

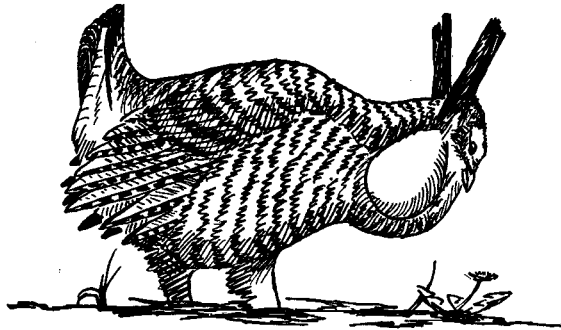
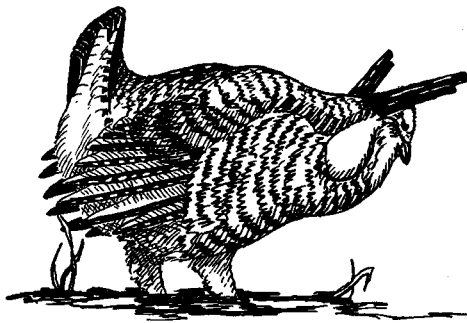
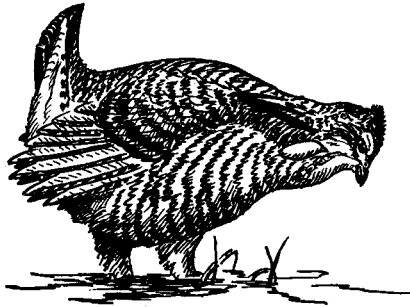
a pair of Dowitchers in a small shallow pool near the north-central end of the island. It was still in the gray plumage with only a slight indication of the stripe down the neck and therefore, considering the date, it must have been a male. The long slender bill and lack of a wing stripe were noted and when compared directly with the White-rumped Sandpipers the Phalarope appeared slightly larger.

Earlier in the morning, while studying the shore-birds feeding on a mud-flat in the Port Terminal Reservation, an army reservation in North Charleston, I identified a single Baird's Sandpiper (*Pisobia bairdi*). This bird was carefully studied for half an hour from a distance of about forty-five feet and direct comparison of size was possible with White-rumped Sandpipers, Semipalmated Sandpiper and Lesser Yellow-legs. The buffiness on the sides and breast was not clear-cut as in the Pectoral Sandpiper but 'faded out' and the general tone above was lighter. I am well acquainted with the Baird's Sandpiper, having seen it frequently in the middle-west and I feel as certain as one can, through sight identification, that this bird was of that species. Since there are no South Carolina records for this bird (see Bent, 1927, Bull. U. S. Nat. Mus., CXLII, p. 201) it should have been collected but as I was inside a military post I hesitated about doing this.

In a letter which I had from Mr. Alexander Sprunt Jr. of Charleston, written May 13, 1929, he says concerning the Baird's Sandpiper "I am sure that I saw one this past winter; that is, as sure as I can be without having taken it—your seeing a Baird's Sandpiper rather corroborates the chance that my bird was one also."—PHILIP A. DU MONT, *Wilton, Connecticut*.

The Booming of the Prairie Chicken.—During the past spring (1929) Prairie Chickens were reported as having taken up their residence in a large, boggy meadow fifteen miles southwest of Minneapolis. The location of their dancing grounds presented excellent opportunities for observation. Two or three small piles of slough grass lay on the ground not far distant and, taking this as a suggestion, a dome-shaped blind was constructed and covered with grass in the center of the dancing area. The birds accepted this immediately and were observed undisturbed during their early morning performances on four different occasions between April 27 and May 3, a total of fifteen hours being spent in the blind observing, sketching, and photographing them. The following is an account of the strange and amusing performances of the birds as they were observed under these very favorable conditions.

A usual morning's performance began about 4:15 A. M. when the birds arrived within a few seconds of each other, alighting directly on their respective "dancing grounds," that is, each bird did most of his displaying within a definite space, perhaps twenty yards across, the birds being about twenty yards apart during the performance. Immediately upon alighting, each set up a henlike cackling in an investigative tone, then the booming



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FIGS. 1, 2, AND 3. BOOMING PRAIRIE CHICKEN.

began in fifteen to twenty seconds and was repeated at least every minute during the most active period, usually till about 6:00 A. M.

The booming of the four cocks observed seemed to be almost identical and, except for some slight variations in the movements of the "horns," each individual repeated the performance in about the same manner. The first indication of the boom was a slight spreading and erecting of the tail to a perpendicular position or even pointing slightly forward, and thrusting the head forward with the beak pointing to the ground (Fig. 1). In this position the neck began to swell and the orange pouches to appear. As this took place the feet were well spread and, as though to assure the performer of a solid footing, they were stamped alternately very rapidly and firmly on the ground producing a sound much like that of a distant outboard motor. This could be heard for some thirty yards but the movement could only be seen at very close range. A number of times the cock, claiming the ground on which I sat, chose my hiding place as a more suitable stage from which to throw out his challenge and this stamping movement vigorously shook the whole frame of the bird as he boomed unsuspectingly not six inches above my head. Immediately following this introduction, the sacs continued to swell, the feather "horns" on the neck swung around sidewise a little above a horizontal plane, and the first syllable of the deep-throated boom was produced. The second syllable, with a decided accent at the beginning, came with the "horns" pointing forward and upward (Fig. 2) then, as the last syllable was uttered, the sacs attained their maximum inflation and the "horns" jerked upward almost to a perpendicular position (Fig. 3). The tail, which during the display, was spread with the outer feathers only slightly beyond a parallel position, was flicked a little wider on the accented second syllable and somewhat more widely at the end of the last. It has been suggested that the three-syllabled call seems to say: "Old—Mul—Doon." The call takes about three seconds, the time being equally divided between the syllables. A very loud, deep-voiced humming of the sound of the letter "m" perhaps best suggests the quality of the notes.

The crescent-shaped, orange, skin patch over the eye is concave, as shown by its having a central shadow line parallel with its edges. While booming the bird widens this crescent, projects it noticeably out from the side of the head, and the sunken line disappears, indicating that it is actually inflated. These attain varying developments in different birds. In one they projected above the feathers of the crown while the bird was booming.

Another interesting antic indulged in every few minutes by these birds struck me as quite humorous. A cock would be standing alertly on his grounds, well apart from the others, with no cause for alarm whatsoever, would suddenly fly a few feet straight up in to the air and drop again with a most excited cackling, then continue after alighting a most pathetic, long-drawn out squawking exactly like that of a domestic hen that has been caught by the legs and lifted from her coop.

Occasionally two cocks would eye each other from a distance, then crouching low, would run directly at one another. Sometimes a short encounter with the feet and a flapping of the wings, much like the spurring combats of domestic cocks, took place as they met, but quite as often they stopped when a foot or so apart and crouched on the ground with many a threatening cackle. This might continue for several minutes without any action taking place, then, rising stealthily still eyeing each other suspiciously, they would strut slowly about, booming now and then, until, apparently satisfied that the opponent cared for no more combat, they would go back to their grounds by several short, cackling flights and continue their booming.

When a hen appeared on the scene one morning, the cocks seemed to forget to a great extent the boundaries of their dancing grounds and strutted with added vigor towards the hen. She ran about through the grass, avoiding their advances but circling around within the dancing grounds, until apparently tiring of their shows of vanity, she flew away. During the pursuit the cocks remained some yards apart and succeeded very well in maintaining wonderful poise and dignity without losing their positions near the prospective mate, despite the fact that she frequently chose to run very rapidly away.

Twice during these observations, Marsh Hawks flew low over the little group of Chickens. Once they all ceased booming and crouched low on the ground. The second time two of the birds flew as though a real fear of the Hawk existed. Several times a Short-eared Owl came over even lower than the Hawk. Although it appeared fully as large as that bird, the Chickens did not so much as stop performing during its visits.

Two Crows alighted on their grounds one morning. Immediately one of the cocks rushed at them causing them to move a few yards but not to leave entirely. After that he made no antagonistic moves but strutted about close to them giving no indication of fear.—W. J. BRECKENRIDGE, *Museum of Natural History, University of Minnesota, Minneapolis, Minn.*

Domestic Pigeons Nest Hunting on a Mountain Top.—While watching Rock Sparrows on Eagle Mountain in the Wichita National Reserve in southwestern Oklahoma June 5, 1929, I was greatly puzzled as to the identity of a pair of birds flying about the great boulders at the very top of the mountain. When one began the familiar display of the Domestic Pigeon, the problem was solved. The male apparently wished to revert to ancestral habits and nest in the rocks; he would fly into a crevice and stay for ten or more minutes while his mate remained outside; out he would come and bow and coo, but she merely edged further away. Again he went in and came out, then tried another spot, continuing his efforts for more than an hour, but she failed to show the slightest interest. Evidently it did not appeal to her to make her home among bare rocks, where her neighbors would be Turkey Vultures and Red-tailed Hawks, wood rats and rattle-snakes.