

up dripping with the spray. He repeated this five times in about as many minutes stopping between to shake and preen his feathers.

A bird who does everything in such a large way can hardly be expected to bring his mind to commonplace detail, and the nest of the scissor-tail certainly looks as if made on a generalization. It is usually big, with long streamers dangling from it in the breeze and looks as if the materials had been thrown at it—in passing. One nest we found at Rio Coloral, however, was a marked exception to all the others we saw, being small, compact, and neatly built. It had a large admixture of wool, left by the goats on the barbed wire fences.

Wherever you find him the scissor-tail is so much in evidence that, like a barking coyote, one is as good as a flock, really abound. Near Corpus Christi we but in parts of the mesquite prairies of southern Texas the beautiful birds once counted thirteen in sight down the road. The largest number we ever found together, however, was in the San Ignatius oak mott, a grove of oaks half way between Corpus Christi and Brownsville. In that section the low

shin oaks of the sand prairie affords no good roosting places and the birds of various kinds congregate at night in the few oasis-like oak groves. The night we got to the San Ignatius mott we were too much occupied making camp before dark to notice much but a general noisy assembly of grackles and scissor-tails and the presence of a *Pyrocephalus*, the red of whose breast we could just discern in the twilight; but at sundown, when Mr. Bailey shot a rattlesnake at the foot of a big oak in camp the report was followed by a roar and rattle in the top of the tree and a great flock of scissor-tails arose and dispersed in the darkness. They did not all leave the tree, apparently, even then, although some of them may have returned to it, for when daylight came to my surprise a large number of them straggled out of the tree. How one oak top could hold so many birds seemed a mystery. Before the flycatchers dispersed for the day the sky around the mott was alive with them careering around in their usual acrobatic manner making the air vibrate with their shrill screams.

Some Experiences of 1901.

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A BRIGHT morning, May 28, saw me early afield in quest of eggs of the long billed curlew, (*Numenius longirostris*). A dry pond on the prairie about two miles from my home appeared to be the center of operations of a colony of these curlews, and I started out in high hope of adding a number of sets of *Numenius* to my collection. By way of introduction I should say that my experience with *Numenius* in the preceding season had so elated me that I felt capable of finding any nest of this species which might chance to be on the prairie. On this particular morning, therefore, I am armed with a capacious basket and sundry other receptacles

(cigar-boxes), and was anticipating a red-letter day in my oological career; in fact, I was already formulating an exchange notice, announcing to my needy ornithological friends that I was overstocked with eggs of the long-billed curlew and that I would take any old thing in exchange for them.

The pond mentioned was near the corner of four extensive pastures, so that I had ample field for the exercise of my powers as a finder of curlews' nests. Approaching the pond from the south, according to a system I had arranged, I was not surprised to see a curlew flying out to meet me, cackling his disapproval. Now, anyone who has

hunted nests of the curlew systematically, knows that when you get near a nest, say within five hundred yards, the first movement of the male is to fly overhead from somewhere, cackle his disapproval, and alight near you, generally within fifty yards. Then you should turn either to the right or left of him, and walk onward; if he pays no further attention to you, you are on the wrong lead; but if he arises and flies near you again, cackling as before, you are getting nearer the object of your quest. So on this occasion, a male came cackling and gave the usual signs that his spouse was somewhere within a radius of several hundred yards, sitting on her four large handsome eggs.

By following my system, I soon had the male flying straight at me. I should further explain that when you are getting near the nest, say within three hundred yards, the male begins to fly out a long distance from you, turns quickly, and strikes a direct line for your head. Moreover, he generally flies toward the nest, so that the male, your head, and the nest are in one straight line, and you have only to search in the line of his flight to find the female flattened out over her treasures. It is all easy enough, but on this particular day the males seemed to be more vigilant and jealous than usual, and hence I made the mistake of not following the clue far enough. Having spent at least an hour in a vain effort to find this nest, I crossed into an adjacent pasture, where another male began to manifest his displeasure at my invasion, and was soon flying at me. This male led me a merry chase for two hours; when it seemed that I should be quite near the nest, he would alight near me and leisurely glean among the scant herbage, apparently quite indifferent regarding my movements. At length I gave up in disgust, and left this center for more profitable localities. However, several days later I found both these nests, with eggs far advanced in incubation, after less than thirty

minutes search when I had caught the first clue; I hope to get to these later.

Disappointed at my failure to find nests of the curlew, I went onward across the bench, and reached a wide irrigating ditch, bordered by a narrow growth of weeds and bushes. A marsh hawk tumbling end over end high in air gave me reason to believe that I might find a nest in the bushes, so I began to search among the rose thickets. Finding nothing in the rose-patches, I gave attention to the lower growth of waxberry, along the outer edge of the weedy areas. Soon a Columbian sharp-tailed grouse fluttered heavily from beneath my feet, exposing her nest among upright stems of the bushes. It is remarkable how open a nest can be, and yet seem entirely concealed from view. I could easily look down and count the fourteen eggs in this nest, but had the hen seen fit to remain with her charge, her youngsters might now be affording sport to some of the Sunday gunners.

It is from long habit as a breaker of the game laws, I suppose, that the oologist feels a guilty feeling when a chicken or other game bird flutters from under his feet, revealing her nest nicely packed with eggs. Of course I looked around, making sure that the thunderous whirring of her wings had not alarmed the occupants of the house less than a half mile distant. Then I sank to the ground, and prepared to pack those fourteen coffee-brown eggs, easing my conscience with the thought that our game law allows the gunner the right to kill not more than twenty birds in one day in the open season, and I was simply taking mine in the egg in the spring while the sportsman prefers his in the feather in the fall. As I was not out for grouse eggs, I should not take another set that day, and especially one of fourteen. So I lifted out the eggs one by one, packed them in a cigar box, and made my data. Nest of dried grass, scantily lined with downy feathers; cavity seven inches in diameter, two inches deep, open at the

top.

Continuing my search for the nest of the marsh hawk, I had not gone a hundred yards from the site of the grouse's nest, when a second female Columbian sharp-tailed grouse lumbered from my feet. (I forgot to give the technical name before, which is *Pediocætes phasianellus columbianus*.) This nest was among upright rose-stems and nettles; I remember the nettles particularly, for every time I reached down to take out an egg, my hand was scratched, and it was poisoned for several days. This nest was open above, and as I hurriedly scanned the contents, I was sure I counted fourteen eggs. This time I felt like an escaped convict, but circumstances were so favorable that I felt impelled to pack the eggs. In case I was interrupted by anyone so low-minded as to overlook the needs of science, I was prepared with a permit to collect anything at any time for the state university museum; and of course these would be for the university museum. My fourteen embryonic chickens had increased to twenty eight, all fresh. This nest was made as the first, in a cavity six inches across and two inches deep, entirely surrounded by the upright stems.

The morning of May 29 seemed to be favorable for further quest of curlews' nests, so taking the same course I had followed the preceding morning, I soon was met by the watchful male who had first entertained me. Determined to follow in this instance to the last extremity, in about twenty minutes I had the male feinting at me from all sides, the last stage in the proceedings, and presently I espied the female brooding over her charge, lying as flat as possible, with head and bill lying on the ground in front of her. Flapping to her feet, she ran limping and fluttering over the ground for thirty or forty yards; then she joined with the male in cackling protests at the despoilation of her household. The nest was among scant grass blades, beside a pile of dried cow man-

ure. The only material was a few pieces of coarse grass stems and several lumps of dried manure, somewhat larger than peas, their use being apparently to hold the eggs in place in the nest. The cavity was eight inches and six inches major and minor axes, two inches deep. The four eggs were placed as usual with the small ends together in the middle of the nest. They were far advanced in incubation. The pattern of coloration was dark green, with large blotches of dark brown, and blackish spots, the markings being more numerous at the larger end, and on one or more of the eggs the markings at the large end were nearly confluent.

Having found one nest of the long-billed curlew, it is difficult to locate another in the same pasture, for the owners of the first nest will follow the disturber, making frequent feints, and the collector will be unable to tell whether it is the owner of a new nest or the pair that has been despoiled. I have known a pair of curlews, whose nest I had despoiled, to follow me three miles, feinting at me as if I were on the first trail of their nest. So I returned home, and on the same afternoon I selected a pasture in a different direction. After walking about half a mile in the pasture, I attracted the notice of a male. As usual, he cackled overhead, and alighted near me. Keeping at a brisk walk, I found this nest in about twenty minutes; in fact, I found it before I was prepared for it, not expecting to chance upon it for another hundred yards at least. It was near the middle of a gentle slope, made between a tuft of tanzany and a pile of dried cow manure, of coarse pieces of weed stems and pellets of manure. These eggs were far advanced in incubation, but were nicely prepared with pancreatin.

It happened that all my nests of the long-billed curlew this season held eggs about ready to hatch. Duties connected with my school kept me in when I desired to be in the field. Good sets of eggs should be taken between the 18th

2nd 5th of a May. Out of ten nests found this year, I saved only four sets; in several I had the pleasure of finding the younglings emerging from the shell.

It was on June 1 that I found the nest of the male which had led me the exasperating chase on the morning of May 28. On the later occasion I approached the place from a different direction. In a short time the male was fluttering excitedly over my head, and I could not understand his actions; but a deep, wide "coulee" lay between me and the continued line of flight, so I lost no time in crossing the coulee. On the crest of the knoll I found the nest, situated and made as usual. I easily understood why I had failed to find it on the earlier day, for it lay at least two hundred yards beyond where I had fancied it should be, and across the fence in an adjoining pasture. The pattern of coloration of the eggs was light yellowish green, with bold markings of dark brown. I packed the eggs, and went on my way rejoicing, chuckling over my skill in having found the nest which had given me such trouble. But when drilling the first hole that evening, my ear was saluted by a far-away-sounding "peep," and I realized that he laughs best who laughs last; after all, I had failed, for my collection was no richer than when I had given up the quest in disgust on the earlier morning.

It was on the following Sunday afternoon I found my last curlew nest of the season. At about 3:30 I was crossing a large pasture, when a male gave the customary signs that I was in the vicinity of a nest. Although a threatening cloud was rolling up in the west, and I had on a pair of new trousers, I accepted the challenge, and followed up the lead with unusual alacrity. At the

end of thirty minutes I was enveloped in a drifting shower, and Numenius was gleaning contentedly over across the pasture. Acknowledging myself beaten, I started for home, but had not gone far when the curlew again began his angry threatenings. Now I was satisfied that a nest was somewhere on that section, anyway, and as the shower had passed, I again set myself to the search; my new trousers were spoiled, so what difference did it make if I kept up the quest? For several hundred yards I hunted in the line apparently indicated by the angry curlew; another shower was scurrying from the mountains, and again I gave up the chase, turned my back upon the indicated center of the curlew's demonstrations, and hurried homeward. But the curlew renewed his feints, and was I going to leave a set of handsome eggs lying out upon the prairie when determined search would bring them to light? Not I. I would be late for supper anyhow; I was already wet to the skin, and so nothing was to be gained by hurrying home. Buttoning up my coat to protect my Sunday necktie, and tilting up the rim of my hat to lead the water elsewhere than down my back, I bent over the trail in grim resolution. It was just about dusk when I climbed through the wire fence into the next pasture, and there—not twenty feet from the fence, lay the female, waiting for me almost to lift her from the nest. One downy yellow youngster was crouching helplessly upon his breast between the halves of his recent home, another had pushed apart the forward end of the shell and was quaintly looking out upon a new world, while vigorous "peeps" announced that there would be more curlews another year to give zest to the season of '02.