140 Vol. XXIX

## THE BLACK TERNS OF SASKATCHEWAN with four illustrations

## By H. H. PITTMAN

URING the summer Black Terns (Chlidonias nigra surinamensis) are numerous in southern Manitoba and Saskatchewan, and large numbers of them follow the ploughs of the farmers, sharing with the Brewer Blackbirds, Grackles and Franklin Gulls the quantities of insect larvae exposed by the implements. Throughout their stay on the prairie these graceful birds are entirely beneficial to the agriculturist and their economic value cannot be over-estimated. Every effort should be made to protect them and every encouragement given to induce them to extend their nesting areas.



Fig. 50. A BLACK TERN AND NEST IN SASKATCHEWAN.

Copyright by H. H. Pittman.

Some of the food of the terns is obtained in the sloughs, but most of it seems to be secured from the ploughed land and later from among the growing grain, over which they maintain a constant patrol. They are as much masters of the air as are the gulls, which I have always thought take a delight in flying but seem to spend even more time on the wing. During their stay on the plains the terns rarely pause to settle, even to pick up food, apparently preferring to hover while gathering what they need. When they do alight it is often upon a fence-post beside a slough or even upon the connecting strands of wire. A tern trying to preserve its balance upon a single strand of fence-wire looks rather odd, yet it will persist in trying.

During the breeding season these handsome birds are gregarious and groups of twenty or thirty nests may be found in the same slough, not touching one another but dotted here and there among the water-grasses as though each pair desired a little privacy while remaining neighborly. The nests are made of dead slough-grass stems and rest upon the floating rubbish that accumulates upon the water—remains of the vegetation of the previous year. Many may perhaps be described as floating, for they rise and fall with every ripple made by a visitor wading amongst them. There is great variation in the amount of material used and sometimes the quantity is so small that the eggs are wet. At other times quite a substantial platform is made, raising the eggs well above the water; but apparently there is no disadvantage in their being damp, for the heat in the sloughs and marshes is very great. An observer spending a June or July day crouching silently in a blind near the nests is apt to find the heat almost unbearable.



Fig. 51. NEST AND EGGS OF BLACK TERN.

Reasonably isolated places are generally chosen, but quietness is not essential; I recently saw a bird sitting on a sketchy nest within a few yards of a road in constant use. The main thing seems to be a sufficient depth of water to discourage wolves and similar enemies. Rarely, single pairs may be found nesting alone, but the grouping habit is so strong that in these cases one is inclined to infer that the pair has lost an earlier nest and consequently regards the original locality as unsafe or undesirable.

The pyriform eggs are two or three in number, although I have found four. They are olive-brown speckled with black, but show considerable variation in the arrangement of the markings. A damaged specimen, I found lying in the water in 1925, had all the dark spots united in a broad band.

Finding a small colony of Black Terns recently, in a conveniently situated slough, I decided to try to photograph them, but as the water was three feet deep, the problem of a suitable hiding-tent at first appeared insurmountable. Eventually we arranged

to cover an old buggy with burlap and draw this out to the nests. This vehicle was old-fashioned and heavy, besides having only two wheels, which made it necessary to support the front end with a box. It took hours to lift the front of this contrivance and drag it through the luxuriant and entangling slough grass, and the performance left me wet through and determined never to repeat it. As a blind it was quite a success, for I was able to spend some hours close to a nest without the owners paying any attention. They were not unconscious of my presence but seemed indifferent as long as I was not visible.

Several days after placing my hiding device in position I visited it again and found the eggs in the nest in front were chipping. I was attended by all the birds and constantly attacked by the owners of any nest I chanced to be close to. An attacking bird always approached from the rear, dropping its feet but striking with its bill. One attack left me interested and perhaps amused, but as bird after bird hit the same spot my head grew tender and I was glad to reach the shelter of the burlap.



Fig. 52. Black Tern helping a chick out of the egg-shell.

Within a few minutes the female gracefully settled on the nest and immediately sat down, covering the eggs but seeming ill at ease and restless. Whether she was uncomfortable or not was hard to decide, but she gradually turned round and round, nearly all the time with her beak open, panting in the heat. Photographing her was simple, for she paid no attention to unavoidable noises, and I found that by talking I could get her to remain still long enough for her portrait to be taken.

A small cloud of birds was passing backwards and forwards overhead all the time and it was interesting to note that the female amid all the clamor could recognize the voice of her mate. After about ten minutes restless attention to her duties she suddenly looked up expectantly and became alert, and a moment or two later he alighted on the rubbish by the nest. After what appeared a brief conversation with his partner he moved over to the water to drink before rejoining the noisy throng in the air. Shortly after, he returned to change places with her, and throughout the afternoon they relieved one another at short intervals.

Everything slowly quieted down. The Red-winged Blackbirds recommenced feeding their young and the Carolina Rails started to call again. The terns began their endless search for food and I soon had a glimpse of the home life of a most inter-

esting pair of birds. The chicks left the eggs that afternoon, in both cases assisted by one of the parents who later carried the shells away. No food was brought to the nest. As every poultry raiser knows, newly-hatched chicks do not immediately require food, and apparently it is the same with young terns. Although the new arrivals constantly opened their beaks as if demanding nourishment, these actions were probably more or less automatic.

One little incident interested me very much and was hard to explain. In some way or other one chick tumbled or was jerked out of the nest, and for nearly half an hour it struggled to climb back without success and without help. It was almost touching the sitting bird, and consequently in plain view, but was entirely unnoticed or else completely disregarded. Fearing it would suffer in the severe heat I put it back in the nest but could not see that the returning bird noticed any difference.

On the day these chicks hatched I found an earlier hatched bird from another nest quietly resting in the water, and from the behavior of the adults suspected the presence



Fig. 53. BLACK TERN SHIELDING CHICKS FROM THE SUN.

of several more. Exactly one week after taking the photographs, I waded in the slough again to secure pictures of the young being fed, but every nest was empty and hours of wearisome searching failed to locate a single youngster, although the slough was full of them, judging by the number of old birds carrying food. By the time I had laboriously waded to a marked spot the quarry would be possibly twenty or thirty feet away in the luxuriant grass, which it could penetrate far more easily than I could.

The Black Terns, whose salt-water relatives are so aptly called "sea swallows", have a wide range in Canada, being found from Ontario to British Columbia. But their principal breeding grounds seem to be in Manitoba and Saskatchewan. They arrive about the second week in May, the exact date depending largely upon the weather. I have no dates of departure for this species, but gather from my notebooks that they leave the prairie rather early, perhaps to congregate around the larger and more permanent bodies of water. They are both handsome and interesting, but, some of my notes seem to suggest, not very intelligent; although, perhaps, more detailed observations might prove the contrary.

Wauchope, Saskatchewan, Canada, January 4, 1927.