and proudly started for home, more than satisfied with my success.

On the 27th of the same month I found the other pair of Mississippi Kites nesting in the fork of a medium sized oak, about forty feet from the ground. It was an old Crow's nest fitted up with a few extra sticks and green twigs in leaf for lining. In the nest there was one egg. I returned on the 2d of June for the eggs, found the nest robbed and the birds sitting in a tree near by, but they appeared to take no notice of, or interest in, the nest as I approached it. On July 5, in strolling over the grounds, I noticed one of the birds on the same nest. In it there was one egg in an advanced state of incubation, but with care I was able to save it. Color, pure white; measurements, 1.70  $\times$  1.35. This nest and the ones examined of E. forficatus were on the breeding grounds of the common Crow, which accounts for the robbery and the few eggs found.

## MANITOBAN NOTES.

BY ERNEST E. T. SETON.

On the 8th of May I found a pair of the Bubo virginianus arcticus in possession of an old nest, in the 'Big Swamp' on the Assinaboine River, south of the 'Big Plain.' This nest was indistinguishable from that of a Red-tailed Buzzard. On the 15th of May I went with my friend Dr. Gilbert and we brought home the three young ones and the adult female. The nest contained two Partridges (Bonasa) and a hare. The young ones appeared to be about three weeks old; the largest weighed I lb. 5 oz., and was about the size of an ordinary pullet. One of the young ones was but half the size of the others; all were clad in white down, with the rudiments of black and white feathers showing in the wings and on the back. Their horns were plainly visible in the form of down tufts.

The young ones favored us with the usual amount of billsnapping and hissing, but did not use their tremendous claws. One of them was injured and died before we got home, the others thrived and readily ate from our hands from the first. They solicited food by a short scream very like that of a Nighthawk; they menaced by snapping their bills and hissing, and they expressed surprise and anger by a querulous, rattling whistle.

By the time they were about two months old they were fully fledged and could fly fairly well. In general color they were pale buff with black bars; a little lighter than the typical *Bubo virginianus*, but considerably darker than the mother. At this time the horns were less conspicuous than when in the down.

They ejected a pellet about five times per week, and if supplied with more food than they require for present use they hide it until they are hungry.

At first we (Dr. Gilbert and myself) were in hopes of taming them, but their ferocity grew with their growth; and when they were able to fly, so far from submitting to handling, it was not safe for a stranger to come near them. No better illustration of their temper could be given, than the fact that on one occasion when they were left without food for a longer time than usual, they killed and ate a fine, full-grown Swainson's Buzzard, which was confined in the same barn. And on a second occasion they did the same with another Swainson's Buzzard which I had always thought quite strong enough and quick enough to take care of himself.

At the age of about ten weeks, a perceptible change in their plumage began to take place; the buffy feathers of the breast gradually giving place to the pure white of the old birds; amounting almost to a transition from the B. virginianus form to that of the B. v. arcticus. They are now over four months old, and are still growing. They require about half a pound of meat per day, and eat with relish only that which is perfectly fresh; indeed, all that I have seen of them—their untameable ferocity, which is daily more apparent, their magnificent bearing, their objection to carrion and strictly carnivorous tastes—would make me rank these winged tigers among the most pronounced and savage of the Birds of Prey.

I find that the Common Harrier (Circus cyaneus hudsonius) indulges in a series of curious manœuvres, which have hitherto escaped the eyes of field-men. During the breeding season the male often flies about over his own particular marsh, with

excessively exaggerated undulations; squeaking like a Snipe as he rises, and dashing down silently. When at the highest point he frequently turns a somersault. I have seen this many times, and shot the bird in the act.

It may surprise some to learn that the Lapland Longspur (*Plectrophanes lapponicus*) is very abundant here in the spring and fall.

Our Plectrophanes are :-

P. nivalis, abundant in winter—a few staying to breed.

P. lapponicus, enormously abundant, in May and September.

P. pictus, very abundant, accompanying the last-named.

P. ornatus, abundant, breeding.

During the months of July and August the Bay-winged Bunting (*Poæcetes gramineus*) ceases its usual vesper song, and vents his feelings in a loud, wild, Lark-like chant, which is poured forth as the bird rises high in the air; he begins to sing as he leaves the prairie, and sings and soars till he has reached a height of fifty or sixty feet, when he again returns to earth.

This air-song is not heard nearly as frequently as the common perching-song is in its proper season, nor have I heard both at the same time of year. The perching-song alone is heard during May and June, and again after the fall moult there is a renewal of the spring chantings—an aftermath of song, for the bird ceases his soaring lay, and once more sings for the setting of the sun.

Another peculiar effusion of the Bay-wings is a prolonged twittering, uttered after dusk, as the bird runs on the ground. It is like a soft, continuous whispering of extracts from his various other musical performances.

As little seems to be known about Leconte's Sparrow (Coturniculus lecontii) I may describe some of its habits. This bird frequents the damp meadows which are a mixture of red-willows and sedgy grass. It is commonly found in the willows at all seasons, uttering its peculiar ventriloqual tweete tweete, whence I knew it as the 'Willow-tweete,' long before I ever heard of Leconte or of any name for this bird. But in spring the male may be seen perched on some low twig in the meadow, pouring out his little soul in a tiny, husky double note, like reese reese. This is so thin and weak as to be inaudible at thirty yards, yet in uttering it he seems to labor hard, his beak being wide open and pointed straight up to the zenith; he delivers it with such unction

that afterwards he seems quite exhausted, and sits very still until at length the fit comes on again, as it is sure to do in about ten seconds.

On the 26th of June, 1882, I found the nest and eggs, which I believe were previously unknown. The nest was by a willow bush in the damp meadow; it was apparently on the ground, but really raised six inches, being on the tangle of grass, etc. It was composed entirely of fine grass. The eggs—three in number—were of a delicate pink, with a few spots of brownish and of black towards the large end. The pink was lost on blowing them. One measured .75 × .50 inches. Yet I must confess I did not shoot the birds at the nest; I only saw them a few yards off and heard their familiar tweete. So that there is possibility—though little probability—of error here.

## ON THE FUNCTION OF THE INFERIOR LARYNX IN BIRDS.

BY J. M. W. KITCHEN, M. D.

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In looking over the literature pertaining to the comparative anatomy and physiology of the vocal organs, we have repeatedly met certain statements which we think are incorrect physiological deductions, following the anatomical study that has been given to the vocal organs of Singing-birds. The great Cuvier was apparently one of the first scientists who gave this subject much study; and, with one exception, all subsequent writers whom we have read, whether French, German, or English, have substantially reiterated Cuvier's statements as to this matter. Indeed, there has been such unanimity of expression, and such similarity in the cuts shown in illustration of the subject, that one is induced to believe that Cuvier's exposition of the subject has been copied *in toto*, without personal investigation on the part of the writers.