

CLIMBING FOR WHITE GOATS.

By George Bird Grinnell.



THE white goat lives above timber line, among the rocks, along the narrow ledges, and in the fissures of towering precipices, by snow fields and glaciers.

Really it is not a goat at all, but an antelope—the analogue and not distant relative of the European chamois. It has horns and a beard, and for no better reason than this, the western American, with his faculty for seizing on any salient characteristic, has called it goat. So in the vernacular these animals, young and old, are billies, nannies, and kids, and will be so always.

This Alpine antelope is about the size of a sheep, and is remarkable in being white. Now nothing is more conspicuous against the summer landscape than a patch of white. On the other hand, many birds and mammals inhabiting snow-clad regions have white plumage or fur, and are thus invisible at a little distance. The goat is one of the mammals thus protected. Its life is passed high up on lofty mountains, often among fields of ice and snow, or at least where snow remains in patches and drifts almost throughout the year. Amid such surroundings it is mere accident if a white animal is seen by the hunter.

The short, sharp, backward-directed horns, the stout hoofs, and the margins of the eyes and lips are black. Young individuals have the long hair on the ridge of the back gray, which, perhaps, points back to ancestors which were not white, but were gray in color like a Japanese relative of this species.

The goat is an animal of the north; yet since altitude often answers for latitude, so we sometimes find it far to the south of its usual range; for example, on Mount Whitney, in California, where goats are abundant, though none of their kind can be found for hundreds of miles to the north. Like certain Alpine butterflies, which occur each

summer on Mount Washington, in New Hampshire, and are not found elsewhere south of Labrador, so on some isolated mountain-tops the goat has been cut off from the rest of his race and still persists in little colonies living alone.

The goat likes regions of great precipitation, and is most abundant in the high mountains where much snow or rain falls. This explains its absence from the southern portion of the continental backbone. Wyoming, Colorado, and New Mexico have many peaks high enough to give it the temperature which it requires, but it is not found in those regions because of their aridity. The goat occurs abundantly in northwestern Montana, Idaho, Oregon, and Washington, and all through the mountain ranges of the British possessions and Alaska, north toward the Arctic Ocean, where the mountains become lower and sink down to meet the seashore. Besides this territory over which the species is generally distributed, there are a number of out-lying localities, like Mount Whitney, a peak or two in Colorado, and a few other points where white goats have been found.

For most of the year the animal wears a shaggy coat of long, coarse hair, beneath which lies a heavy under-fleece of white cotton-like wool of very fine texture. The long, coarse top-coat sheds the rain or the snow like a thatched roof, while the under coat is thus protected from the wet and keeps the heat in and the cold out. Although the goat is generally a shaggy, rough-looking creature, yet in summer it sheds its coat, and for a time is almost as naked as a newly shorn sheep. If it could be obtained in commercial quantities, the wool of the white goat would be valuable. Specimens which I furnished some years ago to Dr. Thomas Taylor, Microscopist of the Agricultural Department at Washington, were called by some wool experts fine Cashmere wool; by others, Australian fine; and by still others, fine wool from various foreign

ports. Dr. Taylor pronounced the wool finer than Cashmere wool. In the mountains of British Columbia, excellent blankets are woven from this wool by the Indians. The fleece is shaved from the hide with a sharp knife, and the yarn twisted by the women, who roll the wool under the hand on the bare knee. A simple loom is used for weaving, and the blankets made are not only thick, warm, and serviceable, but also sometimes very beautiful.

The white goat is occasionally captured alive. Full grown ones will not live in captivity, nor will captives survive when removed from their native mountains. Those taken as kids, however, become perfectly tame, wandering away to feed during the day, and at night returning to the house.

Although the goat is nearly related to the chamois, it has little of the activity of that nimble species. The bighorn is the runner and jumper of the Western mountains, while the goat is the plodder. He gets over the ground and climbs the loftiest peaks "by main strength and awkwardness." The bighorn rushes away along the mountain-side at a headlong pace, the alarmed goat starts straight for the mountain-top at a rate which seems slow, often no more than a walk, but which is so steady and continuous that it soon carries the animal out of the way of danger. The goat does not very often run, nor does it often raise its head to look about it like a deer or a wild sheep. Usually, even after being shot at, it holds its head low, and seems to regard one from beneath its eyebrows. When at last convinced that there is danger, it moves off, either slowly pulling itself up over the rocks, or if the way is level, going with a swinging, sidelong gait, which reminds one of a pacing dog.

But the goat does not always run away. Sometimes, in its simplicity, it turns to fight. An acquaintance of mine who discovered one lying under a shelf of rock took his hunting companion above it and up to within fifteen or twenty yards of it, and then, by throwing stones at it, attempted to drive the game out to where the hunter could see it. To his astonishment, the animal bristled up in a fury and was ad-

vancing as if to attack him, when the hunter shot it. The male goats are quite pugnacious among themselves, and often those killed bear evidence of severe battles which they have had with others of their kind.

The goat is marvellously sure-footed, and from the day of its birth, is practised in climbing over the rocks, but it must not be imagined that it never falls from the insecure perches which it frequents. Such falls are not uncommon, but seem rarely to result in serious injury. Kids which have been captured when very young and kept in captivity have been observed to play at rolling down steep banks, repeating the tumble over and over again, as if practising for the falls which they might be obliged to take later in life.

The spurious hoofs, or dew-claws, of the goat, while not strictly functional, are yet of great assistance to it in climbing about among the rocks and especially in going down hill. These hooflets are large and catch on the ground without yielding, acting as brakes, relieving the direct strain on the middle toes of the foot. The dew-claws almost always show considerable wear against the rocks.

Hunting the goat is man's work, and to follow the game to its home among the rocks calls for the best qualities of the mountaineer. Muscle, nerve, and experience in mountain climbing are needed by the goat hunter, for the labor of reaching the animal's home is extremely arduous. In some sections it is possible to ride a horse up to the game's feeding-ground, but usually much hard foot-work must be done before the hunting-ground can be reached. When the goats have once been found, however, it is usually easy to secure them, for they are gentle and unsuspecting.

A year or two since, I was hunting in the Rocky Mountains with a friend who had never shot a goat, and I was extremely anxious that he should secure one. Besides that, there was no fresh meat in camp, so we had a double motive for hard work. Starting from the lodge one morning with the rising sun, we crossed the stream and set our faces against the great mountain that stood



The White Goat at Home.

before us. First above the valley's level we were confronted by the talus, above that by a thousand feet of cliff, and then by other slide-rock and more cliffs, in all nearly five thousand feet, if we could climb so far. The slope at the foot of the cliff was, perhaps, fifteen hundred feet high; a mass of small rock fragments, rather firmly compacted with earth and vegetation, that lay at an angle of nearly forty-five degrees, so that the climbing was extremely steep and slow. After working our way nearly to the top of this talus, we found running along it, under the cliff, a game trail, and we followed this, knowing that it would take us to some point where the precipice which overhung us could be climbed. The trail worked higher up on the talus, and led us to a break in the cliff, where there were some fissured ledges, which promised an ascent for a few hundred feet at least. Everywhere the path showed signs of abundant use; the angles of the rock were worn and

rounded by the passing of many hoofs, and no plants grew in the scanty soil in the crevices. The climbing soon became hand-over-hand work; one man standing on a ledge and holding the rifles, while the other went up six or eight feet, and then took the guns from his companion, who now in his turn drew himself up over the ledges. As we proceeded, the climbing grew more difficult, and it was hard to understand how any animal, unprovided with hands or wings, could have ascended. Often the ledges on which our feet rested were only two or three inches wide, and sometimes there were no ledges, and we worked ourselves up the face of the wall, clinging with tenacious grip to projections hardly large enough to support the finger-tips, our feet resting on little roughnesses in the rock which barely supported the toe. Some of the work was trying to the nerves, but at length we had passed the worst places and reached a narrow fissure where the ascent was easier.

After a brief pause for a restful pipe, we resumed our climb, and before very long came out on the crest of the great

mile long and ended in a high cliff, over which the stream poured. If hunted and hunters kept along on their respective sides, they would come together at its head. Hidden by the trees, we went on, timing our advance by the goat's progress, and at length when we reached the end of the valley, the animal was on the slide-rock above us and only eighty yards distant.



Head of a White Goat.

shoulder we had been ascending. From this we looked out over a narrow alpine valley, beyond which, steep rock-slides and frowning walls rose to a great height, and just across the valley and half way up the slide, was seen a white patch which could only be a goat. The stream-bed was a little below us, and the trees which grew in the valley furnished good cover for stalking the game, which, however, was as yet too far from the timber for a certain shot. The wind favored us, for it blew up the valley. We waited a little to see what the animal would do, and soon it began to walk slowly up the slide, stopping now and then to feed, and then moving on again. In a few moments it had passed behind some tree-tops and we hurried down into the edge of the timber. The valley was only about half a

Soon the shot rang out. The goat gave a bound, and began to scramble along the slide-rock toward the cliff. Another shot sounded, and then another, the animal climbing all the time, but at the foot of a high ledge it stopped, too weak to surmount it. It turned and for a few seconds stood with lowered head looking at us; then it reeled, its legs seemed to give way, and it fell, slipping, sliding, and bounding down the cliff's face and on to the rocks below, and there turning over and over, it rolled down to us. The work of preparing our loads of meat for transportation to camp occupied some time, so that before we were ready to go, the sun had long been hidden behind the high peaks that flanked the narrow valley.

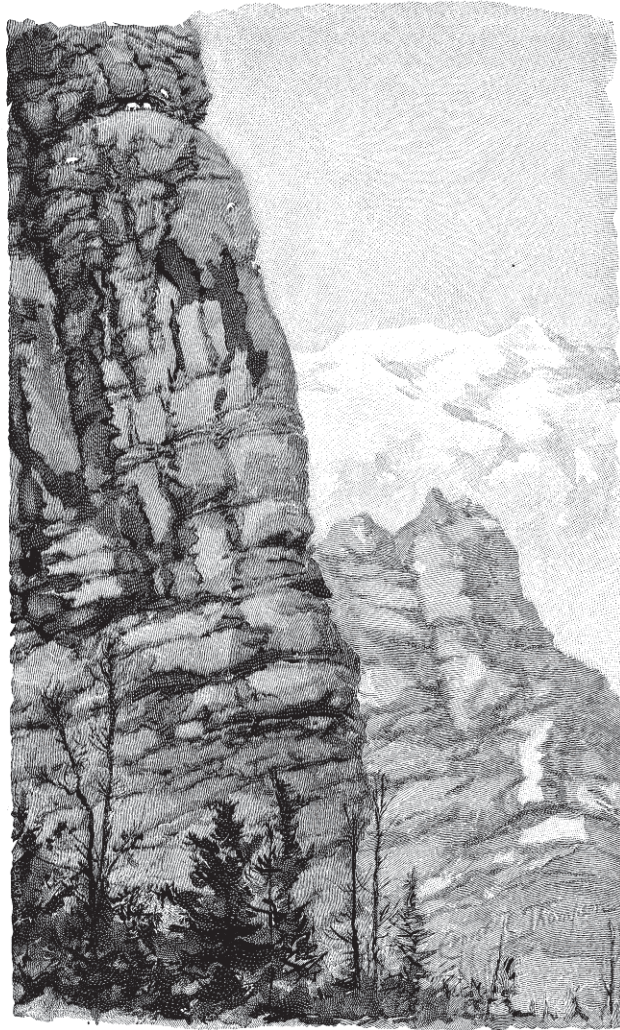
Trying to make a short cut by following down the stream, instead of returning as we had come, we soon found ourselves among ledges that could not be descended, and it took five hours of hard climbing and walking—much of it in the dark—down ledges, among fallen timber and through swamps, before we saw the light of the fire flickering through the lodge covering.

A week later, we climbed through the snow to the crest of another mountain to make some notes on the geography of the region. After we had taken our observations, one of the party called attention to a little spot of white in the shadow of a great rock below us, and looking at it through the field-glasses, it was seen to be a goat.

We approached very cautiously from above, keeping the rock between it and

ourselves, and tiptoeing along as quietly as possible over the clinking shale. When we were within perhaps ten yards of the rock, the goat walked from under it, on my friend's side. He fired once, again, and again. The goat was mortally hurt, but at first it kept its

with all its might, bracing itself, with stiffened outstretched legs, while still it slipped and slid onward toward the verge of the cliff, and we watched it with hearts full of pity now, although—so full is man of contradictions—we had felt no pity when the bullets struck



White Goats Climbing a Nearly Perpendicular Mountain-side.

feet and ran. The mountain side was steep, and just below it was a gulf two thousand feet deep. It fell, rolled over, came to its feet again, and tried to stop. In vain; with staring eyes it looked toward the brink before it, holding back

it. A moment more and it had reached the brink and disappeared, and still I waited and watched, listening and looking for I knew not what, half fascinated by the pitifulness of the sight; and then, half a mile down the valley, I saw