

SEQUOIA NATURE GUIDE SERVICE

Another California Animal in Danger of Extinction
THE SIERRA HARE - SNOWSHOE RABBIT

The Sierra Hare (*Lepus campestris sierrae*), more often called the "Snowshoe Rabbit", belongs to a vanishing race. These little animals of the High Sierras of California are engaged in a life and death struggle for existence. Man seeks to kill the animals at every opportunity, while wild animals and birds of prey are ever present enemies. Under natural conditions the animals could hold their own; but since man has stepped in with death dealing firearms they have but little show. Some fifty years ago the animals were fairly abundant, but with the advance of settlement and cultivation they have diminished from year to year and now but few remain.

Family and Distribution of the Sierra Hare

The Sierra Hare is one of the "Varying Hares". These hares represent a small group of closely related species inhabiting northern North America in the cool forest regions from the northern border of timber line southward through British Columbia; thence on through the United States along the Atlantic to Maine, the Alleghanies to West Virginia, the Rocky Mountains to New Mexico, the Sierra Nevada to Sequoia National Park and Monache Meadows California.

Dr. C. Hart Merriam has pronounced the Sierra Hare a distinct species indigenous to the Sierra regions of California. Its range covers an area along the high Sierras from a point probably near Mount Shasta, on the north, to Monache Meadows on the south. The hares inhabit the more open plains and meadow lands bordering on upper timber line. They have a vertical range in summer of from 9,000 to 12,500 feet; in winter down to 8,000 feet; general zonal range Boreal. In winter they drift down to the upper edge of the sagebrush areas of eastern California, and along the western slopes of the Great Western Divide to Mineral King, Alta and Hockett Meadows in Sequoia National Park.

Description of the Sierra Hare

The Sierra Hare is the largest and most beautiful of our California hares. It is more stockily built and with somewhat larger ears and tail than our California plains jack rabbit. It has a body length of about twenty-five inches and often weighs as much as eight pounds. In summer the animal's upper body, breast, front side of forelegs and back side of hind legs are gray, remainder of legs and belly white; back half of the convex side of ear and nape white; tip of ears black; white spot in forehead; front side of ear and head grayish buff; tail large, bushy, white, with narrow gray stripe on top, slightly tinged with yellow; in winter the animals are white; ears tipped with black.

The fur of the animals is long and thick, especially in winter, when the legs, and even the soles of the feet, as well as the body are heavily furred. So heavy and dense is the animal's coat in winter that during the moult in the spring the fur often comes off in patches, thus giving the hare a ragged and mottled appearance. The long spreading hind feet, with unusual long hair on the soles, enables the hare to travel on top of the snow at all times. This is responsible for the common name applied - "Snowshoe Rabbit".

Feeding Habits of the Sierra Hare

Winter, of course, is the time of hardship and battle for most wild animals which live on top of the ground, do not hibernate, and are compelled to search daily for their food. But this is not the case with these rabbits, for nature has prepared them to withstand the rigors of winter.

The summer food of the animals consists of herbaceous plants and grasses. The winter food is chiefly buds and bark from twigs on brush and small deciduous trees, and they feed at all times on top of the snow. Each additional snowfall raises them a little higher to the new supply of food, so that few, if any, animals are better provided for or better adapted to living in cold climate and deep snow than these heavily furred and well shod rabbits. They do not dig burrows, but make forms in which they live by day, for they are mainly nocturnal in habits and do most of their feeding at night. The hares wander in search of food in winter; but after the mating season in the spring they usually return to the vicinity where born.

An Animal with Many Enemies

The enemies of the hare are varied and many. Man is the most deadly of them all. I do not mean by this that man is responsible for the killing of more animals than all their other enemies. But because the rabbits are bold in the presence of man, and do not recognize him as being a hostile genus that can kill with firearms from afar, they fall easy victims. Eagles, hawks, owls, wolves, lynx, foxes, marten and weasel, all prey upon the animals; but more often they fail in their efforts to catch the older ones either by speed or stealth. With the younger animals it is quite different. The young wander about and care for themselves at what seems a very tender and immature age, at which time all their enemies lay in wait for them and only a very small portion of all that are born survive.

Breeding Habits of the Sierra Hare

The mating time of the animals for this locality is undoubtedly regular in the spring, as young are usually found in June. The young range from four to six in number, and it is doubtful if more than a single litter is produced each year. The young, when first born, are shaped like the adults but are different in coloring. They are born with their eyes open, with their sharp incisor teeth, feet with sharp claws, and hair on the soles. Their bodies are covered by short downy fur of a soft shadowy yellowish brown color. They are born in nests made of dry leaves and grasses, heavily lined with hair from the mother's body, and usually well hidden under clumps of bushes, or in dense bunches of vegetation. A few days after their birth, the young leave their beds and move freely about; and when about half grown all family ties cease and the mother leaves them to shift for themselves.

It was on June 21, 1907, that we found a mother Snowshoe Rabbit and her young on the north spur of Mt. Sillimen in Sequoia National Park, elevation 10,400 feet. The mother had tunneled through some eighteen inches of crusted snow and built her bed on the ground under low willow bushes. When we approached, the mother rabbit bounded out on top of the snow, ran a few yards in a series of high jumps, then suddenly stopped and sat down high upon her haunches apparently in an effort to attract us from her young. We took the five young rabbits all gently from their nest, looked them over carefully, then returned them to the nest whence they came. When we were handling the young rabbits they uttered shrill squealing cries of fright and distress. In response to their cries, the horrified mother ran hysterically around us uttering soft weird grunting sounds of emotional distress and stamping her big padded hind feet hard down on the crusted snow with a great slapping effect. After we had taken our departure, and when away a distance of some one hundred yards, the ever anxious mother was observed passing from sight under the snow to re-join her helpless offspring.

Protective Coloration

No animals of the Sierras are better provided with protective coloration that blends with its environment than are the Sierra Hares. At all times they rely largely on their protective coloring to shield them from their enemies. The animals are so protectively colored in both winter and summer as to render them inconspicuous and seldom seen. They change their color twice a year; in spring and in late autumn. In winter they turn white to match with the snowy background of their surroundings, and in summer gray to blend with the granite

shale and ledges; so enabling them to hide with but scant protection. On occasions I have frightened these animals from their forms and they would go bounding away in a series of long, high jumps for a short distance, when they would suddenly stop, slowly settle down, and were immediately lost from sight.

Fear a Ruling Passion

Like most timid creatures, fear governs the every day life of the Sierra Hares. Their dominant thought seems fear, and they are always on the alert to escape bodily harm from their enemies. I know of no other animals in the Sierras that live in such constant fear, both by day and by night, or are less given to combative impulse, than these timid rabbits. I often wonder how it is that animals such as they, surrounded by so many enemies, can take any enjoyment in life whatsoever - but nevertheless they do. Although they have but little social ties other than that of mother and her young, at times they assemble in small social gatherings, relax, and enjoy life in play and pastime. I have on a few occasions watched them in their frolics of this character, as conducted on the forest floors in Sequoia National Park; and in these frolics they demonstrated that they were very intelligent, alert and mischievous.

The Sierra Hare is an animal endowed by nature with philosophical mind and excellent reasoning power when put to the test to escape an attack from enemies. They have a winning burst of speed that surpasses that of practically all other animals of their region. Their sense of smell is poor, but their hearing and sight are of the very best. The soles of their feet are so heavily furred and pad-like in their form as to enable the animals to run over rocks snow and ice at a very rapid gait with but little sound or effort. All of these features, combined with their fear and protective coloring, when put to defensive use, ranks the animals as one of extraordinary characteristics.

Valueless for Food in Summer - Yet Often Killed

The Sierra Hare, when taken in prime condition, is an excellent food animal. But by reason of the remoteness from settlement and high elevation of the region which it inhabits, few are taken other than during the summer months, at a time when their flesh is practically unfit for food. A few years ago it was no uncommon occurrence for those tourists and sportsmen whose privilege it was to visit the Mt. Whitney and Kern River region to bring home with them either the pelt, foot, tail or ear, of animals that they had killed as souvenirs of their trip. As the animals become scarcer, this practice has been gradually on the wane ever since the year 1903, up to the present time. The last record of which I have note of any animals having been killed in the above named territory is in 1918.

Should the Sierra Hare be Protected or Exterminated?

To me, the Sierra Hare forms one of the most interesting members of our California mammal life and should be protected before everlastingly too late. Furthermore, the animals are not harmful in any way to agriculture and do practically no harm to growing vegetation. They will not thrive when held in captivity, and when once depleted over their range the species can never again be restored by man. The only protective territory the animals now have is within our California National Parks. But for the reason that these parks contain but little of their range, the protection afforded from this source is but meager. Outside of the parks the animals are constantly grappling with new danger and gradually going down to their deaths by means of the death dealing methods which man has brought about. Extermination of these animals which have not been proven guilty of destructiveness, and are of little or no use for food in summer, is not justifiable and, to me, seems simply a matter of cruelty.

For hundreds, yes, perhaps thousands, of generations these beautiful and harmless animals have lived out their lives under the sunny skies of the High Sierras in California. Shall we, as citizens, stand by idly and allow this harmless and picturesque race of California mammal life to go down and out under persecution of man? Or shall we be just and permit them to continue to perpetuate their kind and live their lives according to their destiny in their chosen homes on the Sierra summits?