



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE AUK:

A QUARTERLY JOURNAL OF

ORNITHOLOGY.

VOL. XIX.

APRIL, 1902.

No. 2.

IN SEARCH OF A NEW TURKEY IN ARIZONA.

BY E. A. GOLDMAN.

IN DECEMBER, 1899, I was directed to make a trip into the Mogollon Mountains of northern Arizona to secure a series of Wild Turkeys for the Biological Survey of the United States Department of Agriculture. The first of January, 1900, found me outfitting at Winslow, on the Santa Fé Pacific Railway. After some talk with local hunters I decided to go to the Clear Creek country on the north slope of the mountains, chiefly because, as far as I could learn, no one had hunted in that section during the season, while numerous parties had been out in every other direction, and the flocks were said to be scattered and the birds very wild. The services of a local hunter and a camp man were secured and a late start made with a light but strong wagon, and horses which were trained for packing and work under the saddle as well as for driving. Provisions for two weeks were taken, and as we expected to see some snow our outfit included a shelter tent.

The weather had been bright and clear, and the winter so far an open one with little or no snow, but the first day of the new year was raw and cloudy and I was cheered by the prospect of a storm, knowing that after a fresh snowfall it would be comparatively easy to track and overtake the turkeys.

From the railway the road led off to the southwest, across the gray, wind-swept desert, ascending slowly but steadily to Sunset Pass — a gap among some bare, sterile hills which rise a few

hundred feet above the plain as outlying foothills of the Mogollons. A few miles beyond the pass, camp was made for the night at a waterhole among the cedars which clothe the lower slopes of the range.

This section of the Mogollon Mountains is of peculiar formation. It has a northwest and southeast trend and forms here the southern rim of the Colorado Plateau by connecting the San Francisco group with the White Mountains of eastern Arizona. The summit is known locally as the 'rim,' and marks the point from which precipitous 'breaks' lead down on the south into Tonto Basin. Toward the north the slopes are so gradual that in ascending one scarcely realizes that he is entering mountains, and streams heading near the rim, flow northward in parallel courses through deep and often inaccessible box cañons until they emerge on the desert and enter the Little Colorado.

On the second day we continued up the long easy slope along the ridge separating Clear Creek Cañon and some of the upper branches of Cañon Diablo. The weather was beautifully clear and all our hopes for an early storm were gone. As we gradually increased our altitude the panorama of the Little Colorado Valley widened below us, while far away in the northwest, San Francisco Peak, the great landmark of the whole region, rose abruptly into cloudland.

The first turkey tracks were seen in spots of soft soil among the piñons soon after noon and others were crossed at intervals along the road. Late in the afternoon, when near the upper edge of the piñon belt, we entered what was evidently the feeding ground of a large flock, for many tracks were seen crossing the wagon road in several places. This encouraged us to camp near here, and when we came to a trail leading down into Clear Creek Cañon and indicating accessible water, we did so. After a few hasty preparations for the night the camp man was sent to the bottom of the cañon, over a mile away, to water the horses and fill casks for camp use, while the hunter and I started out in opposite directions to look for turkeys. I walked slowly and as quietly as possible through fairly open pine and piñon woods, following a half circular course in order to avoid going too far from camp so late in the day. Many tracks were seen, but none of

them had been made that day. At the end of an hour or so I came to the head of a small side cañon about a mile from camp. The sun had just set and all nature seemed to have gone to sleep. Not a sound broke the stillness except the slight, unavoidable rustling of my own footsteps among the dry leaves. I stopped a moment to listen and had about decided to cut across to camp when suddenly from down the cañon came faint but unmistakable turkey notes which started me on a run in that direction. A few minutes later I cautiously approached the place where probably over 150 turkeys, all females and young of the year, were noisily trying to settle themselves for the night. They occupied the tops of tall pines for about 200 yards along one of the steep walls of the cañon. In many of the trees there were only two or three turkeys, but some of the larger ones, and especially those with many dead branches, contained from five to ten birds. Many of them sat as closely together as possible and constantly craned their necks about, squawking, crowding each other and struggling for places. They flew frequently from tree to tree and sometimes a bird, alighting clumsily on a crowded branch would knock off one or two others and all would fly off noisily to other places. At first the disorder seemed to be general and most of the birds were crowding or being crowded and were uttering loud cries of "quit, quit, quit," with many modulations depending apparently upon the degree of excitement. They rapidly became quieter, however, until by the time it was dark they were settled for the night. When all was still I rose from the cover where I had been hiding and after carefully noting the locality, left the birds undisturbed and picked my way across several small cañons into camp. The hunter came in soon afterward and a comparison of notes showed that we had located the same roost, he having come up the cañon while I went down, and each had decided to watch the birds until dark and not to begin firing without the other. About 9 o'clock we returned to the place. The first few shots, fired rapidly, created a great commotion, and the air seemed to be filled with turkeys flying heavily off in all directions, but there were no outcries and in a few minutes all was quiet, and no more birds could be found. I was satisfied, however, that we had secured as many as necessary for specimens though we did not know the exact number, for some of

them, went thumping down to the bottom of the cañon, and others fell at some distance.

At daylight next morning we were again on the ground and found the flock broken up into small parties, which soon left their roosts and went off in various directions. On leaving the trees, the turkeys usually flew two or three hundred yards and then ran rapidly until out of sight. During the following days it became evident that all the tracks seen for several miles about our camp had been made by this flock. No more fresh ones were found in the vicinity, showing that the frightened birds had left the locality at once.

Our lucky night hunt having given us a fine series of females and young of the year we then devoted our attention entirely to the old gobblers. We hunted steadily, day after day, covering the country for miles in all directions without seeing any of the old fellows, but they were in the country and it could only be a question of time until we found them. From the tracks of the different flocks it appeared that the old males were living apart from the females and young. Females and young were seen several times but were not molested. Evidently these birds wander far and wide, for tracks a day or two old were often found along some ridge and no fresh ones were seen in the vicinity for days. It did not appear that the birds returned regularly to the same roosting place. Several old roosts were found, usually among tall pines near the head or along the walls of some side cañon, which were evidently occupied occasionally. None appeared to have been used very long, and at least two had only been occupied once. The birds spent the day wandering over the broad and gently sloping ridges between the cañons and as evening approached worked toward one of the cañons and roosted wherever night overtook them.

Finally on the ninth day, soon after noon I came upon some big gobbler tracks which were evidently only two or three hours old, and decided at once to follow them. There were about fifteen of the old fellows, and in crossing patches of soft soil they left a broad trail which became very indistinct or disappeared altogether on rocky ground. I had gone only a short distance when my hunter, whom I supposed far away, came up. He had found my moccasin tracks following the turkey trail and quickly overtook me.

I was very glad to see him, for it was difficult work, and even with our combined skill in trailing we made slow progress. Sometimes we had no trouble for several hundred yards, then suddenly we came to places where the birds had paused to feed and found they had wandered about in all directions scratching among the leaves. At such places the trail became so involved that it was difficult to find the direction taken when the birds left. When we came to hard or stony places a few misplaced leaves or an overturned stone or stick were the only things to guide us. Where the trail became dim one of us usually went a trifle to the right and the other to the left so that unless the flock changed its course abruptly one or the other was pretty sure to find some signs every few yards. Occasionally we lost the trail altogether and had to go ahead and 'cut for tracks' in softer ground. For awhile the course followed was very crooked and several times it even doubled back and crossed itself, but late in the afternoon it became evident that the flock was working toward a branch of Clear Creek Cañon. Shortly before sunset the trail became so fresh that we kept a sharper lookout ahead, expecting to sight the flock at every moment. It was still proceeding in a leisurely manner, as was plainly shown by the number of places where birds had paused to scratch out deep pits in search for food. At sunset we were quite close to the cañon and I began to fear they would be able to roost before we could overtake them. With the idea that I could hear for a considerable distance the heavy wing strokes they would make in rising to the roost, I decided to go ahead and listen, leaving my companion to follow the trail as best he could. I had only advanced about two hundred yards to some higher ground when I suddenly saw the flock only about forty yards to my left. The birds had not seen me and were walking quietly along in single file, following a course directly parallel to the one I had taken. They presented a fine sight and I was strongly tempted to shoot, but on second thought decided to follow them until they roosted. Moving quickly out of sight into a small arroyo, I ran back a short distance and gave a low whistle, when my companion soon overtook me. Together we followed the birds, using great care not to show ourselves. Food had ceased to interest them, and they were evidently looking for a place to roost. They continued

in single file, pausing occasionally to look warily about, until they reached some high ground overlooking a small cañon along the slopes of which stood several tall dead pines. The leader, a fine old fellow of unusual size, stopped and the rest of the flock came trailing up and gathered in a group, facing the cañon. Several low, tremulous signal notes — *quir-r-r-rt, quir-r-r-rt, quir-r-r-rt*, — were uttered and suddenly they took wing altogether and flew almost horizontally out to the branches of the dead trees. After leaving the ground no sound was heard except the heavy flapping of wings. A few moved into the tops of live trees a short distance farther down, but most of them remained in the dead ones. Their behavior was in marked contrast to that of the females and young. There was no crowding and no confusion, and in a remarkably short time they were settled for the night and all was quiet. From where I was lying their bodies appeared in the gathering darkness like enormous black fruits, outlined sharply against the glowing western sky.

When it had become thoroughly dark, we cautiously approached the trees and I took a stand almost under one containing several birds. They were perched two or three feet apart so that only one could be shot at a time. As we knew the old fellows were very wary we held our guns in readiness as soon as we came within range and prepared to shoot at the first sign of alarm. I sent my companion to the next tree and told him to give a low whistle when he was ready. I held my ten-bore gun leveled at one of the birds, and it began to feel very heavy before the signal was given. When it finally came I fired both barrels in quick succession and was much gratified an instant later to hear a crashing noise among the branches as two fine old gobblers came tumbling down, landing before me with a loud thump. Instantly heavy wing strokes could be heard in all directions as the frightened birds left their perches. My companion had also made successful right and left shots into his tree. After some search we each located and killed another turkey, after which no more could be found. We then gathered the big birds together, swung them well out of reach of prowling coyotes or mountain lions and started for camp. When about a quarter of a mile from the roost I saw by the dim moonlight a dark form among the branches of a big pine. A chance shot was made

at it and I was more than half surprised when another big turkey came crashing down. To reach camp we had several deep, dark cañons to cross without trails, and floundered about finding the usual obstacles, which are unconsciously avoided in daytime but are always encountered at night. We were in a cheerful frame of mind however, and above noticing small bruises and other mishaps. The next forenoon was spent taking pack horses to the roost, by a circuitous route, and bringing our game to camp. In the afternoon we started on our return to the railroad and camped among the piñons. The snowstorm we hoped for until it could no longer serve us, came during the night, and morning found everything white and cold outside our tent. We made a hurried breakfast and after a long drive reached Winslow in the afternoon.

The result of the trip was a series of 13 specimens, including adults of both sexes and the young of the year. When the specimens reached Washington, Mr. Nelson found they represented an undescribed subspecies which he named *Meleagris gallopavo merriami* (Auk, Vol. XVII, pp. 120-123, April, 1900).

Merriam's Turkey ranges in summer over the higher slopes of the Mogollon Mountains. In winter, and especially when snow lies over the summits, the birds move down into the piñon belt where food is abundant. I found them feeding largely on the nuts of the piñon (*Pinus edulis*). According to some of the old hunters they also eat the berries of the cedar (*Juniperus utahensis*), but none were found in the stomachs examined, although the turkeys, just before being killed, had been wandering through the upper edge of the cedars, where the ripe berries were excessively abundant.