colour. They are ripe and fit to eat from August until October, when

they are softened by the frosts. Either raw or stewed they are equally good, and though liked by all they are particularly appreciated by the camper who has the good luck to find himself in a good "patch." These, and a few "wild pears" (amelanchier) and cranberries, constitute the wild fruit supplies. It will easily be seen that, with the exception of perhaps meat, everything needed for food must be carried. All supplies can be obtained either in St. John's or at Curling, Bay of Islands. The quality is generally good and the prices fair (with the exception of coffee, with which I have had no luck). It is scarcely necessary to give a list of food, for this is not a "how to camp" chapter, but rather an account of the conditions to be met with, and which are more or less peculiar to the island. It might be well to note that if you are ordering food supplies, the men drink tea on every available occasion. Never do they miss a chance of "boiling a pot." If nothing else in the outfit is handy and getatable, the kettle is sure to be in a conspicuous place. The men expect you to supply them with tobacco and feel much aggrieved if it is not forthcoming.

On the subject of boats a few words may not be amiss. Fifteen years ago, canoes were practically unknown in Newfoundland, dories and "river boats" were the only kinds used. Lately, however, the Canadian canoe has come into fashion and many of the guides have them. Unfortunately, these men, most of them rough fishermen, accustomed to heavy, stiff boats, are somewhat awkward in the light canoe, and handle it clumsily. This is all very well in still water, but in rapid rivers and rough lakes skill is necessary to ensure safety. The canoes are the light canvas-covered models without keels, as a rule, and have no serious objection to capsizing if given a reasonable excuse. The man who is accustomed to their ways never gives them



Mending our canoe with Caribou skins. Only by this method were we able to make the return journey down one of the rough rivers.



The canoe in the water with its sheathing of Caribou skins



the excuse, but the tyro often does. Then, again, these men scarcely realise how delicate a canoe is, and that it must receive good care or it soon becomes useless. Pulling them over rough stones or snags should be avoided, and they should always be turned bottom up at nights and never left in the water where a floating log may be driven against them with disastrous results. I merely mention these points because I have seen several instances in which accidents have occurred through failure to take proper precautions. A good eighteen-foot canoe should carry two men and about twohundred-and-fifty or three hundred pounds of outfit without difficulty, except in very rough water. Some of the wider models will carry much more, but, of course, will not paddle so easily. For a long trip the dory is usually employed. It is a heavy, ungainly, flat-bottom boat, but has wonderful carrying capacity and may be knocked about with comparative impunity. They seem to have a failing towards leaking which does not add very materially to one's comfort. Observance in this direction *before starting* may prove useful, a little calking and pitch will save no end of discomfort.

An article which will be found of use in the early part of the shooting season is "liquid smoke," for with it meat may be "smoked" very quickly and with scarcely any trouble. The shooting season opens for Caribou on August 1st (why I do not know, as the stags are still in the velvet and the horns are therefore useless as trophies), and the weather at that time is likely to be quite warm, so that meat will not keep long unless preserved in some way. Salted venison is not good, but the meat when lightly smoked is very palatable. Fish may also be treated in the same way.

This chapter would not be complete without allusion to the painful subject of insect pests. I wish I could honestly

avoid it, but it would not be quite fair if I failed to warn the prospective visitor to the land of Caribou that he will be pretty sure to encounter both black flies and mosquitoes in objectionable quantities. Sand flies also will be found near the sea coast and on some of the rivers and lakes. season for the black flies begins in June, and lasts with fair certainty till September, and frequently on warm days until well into October. I have been nearly driven mad by these pests at times when the ground was covered with ice and The black fly fortunately confines his operations to the hours of daylight, but the mosquito takes the next watch with full vigour, even though he also likes to annoy poor man while the sun still shines. His season is shorter than that of the black fly, and he is seldom troublesome after August. The sand fly holds forth mostly during the early mornings and late evenings during the summer, and though very small in point of size he makes up for it by causing great annoyance. The question is, what should be done to protect oneself from these pests? A mosquito net of fine mesh is essential if you would sleep in comfort, but during the day-time when one wants to shoot, fish, paint, or merely lie in comfort, a remedy is indeed difficult to find. of efficiency there is nothing like the black oil of Stockholm It is disgusting stuff to use, but it gives peace. Some of the prettier preparations of citronella and pennyroyal are not so objectionable, but then they do not do their work so well. Head nets keep out the flies, or keep them in if they are not properly adjusted; they are hot and bothersome contrivances in many ways, and are by no means an unmixed blessing. The hands may be protected by gloves, if you do not mind wearing them, but they are only valuable if made long enough to cover the wrist, for that is where the worst bites are received.

This brings us, I think, to the end of the subject. If I have forgotten to mention anything of importance the reader must forgive me, and even though such omission may exist, it is to be hoped the hints and suggestions will prove of some value. I must also crave forgiveness if I seem to have dwelt too much on the less pleasant aspects of camping, but it is by guarding against discomforts that one's pleasure may be made most complete, for the delights of camping in the island will speak for themselves and demand no precautions.

In bringing this volume to a close, I can but hope that the reader will have taken the material it contains in the spirit in which it is offered, and even though its many short-comings will have been noticed, it will perhaps stimulate an interest in the wild creatures of Newfoundland; and I sincerely trust that the reader, should he ever visit the island, will enjoy as much as I have the numerous delights which it has to offer.

## THE GAME LAWS OF NEWFOUNDLAND.

## CARIBOU OR DEER.

SEC. 3.—No person shall hunt, kill or pursue with intent to kill, any Moose or Elk within this Colony, at any time before the 1st day of January, 1912.

Maximum penalty \$200 or three months' imprisonment.

6.—No person shall hunt, kill or pursue with intent to kill, any Caribou from the 1st day of February to the 31st day of July in any year, both days inclusive, or from the 1st day of October to the 20th day of October in any year, both days inclusive.

7.—No person other than a licensee under this Act shall, during the time by this Act allowed for killing Caribou, kill or take more than two stag and one

doe Caribou in any one year.

10.—No person not actually domiciled in this Colony shall hunt, kill or pursue with intent to kill, in any season any Caribou without having first procured a license for the season, nor shall more than one license be granted in any one year to any one person.

11.—Such licenses to hunt Caribou shall only be issued by a Stipendiary Magistrate, a Justice of the Peace, or the Department of Marine and Fisheries.

A fee of \$1 for each license shall be paid to the person issuing same.

- 13.—Any person not domiciled in this Colony shall be entitled to hunt, kill and pursue with intent to kill, Caribou on taking out a license, for which a fee of \$50 shall be paid, and such license shall entitle the holder thereof to kill not more than three stag Caribou. Licenses may be issued to Officers of His Majesty's Ships of War employed on this station for the Fisheries Protection without payment of any fee upon application to the Minister of Marine and Fisheries.
- 14.—Licenses shall be issued to all guides by any of the persons named in Section 11, but the fee of \$1 in the said section mentioned shall not be charged. Every non-domiciled guide shall pay for such license a fee of \$50. Every applicant for such license shall make oath or affirmation that he will use his best endeavours to have the provisions of this Act carried out, and that whenever any breach thereof may occur he shall forthwith report the same to the nearest Magistrate, Justice of the Peace or Warden, with a view of prosecuting the offender to conviction.
- 15.—No person holding a license to hunt, kill or pursue Caribou shall employ as a guide, valet, or personal servant, labourer or bearer in a hunting expedition any person who has not obtained a license under the next preceding section.

16.—Any person obtaining a license to hunt, kill or pursue Caribou shall make oath or affirmation before the person granting the said license that he will not violate or permit the violation of any portion of this Act.

17.—No person holding a license to hunt Caribou shall kill or take more stag Caribou than the number indicated by his license, and no member of a hunting expedition, whether a guide, bearer or labourer, or otherwise in the employ of the holder of such license, shall kill any Caribou other than under the said license, and as a part of the number indicated therein.

18.—It shall be the duty of the holder of a license to hunt, kill or pursue Caribou to return his license at the expiration thereof to the Magistrate or other person authorised to issue the same with a statement thereon in writing under oath or affirmation specifying the number of Caribou killed by him and his

party under the said license.

19.—Save as provided in this Act, no person shall export the antlers, heads or skins of any Caribou, nor shall the owner, master, officers or crew of any vessel permit the exportation therein of any such antlers, head or skin, or any part thereof, save as provided and under a permit of a Customs officer. Penalty \$500 or six months' imprisonment.

20.—If any master, owner, or officer, or any one of the crew of any vessel shall be convicted of a violation of the last preceding section, he shall, upon such conviction, be liable for every such offence to a penalty of \$500 or six months' imprisonment, and such penalty shall constitute a claim against the said vessel, and become a lien thereon, and may be collected and enforced by the seizure, confiscation and sale of the said vessel, despite any change of registry or ownership between the date of the offence and the seizure of the vessel.

- 21.—Any person holding a license to hunt, kill or pursue Caribou under this Act may export the carcasses, antlers, head or any part of any Caribou killed under the said license, upon entering the same at the Custom House for exportation and receiving a permit therefor. Such person shall make oath or affirmation, specifying the articles which he intends to export, and that the same are portions of Caribou killed under license held by him, and stating the name of the person from whom he obtained the said license, and the date thereof, and that the articles about to be exported are not being exported as articles of commerce, and he shall thereupon pay a fee of 50 cents to the officer of Customs before whom such export entry is made, which fee the said officer is hereby authorised to retain. Such affidavit or affirmation shall be forwarded to the Department of Marine and Fisheries.
- 22.—No person holding a license to hunt, kill or pursue Caribou under this Act shall export from this Colony the carcasses, heads, or antlers of more than three stag Caribou.
- 23.—Any person not holding a license to hunt, kill or pursue Caribou, but who is domiciled in this Colony, may export the antlers, heads or skins of Caribou upon entering the same for exportation at a Customs House in the Colony, and receiving a special permit therefor. Such permit shall not be granted except upon an affidavit made before the Customs officer to whom application for a permit is made, stating the name of the owner of the articles to

be exported, their destination, and the person from whom and place where obtained, and that the same are not being exported as an article of commerce. Such affidavit shall be transmitted by the officer of Customs to the Department of Marine and Fisheries.

24.—Any person who shall put up the flesh of Caribou in cans or tins or other packages shall be liable to a penalty not exceeding two hundred dollars, or, in default thereof, to imprisonment for any period not exceeding three months.

25.—Any flesh of Caribou found put up in cans, tins or other packages may be seized, and may be destroyed by the order of a Justice of the Peace.

26.—It shall not be lawful for any person to purchase, or to receive in exchange, from any other person, any venison or any portion of the flesh of Caribou, at any time between the 1st day of January and the 31st day of July in any year, and any person offending against the provisions of this section shall be liable to a penalty not exceeding two hundred dollars, or, in default, to imprisonment for any period not exceeding three months.

27.—If any Customs officer is informed or becomes aware that any antlers, heads or skins of Caribou are being exported except by a person who has complied with the provisions of this Act in all respects, it shall be the duty of such officer to seize the said antlers, heads or skins, or any portion thereof, and to make complaint before a Stipendiary Magistrate or Justice of the Peace that a violation of this Act has been committed.

28-29.—All persons are prohibited from setting any snare, trap or pit for the destruction or capture of, or killing or pursuing with intent to kill any Caribou:—

(a) With dogs; or

(b) With hatchet, tomahawk, spear, machine, contrivance or weapon, other than firearms loaded with ball or bullet; or

(c) While swimming or crossing any pond, lake, stream, river or watercourse.

No person is allowed to hunt or kill Caribou within the area as hereafter described, that is to say:—

Commencing one-and-a-half miles south of Grand Lake Station, on the shores of the lake, to a point at the same distance from the railway at Howley; thence to Goose Brook, one-and-a-half miles from the railway line; thence east to the railway line near Kitty's Brook Falls; thence northwardly six-and-a-half miles; thence to a point at Junction Brook, three miles north of Grand Lake Station; and thence southwardly along the course of the brook and shore of the lake to the place of commencement.

All fines and penalties under this Act shall be sued for and recovered in a summary manner on information or complaint before a Justice of the Peace by any person who shall inform and sue for the same; and one-half of all fines and forfeitures imposed shall be awarded to such complainant who shall prosecute the offender to conviction.

Any person who shall violate any section of this Act for which no penalty is herein provided shall be liable to a fine not exceeding \$200, and in default of payment to imprisonment for any period not exceeding six months.

### BIRDS AND WILD RABBIT OR HARE.

No person shall hunt, kill, purchase or have in his possession any ptarmigan or willow-grouse, commonly called partridge, or the eggs of any such birds within this Colony between the 15th day of December and the 20th day of September in any year under a penalty of not exceeding one hundred dollars, or imprisonment not exceeding three months. Provided it shall not be held unlawful to sell, etc., or have possession of such birds where the party shall prove that the said birds were killed between the 20th day of September and the 15th day of December in any year.

It shall be unlawful for any person to export from this Colony for sale as an article of commerce, any willow or other grouse or partridge, under a penalty

of five dollars for each bird so exported.

No person shall hunt, etc., sell, purchase or have in his possession any curlew, plover, snipe or other wild or migratory birds (except wild geese) or eggs of any such birds within the Colony between the 15th day of December and the 20th day of September in each year, under a penalty of not less than \$25 nor exceeding \$100, or, in default of payment, of imprisonment not exceeding three months.

No person shall trap or snare any wild Rabbit or Hare between the 1st day of March and the 20th day of September in any year under a penalty of not less than \$25 and not exceeding \$100, or imprisonment not exceeding three months.

Any person except a traveller on a journey found on Sunday carrying firearms, shall be subject to a fine not exceeding forty dollars, and in default of

payment, to imprisonment for a period not exceeding one month.

Any person, except a traveller on a journey, found on the shooting grounds carrying firearms with or without dogs between the 15th day of December and the 1st day of October, where such game is known to frequent shall be subject to a fine not exceeding fifty dollars, and in default of payment, to imprisonment for a period not exceeding one month.

No person shall hunt, kill, wound, take, sell, barter, purchase, receive or give away, or have in his possession, any Capercailzie or Black Game, or the eggs of any such birds within this Colony, at any time from the 12th day of October, 1907, to the 12th day of October, 1917, under a penalty not exceeding one hundred dollars and costs, and in default of payment, to imprisonment not

exceeding two months.

The following description of the birds is published for general information: The Capercailzie Cock is a large bird weighing from seven to twelve pounds, of dark blue plumage, but white from the crown downwards and with white spots on the upper wing coverts. The Black Cock, which is larger than the Partridge, is also of dark blue plumage, with white feathers under the tail and wings. The hens of both species are colour of the local Partridge in early summer—a light brown.

Nothing contained in these Rules and Regulations shall extend to any poor settler who shall kill any birds (except those prohibited for a term of years from

being killed) for his immediate consumption or that of his family.

# OTTERS, BEAVERS AND FOXES.

No person shall hunt beavers or export beaver skins till October 1st, 1913. No person shall, in any year, take, kill, wound or destroy any otter or beaver between the 1st day of April and the 1st day of October, under a penalty

of \$25 or imprisonment not exceeding one month.

Any person who shall purchase, receive or have in his possession any skin or carcass of a beaver killed or taken in violation of the law, shall be liable to a penalty for a first offence, not exceeding \$200, or in default, imprisonment not exceeding two months; and for a second offence shall be imprisoned for six months with hard labour.

Possession of a carcass or skin of a beaver shall be *prima facie* evidence of a violation of this Act.

No person shall hunt foxes from March 15th to October 15th in any year.

#### TROUT AND SALMON.

No person shall catch, kill, capture or take any salmon, trout or inland water fishes in any river, stream, brook, pond, lake or estuary in Newfoundland by any other means except rod, hook and line.

No person shall by spearing, sweeping or hauling with any net or seine, take or attempt to take any salmon, trout or inland water fish, and the use of lime, explosives or other deleterious compounds for killing or catching fish

of any description is prohibited.

In every mill-dam, rack or framework erected or built across any pond, lake, river, brook or stream where salmon and trout have been known to enter, there shall be put a proper pass-way or fish-ladder not less than four feet in width, capable of allowing salmon or trout of any size to enter the waters above. Any logs or timber of any description which may be so placed as to impede the passage of salmon or trout in a river or stream shall be instantly removed, and no sawdust or mill rubbish of any kind shall be east into any pond, lake, river, brook, stream or watercourse.

No person shall eatch, kill or take any salmon or trout in any river, brook, stream, pond or lake in this Colony between the 15th September and the

15th January next following in any year.

No person shall buy or sell or have in possession any salmon or trout which have been taken contrary to these rules, and every salmon or trout so

taken may be forfeited to the complainant by any Justice.

No person not being a resident of this Colony or its dependencies or not having a fixed place of domicile therein shall take or fish for any salmon, seatrout, ouananiche, trout or charr, or any fish inhabiting or resorting to the inland waters or estuaries of this Island or its Dependencies, unless such person shall first have taken out and obtained an Inland Fishery License. Provided, nevertheless, that this section shall not apply to officers of His Majesty's ships upon service on or visiting this station.

The conditions on which the said license is granted shall be :—

(a) That the licensee shall in all respects conform to the laws of this Colony, and especially to the Statutes and the Rules and Regulations of the Board having reference to the taking of fish in inland waters, and shall do all in his power to prevent the infraction of such laws, rules and regulations, and to promote the protection of the Inland Fisheries; (b) That he shall pay to the Board or its authorised Agent the sum of \$10 as a fee for said license; (c) Upon proof to the satisfaction of the Board that such licensee has been guilty of any violation of the law the Board may declare the said license to be cancelled, and the said licensee is thenceforth deprived of all rights and privileges under the same.

## FIRE PATROL REGULATIONS.

The Government has appointed a Chief Woods Ranger and Fire Wardens for the better protection of the game forests. His duties are, in part:—

(1) To periodically travel over all woodlands, whether belonging to the

Crown or private owners under lease from the Crown.

(2) To trace the origin of every woods fire and fully report same to the Government.

(3) To act in the capacity of an officer for the enforcement of the game

laws of the Colony.

(4) To see that the following notice is conspicuously displayed:—"Campfires must be totally extinguished before breaking camp, under penalty of not to

exceed twelve months' imprisonment or \$400 fine, as provided by law."

The Government of Newfoundland having leased to the Anglo-Newfoundland Development Company certain land and water areas situate in the districts adjoining Red Indian and Victoria Lakes, tourists and sportsmen will please note that, before entering upon the lands of the Anglo-Newfoundland Development Company—whose lands extend along the line of railway from Grand Falls to Gaff Topsails (Summit), inclusive—it will be necessary to first take out a permit, which can be obtained by applying to the Company's head-quarters at Grand Falls. It is also required by the terms of the contract arranged with the Government, that "Every tourist or party of tourists shall be required to employ one at least of guides or fire wardens employed by the Anglo-Newfoundland Development Company, as guide at the usual fees when entering on the lands of the said Company."

#### CUSTOMS REGULATIONS.

When Tourists, Anglers and Sportsmen arriving in this Colony bring with them Cameras, Bicycles, Angler's Outfits, Trouting Gear, Firearms and Ammunition, Tents, Canoes, and Implements, they shall be admitted under the following conditions:—

A deposit equal to the duty shall be taken on such articles as Cameras, Bicycles, Trouting Poles, Firearms, Tents, Canoes, and Tent equipage. A receipt (No. 1) according to the form attached shall be given for the deposit and the particulars of the articles shall be noted in the receipt as well as in the marginal cheques. Receipt No. 2, if taken at an outport office shall be mailed at once, directed to the Assistant Collector, St. John's, if taken in St. John's the Receipt No. 2 shall be sent to the Landing Surveyor.

Upon the departure from the Colony of the Tourist, Angler or Sportsman, he may obtain a refund of the deposit by presenting the articles at the Port of Exit and having them compared with the receipt. The Examining Officer shall initial on the receipt the result of his examination and upon its correctness being

ascertained the refund may be made.

No groceries, canned goods, wines, spirits or provisions of any kind will be admitted free and no deposit for a refund may be taken upon such articles.

# INDEX.

Alaska, Caribou of, 5, 137, 139; illustrations, 143, 145 Alder, The, 30, 160 Algonquins, The. See Indians, Beo-Aluminium cooking utensils, 174, 175 America, North, Caribou of, 139 American Museum of Natural His-Anglo - Newfoundland Development Company, 185 Antelope, The African, 104, 141 Arctic Islands, Caribou of the, 139 Aurora Borealis, 41 "BADMINTON MAGAZINE," Prichard's article quoted, 134, 135 Bake apples, 175 Barren Ground Caribou, 122, 137; horns, 133; group of Caribou included in, 139; illustrations of, 140—143, 145, 146 Bears, Black, in Newfoundland, 18, 157; Polar, 38; shooting of, 116; Kadiak, 137; as food, 175 Beavers, food of, 31; habits, 45; Game Laws regarding, 158, 184 Bedding for camping out, 173 Belle Isle, Straits of, 10, 11, 74, 148 Bicycles, Customs Regulations regarding, 185, 186 Birches, Silver, 30, 161 Birds in Newfoundland, Game Laws regarding, 183, 184 Black Game, 183 Blinds, 89, 94, 106, 110 Blueberries, 175, 176 Boats, 176, 177 the throat glands, 25; the southerly

Авітіві, 49

Bogs, 32, 35, 36, 162—64 Breton, Cape, 149, 152 Bristol, 149 British Columbia, Caribou of, 136, 139, 145 Browse, 30

Cabot, John, 21, 149, 150 Cabot Strait, 149 Camera, The, as a recorder of facts, 4, 5; advantages over the rifle, 91, 102, 103; Customs Regulations, 185, 186 "Camera Adventures in the African Wilds," 4 note Camping out in Newfoundland, restrictions, 79; outfit for, 163-72; selection of ground, 166, 167; choice of a guide, 167-69; the cook, 169; bedding, 173; laws concerning camp fires, 185 Canada, 139 Canoe, The Canadian, 176, 177 Canoes, Customs Regulations regarding, 185, 186 Capercailzie, 183 Caribou, The Newfoundland— Killing of, primitive methods, 9, 10; number of, 11, 12; derivation of name, 13; measurement, 13, 14; weight, 14; colouring, 14, 15, 24, 25, 37, 63, 64; feet of the, 15, 16, 34—36; horns, 16, 17, 20, 23, 24, 37, 62, 63; his four periods of life, 17—42; habits of the doe, 17—19, 100; the fawn, 19, 20; coat, 20, 21, 33, 34;

188 INDEX

Caribou, The Newfoundland—cont. Exportation of antlers, heads, or migration, 27—41; sight, 29; skins, laws against, 181, 182 food, 30, 33, 38, 39; swimming powers, 36, 37; the mating, or Fences, primitive, for catching Carirutting season, 43-72, 115; fights bou, 9, 10 between master stags, 46, 47, 60— Fire Patrol Regulations, 185 62; 65-71; methods of signal-Fire Weed, 159, 160 ling, 89, 90; keenness of scent, Fire-arms and ammunition, Customs 104, 106, 113; curiosity, 114; Regulations concerning, 185, 186 meat of, 114, 115, 182; age, 124, Fires, Camp, laws regulating, 185 125; distribution of, map showing, Firs, 30, 160 138; individuality, 147; shooting Fish of Newfoundland, 149—52 of, Game Laws regulating, 180-82; Fishing, Laws regulating, 116, 117; laws against export of, 181, 182 licences, 184, 185 Cartier, 21 Flies, Black, 18, 75, 172, 178; gad-Cassiar Mountains, 136, 145 flies, 18, 19; sand, 178 Cat, Wild, 157 Florida, Quail of, 122 Cheewink, 122 "Forest Life in Acadie," Hardy, 11, Chief Woods Ranger, duties, 185 Citronella, 178 Fort Chimo, 141 Cod Fishery, The, 149-152 Foxes, 157, 158; Game Laws re-Columbus, 149 garding, 184 Cook Inlet, 139, 140 Fruits, Wild, 175, 176 Cooking utensils, 174, 175 Corduroy, use of, 172 Cox, Mr. Whitaker, 6 Gad-flies, 18, 19 Gaff-topsail, 27, 185 Cranberries, 176 Curlew, The, 183 Game and Fisheries Board, 6 Game Laws of Newfoundland— Curling, 176 Customs Regulations, 185, 186 Birds, Wild Rabbit and Hare, 183, DEER, Virginian or White-tailed, 21, Caribou or Deer, 180—82 Otters, Beavers and Foxes, 184 36, 130 Salmon and Trout, 184, 185 Does, Barren, as leaders, 27, 28, 33, 44, 87, 118; keenness of scent, Mentioned, 79, 109, 115, 116 28, 29, 52, 53, 57, 58, 82, 113, Gander River, 112, 153 170; horns, 37, 42, 64, 133—35; "Gaze," 106, 107, 110 Gazelle, The African, 141 habits, 100 Gilbert, Sir Humphrey, 150 Dog-wood, 160 Dory, The, 176, 177 Giraffe, The, 141 Ducks, 159; black, 175 "Glitter," 40, 74 Gloves, 172 Goose Brook, 182 ELIZABETH, QUEEN, 150 Goose, The Canada, 159, 175; Wild, Elk, 180 Ellesmere Island, 139 Exploits River, 112, 153 Grand Falls, 185

Grand Lake, 6, 27, 45, 77, 78, 112, 117, 153, 182 Grant, Mr. Madison, Article of, cited, 6, 125; illustrations from, 128, 134, 136—141, 143, 145 Greenland, Caribou of, 139, 143, 146 Guides, Methods of, 105, 107, 109, 112, 115 ; licences, 118, 180 Gulf Stream, influence, 74, 156, 157 HARDY, CAPTAIN C., "Forest Life in Acadie," 11, 157 Hares, 159, 175; Game Laws regarding, 183, 184; Northern, feet ot, 34; colour, 38 Harlequin, The, 159 Harmsworth, Messrs., 156 Harry's Mountain, 112 Henry VII., 149 Hornaday, Dr., 6 Horns of the Caribou— Rubbing off the velvet, 23, 24, 62, 63; discarding the, 37; entangled in fighting, 60—62; colour, 63, 64, 144, 145; variation in, difference as evidence of species, 123, 124; age determined by, 124, 125; size, 126 — 33; photographing of, 130; number of points, 133; the Newfoundland doe, 133-35; size diminishing, 137; laws against export of, 181, 182 Howley, Mr. J. P., 6, 9, 12, 27, 117, Huckleberries, 175, 176 Humber River, 153, 155 Hunting Caribou, methods, 39, 40 Huntress, Mr., 6 Ice Storms, 40 Idaho, 139 Indians, Beothic, 9, 22, 152, 153; Micmac, 153 Insect Pests, 18—20, 75, 177—79

Ireland, 149; bogs of, 32 Islands, Bay of, 155, 176 James, King, 151 Jay, The Canada, 85, 86 Johnstone, Mr. J. W. N., 6 Junction Brook, 182 Juniper, 30, 63, 161 Kadiak Bear, 137 Kalmia, 160 Kenai Peninsula, 137 Kitty's Brook Falls, 117, 182 Labrador, 148; Caribou of, 11, 74, 75, 122, 134, 135, 142, 157 Larch, 63 Licences, 180 Lichens, 11, 30, 38, 39, 159 "Liquid smoke," 177 Lynx, 18, 34, 157 McGrath, Mr. Р. Т., 6, 150—52 Mackintoshes, 172 Maine, 139 Manitoba, 139 Maple, 30, 31, 161 Massachusetts, Quail of, 122 Mathew, Cabot's ship, 149 Micmac Indians, 153 Migration of Caribou— Times, 27, 41, 77, 78; mating during, 47, 48; reason for, 73—77; path of, 78, 79; habits during, 79—101 Millais, Mr. J. G., "Newfoundland and Its Untrodden Ways" quoted, 6, 11, 12, 14, 16, 17, 25 note, 78, 79, 110, 112; head shot by, illustration, 123, 124 Millbanke, Governor, 152 Mink, 159 Moose, discovery, 21; habits, 31, 32,

36, 100, 114; weight, 35; Game

Laws regarding, 180

Morris, Sir E. P., 5

Mosquitoes, 18, 19, 178

Mosses, 32, 38, 39, 67, 159, 161 Moulton, Mr., 12 Mountain ash, 160 Mountain Caribou, 134—37, 146 Musk-ox, 38 Musk-rat, 158, 159 Myrtle, 31 "New Isle," 151 New Jersey, 159 New York, 150, 159 New York Zoological Park, 6; National collection of Heads and Horns, 131, 142 Newfoundland, Caribou of, 8—11, 139, 146; Summer in, 17, 18; rivers of, 30, 31, 153-56, 165, 166; bogs, 35, 36; formation of, 74, 75, 153; the railway, 117, 152; the reserve, 117, 118, 128; Game Laws of, 117, 118, 180—86; geographical position, 148, 149; cod fishery of, 149-52; restrictions against colonists, 151, 152; original inhabitants, 152, 153 ; farms, 156 ; temperature, 156, 157; animal life, 157—59; flora, 159—61; woods, 161, 162, 164, 165; lakes, 165, 166 ; weather, 166, 167 Newfoundlander, The, 169 North Pole, 171 North Sydney, 152 Norway, fiords of, 155 Nova Scotia, 149, 153 Old Harry, 77 Old Man's Beard, 39, 161 Opossums, 159 Osborn's Caribou, 130, 135, 136, 145 Otters, 159; Game Laws regarding, 184 Outfit for camping out, 170—72; Regulations regarding, Customs 185, 186

Palliser, Governor, 153 Partridge, 183 "Pears (wild)," 176 Peary Caribou, 142 Peary, Lieutenant, 171 Pennell, Mr., 6 Pennyroyal, 178 Piduateh, 25 *note* Pigeons, tame, 103 Pigeonwood, 160 Pine, 160 Pitcher Plant, 160 Plover, 183 Pools, "bottomless," 32 Poplars, 30, 161 Porcupines, 159 Port-aux-Basques, 152, 154 Prichard, Mr. H. Hesketh, 6; "Caribou of Labrador and Eastern Canada," quoted, 134, 135; photographs lent by, 120, 127, 132, 135, 142, 145 Ptarmigan, 159, 175, 183 Pulp mills, 156, 160

Qualt, the American, 122 Quebec, Caribou of, 135, 145

Rabbit, Wild, Game Laws regarding, 183, 184 Raccoons, 159 Raspberries, 175 Rats, Musk, 158, 159 Red Indian Lake, 128, 185 Reid Company, of Newfoundland, 5, 6 Reid, Sir Robert G., 152 Reindeer, habits, 18, 19; feet of, 34, 35 ; the Siberian, 143 Rhinoceros, Black, 99 Richardson, Sir John, *quoted*, 13 Roberval, 21 Rocky Mountains, Caribou of the, Roosevelt, the ship, 171

St. John's, 148, 150, 152, 157 note, 176
St. Lawrence, Gulf of, 148
Salmon, Game Laws regarding, 184,
185 Sandy Lake, 47, 77, 78
Sandy River, 45—47, 84, 97, 99, 117
Scotland, Stags of, 12 Selous, Mr. F. C., 6; "Hunting Trips in North America," quoted,
Selous, Mr. F. C., 6; "Hunting
108, 109; head shot by, illustration,
126, 129; on hornless does, 135,
136
Seton, Ernest Thompson, "Life His-
tories of Northern Animals," 6, 7, 21, 34, 35, 138
Shoe Hill, 25 note
Shoe Hill, 25 note Shooting of Caribou— Primitive methods of killing, 9,
Primitive methods of killing, 9, 10; numbers killed, 11, 12; an
incident, 78, 79; rifle and camera
compared, 94, 95, 102—4; in water, forbidden, 109, 182; time
for, 114—17 Siberia, Caribou of, 139, 145; Rein-
deer of, 143
Snipe, 183
Snow-shovel or brow-antler, 68, 130
Spatter-dock, 31 Spitzbergen, 139
Spruce, 30, 67, 160, 165
Squires, Mr., 6
Squirrels, 159 Stag, The Newfoundland—
Keenness of scent, 28, 29, 59; his
band of does, 49, 50; fights be-
tween master stags, 46, 47, 60—62,
65—71; habits during the rutting season, 58
Stalking of Caribou, 110, 113

Stone's Caribou, 5, 137, 140, 146 Storms in Newfoundland, 40, 73 Stoves for camping, 175

Tamarack, 30, 63, 160
Tar, Stockholm, 178
Tents for camping out, 173, 174;
Customs Regulations regarding, 185, 186
Terra Nova, 153
"Toler," The, 25 note
Trapping, 157, 158
Trout, 166; Game Laws regarding, 184, 185
Trouting gear, Customs Regulations regarding, 185, 186

Upper Gander River, 124 Usnea, 39, 161

Venison, salted, 177 Viburnums, 30, 31, 160 Victoria Lake, 185 Virginia or white-tailed deer, 21, 36,

Waldegrave, Governor, 152
Wapiti, The, 21
Water-lily, 31, 32
Weasel, 38
Whitbourne, Captain Richard, "A
Discourse and Discovery of Newfoundland," 151
White Bear Bay, 12
Willow, 30
Willow Grouse, 183
Wolves, 18, 37, 104, 157
Woodland Caribou, 13, 122, 134—36, 139, 145, 146

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