

thereby a habit of which we became aware for the first time on that occasion. To avoid a dog that was in close pursuit it mounted a tree and laid itself flat on a limb about twenty feet from the ground, from which it was finally shot. We have ascertained by successful experiments, repeated more than a hundred times, that the Ermine can be employed, in the manner of the ferret of Europe, in driving our American rabbit from the burrow into which it has retreated. In one instance, the Ermine employed had been captured only a few days before, and its canine teeth were filed in order to prevent its destroying the rabbit; a cord was placed around its neck to secure its return. It pursued the hare through all the windings of its burrow and forced it to the mouth, where it could be taken in a net, or by the hand. In winter, after a snow storm, the ruffed grouse has a habit of plunging into the loose snow, where it remains at times for one or two days. In this passive state the Ermine sometimes detects and destroys it. In an unsuccessful attempt at domesticating this grouse by fastening its feet to a board in the mode adopted with the stool pigeon, and placing it high on a shelf, an Ermine which we had kept as a pet, found its way by the curtains of the window and put an end to our experiment by eating off the head of our grouse."

"Notwithstanding all these mischievous and destructive habits, it is doubtful whether the Ermine is not rather a benefactor than an enemy to the farmer, ridding his granaries and fields of many depredators on the product of his labour, that would devour ten times the value of the poultry and eggs which, at long and uncertain intervals, it occasionally destroys. A mission appears to have been assigned it by Providence to lessen the rapidly multiplying number of mice of various species and the smaller rodentia."

"The white-footed mouse is destructive to the grains in the wheat fields and in the stacks, as well as the nurseries of fruit trees. LeConte's pine-mouse is injurious to the Irish and sweet potato crops, causing more to rot by nibbling holes into them that it consumes, and Wilson's meadow mouse lessens our annual product of hay by feeding on the grasses, and by its long and tortuous galleries among their roots.

"Wherever an Ermine has taken up his residence, the mice in its vicinity for half a mile round have been found rapidly to diminish in number. Their active little enemy is able to force its thin vermiform body into the burrows, it follows them to the end of their galleries, and destroys whole families. We have on several occasions, after a light snow, followed the trail of a weasel through fields and meadows, and witnessed the immense destruction which it occasioned in a single night. It enters every hole under stump, logs, stone heaps and fences, and evidence of its bloody deeds are seen in the mutilated remains of the mice scattered on the snow. The little chipping or ground squirrel, *Tamias Lysteri*, takes up its residence in the vicinity of the grain fields, and is known to carry off in its cheek pouches vast quantities of wheat and buckwheat, to serve as winter stores. The Ermine instinctively discovers these snug retreats, and in the space of a few minutes destroys a whole family of these beautiful little *Tamias*; without even resting awhile until it has consumed its now abundant food, its appetite craving for more blood, as if impelled by an irresistible destiny, it proceeds in search of other objects on which it may glut its insatiable vampire-like thirst. The Norway rat, and the common house-mouse take possession of our barns, wheat stacks, and granaries, and destroy vast quantities of grain. In some instances the farmer is reluctantly compelled to pay even more than a tithe in contributions towards the support of these pests. Let however an Ermine find its way into these barns and granaries, and there take up its winter residence, and the havoc which is made among the rats and mice will soon be observable. The Ermine pursues them to their farthest retreats, and in a few weeks the premises are entirely free from their depredations. We once placed a half domesticated Ermine in an outhouse infested with rats, shutting up the holes on the outside to prevent their escape. The little animal soon commenced his work of destruction. The squeaking of the rats was heard throughout the day. In the evening, it came out licking its mouth, and seeming like a hound after a long chase, much fatigued. A board of the floor was raised to enable us to ascertain the result of our experiment, and an immense number of rats were observed, which although they had been killed on different parts of the building, had been dragged together, forming a compact heap."

"The Ermine is then of immense benefit to the farmer. We are of the opinion that it has been over-hated and too indiscriminately persecuted. If detected in the poultry house, there is some excuse for destroying it, as, like the dog that has once been caught in the sheepfold, it may return to commit further depredations; but when it has taken up its residence under stone heaps and fences, in his fields, or his barns, the farmer would consult his interest by

suffering it to remain, as by thus inviting it to a home, it will probably destroy more formidable enemies, relieve him from many petty annoyances, and save him many a bushel of grain."

The Ermine brings forth its young from four to seven at a litter in the months of April and May, and it is said that the family usually remain in the same locality until autumn. With respect to the change of colour, Audubon is of opinion that it is effected by shedding the hair, the new coat coming out in a different color. On the other hand, an European naturalist, Mr. Bell, thinks that the hair changes colour. Upon this subject, and also upon the habits of the species in Britain, we make the following extract from Knight's English Cyclopædia, page 1006:—

With regard to the mode in which this alteration is brought about, Mr. Bell expresses his belief that the winter change is effected not by the loss of the summer coat and the substitution of a new one, but by the actual change of colour in the existing fur; and he cites, in proof of this view of the subject, the case of the Hudson's Bay Lemming, which in Captain Sir John Ross's first Polar Expedition was exposed in its summer coat on the deck to a temperature of 30° below zero, and the next morning the fur on the cheeks and a patch on each shoulder had become perfectly white. Next day the shoulder-patches had considerably extended, and the posterior part of the body and flanks had turned to a dirty white. At the end of a week the winter change was complete, with the exception of a dark band across the shoulders prolonged down to the middle of the back.

That change of temperature, and not merely change of season is necessary to effect the alteration of colour is evident from Mr. Hogg's observations. (5th vol. of London's 'Magazine of Nat. Hist.,' Bell, 'British Quadrupeds')

Mr. Hogg, whose remarks appear to have been made in the county of Durham, states that within the last nine years from the date of his communication he had met with two Ermines alive, and in the most different winters that had occurred for many years. One was observed in the extremely severe winter (January to March) of 1823; the other in the extremely mild January of 1832.

"In consequence of the months of December, 1831, and January, 1832, having been so extremely mild, I was," says Mr. Hogg, "greatly surprised to find this stoat clothed in his winter fur; and the more so, because I had seen about three weeks or a month before, a stoat in its summer coat or brown fur. I was therefore naturally led to consider whether the respective situations which the brown and white stoats seen by me this warm winter inhabited, could alone account for the difference of the colour of their fur, in any clear and satisfactory manner. The situation then where the Brown Stoat was seen, is in nearly 54° 32' N. lat., 1° 19' W. long, upon a plain elevated a very few feet above the level of the river Tees, in the county of Durham. Again, the place where I met with the Ermine, or White Stoat, on the 23rd of January, 1832, is in the North Riding of Yorkshire, in nearly 54° 12' N. lat., 1° 13' W. long; it is situated at a very considerable elevation, and in the immediate neighbourhood of the lofty moorlands called the Hambleton Hills. These constitute the south-western range of the Cleveland Hills, which rise in height from 1100 feet to 1200 feet above the sea. At the time, the Ermine was making his way towards the hills, where, no doubt, he lived, or frequently haunted; and consequently the great coldness of the atmosphere, even in so mild a winter, upon so elevated and bleak a spot as that moorland, would satisfactorily account for the appearance of the animal in its white fur; although the place is, in a direct line, more than 23 miles distant to the south of the fields near the Tees, inhabited by the Brown Stoat."

The Ermine-Weasel, the length of whose head and body is 9 inches 10 lines, the tail being 4 inches 8 lines, is the Carlwm of the Welsh; Stoat, Stout, and greater Weasel of the English; L'Hermine and Le Roselet of the French; Armellino of the Italians; Armino and Armelina of the Spanish; Hermelin of the Germans; Hermelin and Lekatt of the Swedes; Hermilyn of the Dutch; Hermelin and Lekatt of the Danes; Seegoos and Shacooshe of the Cree Indians; and Terreeya of the Esquimaux.

The Ermine is found generally in temperate Europe, but common only in the north. The finest, that is, those with the longest and thickest fur, and of the purest and brightest colour, are imported from the high latitudes. Russia, Norway, Sweden, Siberia, and Lapland, furnish them abundantly. The British importation, in 1833, was 105,139; and 187,000. In America it is found from the most northern line to the middle districts of the United States. Ermine-skins formed part of the Canada exports in the time of Charlevoix; but they have so sunk in value, that they are said not to repay the Hudson's Bay Company the expense of collecting them, and very few are brought to this country from that quarter.