

Natural History.

AT THE WASHINGTON ZOO.

WITHIN the past few years there has come into operation at Washington, D. C., an institution of which most of us have heard, but which few of us have seen. This is the National Zoological Park, established by act of Congress, and supported in part by Government funds and in part by those of the District of Columbia. Its history is interesting, but more to the purpose just now is to sketch hastily what was seen there during a brief visit made early this month, and to remark upon the extreme interest of this collection of animals and its extraordinary healthfulness.

The bills passed by Congress in appropriating money for the maintenance of the park forbid the expenditure of any sums for the purchase of animals, though transportation charges on specimens presented to the park may be paid. The only way, therefore, in which additions can be made to the collections is by gift, or, temporarily, by specimens loaned to the park. It can thus be understood that, so far as species of exotic animals are concerned, the collections are poor, while some of the native forms are fairly well represented. Many very desirable animals, however, offered to the park at low prices, cannot be secured because of the law, and the collections grow but slowly. However, there is enough to be seen there to please and interest an American, and to please him doubly if he is a hunter or a lover of nature and of nature's wild creatures.

Down at the southeast corner of the park, at the bend of Rock Creek, are the bear pits, in one of which is a small brown or cinnamon bear and in another two black bears. The cages are built against the perpendicular face of a cliff, in which caves are hollowed out, which give the animals shelter from the weather. The floors are of asphalt, and in each there is a water tank for drinking and bathing. The cliff against which these cages are built is really perpendicular so far as the eye can judge, yet when the first bear was introduced there he promptly clambered up the face of the rock, escaped into the open fields above, and was only captured after a sharp chase. A repetition of this performance was prevented by the erection of a strong iron fence.

Passing across the bridge which spans the creek, and up the gentle ascent, one comes to the large, low stone building where the tropical animals are kept. Here are two male lions, a superb tiger, a leopard, a rhinoceros, a hippopotamus, various monkeys, a capybara, European porcupines, a cougar or two and some other animals. Most interesting of all was a superb lioness with two little cubs. These are about 2 months old and are as large as full-grown cats, but of course much heavier and clumsier. They were asleep in the inner room, and the lioness was lying down in the outer cage when keeper Blackburn, shutting the sliding door which separated the two compartments, opened the inner one and took out one of the cubs so that it might be more closely inspected. The mother at once became anxious and began to spring uneasily about the cage, and when the little one had been returned to its bed and the door opened, she ran in to see whether her young had been harmed. Finding them safe she came out again and the cubs waddled along after her and then lay down, and looking frightfully bored, yawned two or three times in our faces and then went to sleep.

The hippopotamus is a fine one, 12 years old, and has been in the garden for a year or more. He was very friendly, and on request opened his huge jaws, showing his shapeless tongue and great teeth. He was recently sold by his owner for \$1,500, being worth perhaps \$4,000, and if the park could lawfully purchase animals would have been a great bargain and a most valuable acquisition. Chances as good as this are constantly slipping through the fingers of the Washington Zoo, and for the same reason. It is a great pity.

In a little room of this house we were shown the armadillos—three of them—from the Southwest. They are nocturnal animals, and when we entered the room they were buried in a pile of hay in a pit made in the floor of the room. Mr. Blackburn felt round in this pit and soon hauled one and then another out by the tail until the three were exposed to view. They were quicker in their motions than I had expected, but seemed confused by the strong light, in which they blinked painfully.

Each of the principal cages of this house has a door leading to an outside cage for summer use. Each outside cage is separated from the adjoining ones by closely woven gratings of fine steel strips, which, while admitting light and air, do not permit next-door neighbors to get at each other. In each one of these outdoor cages is a large tree trunk planted in the ground, over which the animals may climb and play, or on which they may rest.

Not far from this house is a large tree, standing alone and surrounded at a considerable distance from its trunk by a fence of strong wire netting. In the branches of this tree and in the hollow log which lies at its foot are a dozen or twenty raccoons, sleeping, climbing and playing. They are thus out of doors and have abundant room for exercise, yet cannot get away. Beyond this tree are a number of open-air cages, one of which holds a pair of young mountain lions which had only been in the garden two weeks. They were captured in New Mexico and are supposed to be not more than a year old. Their appearance justifies this belief, for on the legs and flanks of one of them faint spots can still be seen. The lions are in superb coat and generally in the very pink of condition, and are still quite shy, dodging at any unexpected motion, and being very restless and uneasy. One of them, however, would often stop its hurried pacing to and fro to watch, with erected ears and every appearance of keen interest, a little child that was playing about near this cage.

One of the most interesting animals here is a huge grizzly bear in superb condition and splendid coat, which was captured two or three years ago in the Yellowstone National Park. It was taken in a trap cage sent out from Washington, and when captured weighed 730 lbs. Mr. Blackburn estimates its present weight at 850 lbs., and no doubt the average hunter, who might see such a bear wild, would say and believe that it weighed 1,500 lbs. It is very dark in color, with white claws, is enormously broad between the ears and very short coupled, with a tremendous body. It conveys an impression of great

massiveness. The other bears do not require special mention.

Not far from these cages is the inclosure in which are confined most of the beavers brought last year by Mr. Hofer from the Yellowstone Park. None of these were visible, but their dams, their houses and the trees that they have cut down are very much in evidence. The question as to whether they will breed this spring is one of great interest and should be decided now before very long. The beavers are very difficult to confine, and this inclosure is surrounded by two fences, the inner one being so arranged that it cannot be climbed over.

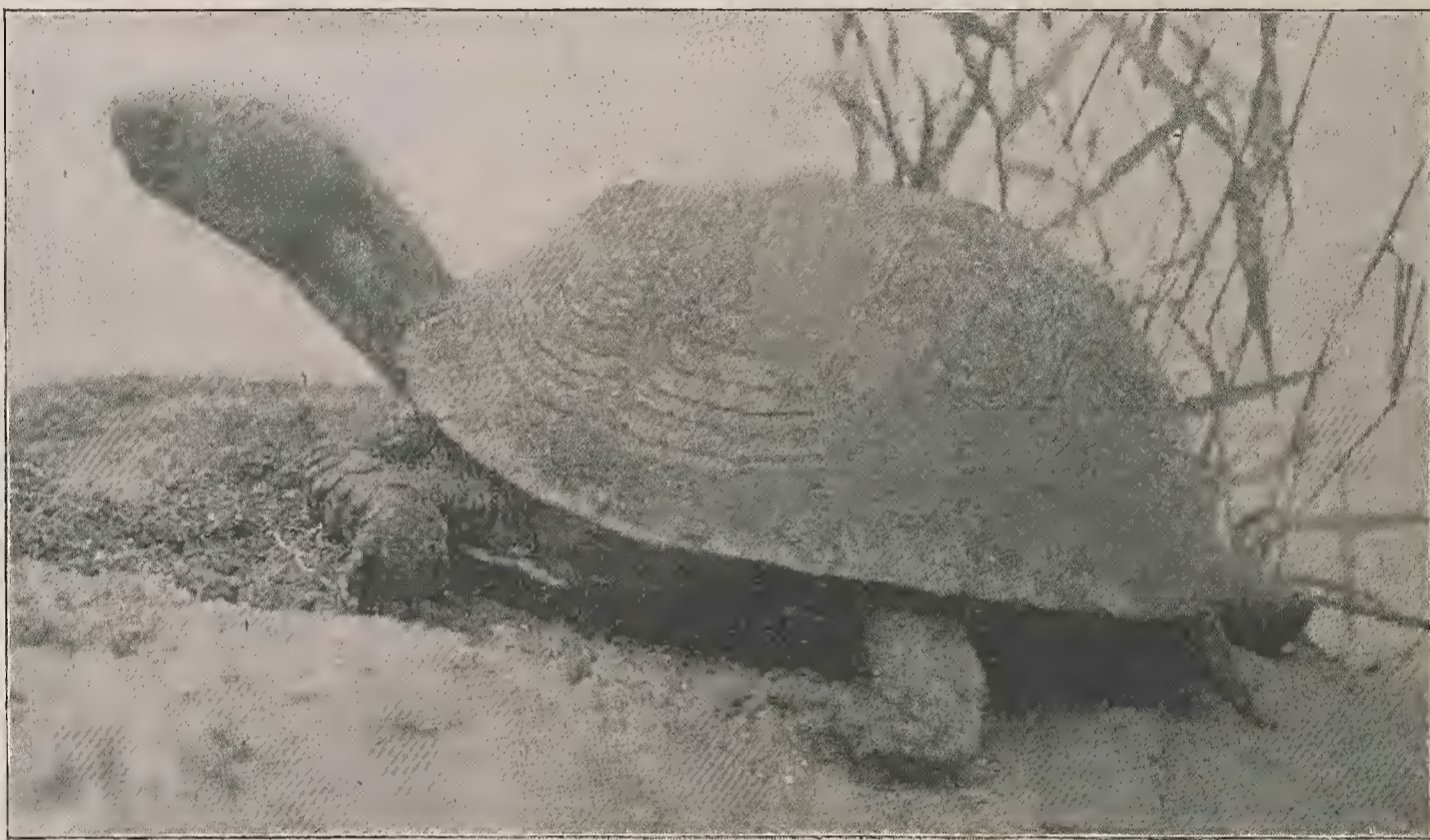
Elephants, Old World antelopes and cattle, a pair of ostriches—California bred—some llamas and some kangaroos were seen in their various houses; and we then passed on to two large paddocks on a steep side hill, in which are confined animals distinctively American—elk and bison. There are perhaps a dozen elk, one large, old and vicious bull, one large old cow, one or two younger cows and a number of young bulls. These are all in excellent condition, in good coat, fat enough, but not too round, and with eyes and hair showing good health. On account of his temper the old bull was confined in a pen by himself and the others were all together in the inclosure, which is too large to be called a paddock, yet hardly extensive enough to be a pasture. The situations of this and of the adjoining buffalo pen are admirably chosen. They are on a steep side hill, with a little level land above and below. The animals are fed at the foot of the hill and watered at the top, and so must necessarily climb up and down the hill two or three times a day. Thus they get exercise—something that wild animals in confinement seldom have much of, but which they need above almost anything else. When we were there the young bulls were fencing and fighting along the hillside, two or three couples being sometimes engaged at the

when suddenly the air was full of an old sound heard often enough in a buffalo country, the yelps and barks of the coyotes swelled after a little by the deeper howlings of the big wolves. For a moment I forgot where I was and looked across the flat to the bluffs beyond the stream, half expecting to see striding down the hill a line of men and women and pack horses laden with meat returning from the buffalo hunt. Then one of my companions spoke—and I realized that it is twenty years later and that the buffalo is extinct.

THE AMERICAN BOX-TORTOISE.

BY R. W. SHUFELDT, M. D., C. M. Z. S.

FROM Maine to Florida our common box-tortoise (*Chelonia carolina*) is so well known to those living in the country districts that any description of this *Chelonian* would seem to be quite unnecessary. They are very abundant in the fields and woodlands lying about Washington, D. C., and the writer has had ample opportunities to study them upon many occasions. I have never been lucky enough to find one of their egg deposits here, but I did many years ago in Stamford, Conn., when I caught the female laying her eggs in the mire near a marsh, she having the hinder half of her body in the water and mud while she did so. These eggs were not numerous, over an inch long each and pure white. In form they were ellipsoidal. Old box-tortoises vary greatly in both form and color; occasionally the vault of the carapace is quite hemispherical in contour, while again it is much flattened behind. The shield beneath, or plastron, is usually quite flat, with the transverse hinge forward of the middle of the body. This tortoise also varies much in its coloration, sometimes the plastron is black, often light clay color, or various shades of brown and mottled. Some of them



THE AMERICAN BOX-TORTOISE.

From a photo by Dr. Shufeldt.

same time, pushing and straining, and constantly giving vent to the low bird-like whistle of anger so characteristic of the elk.

The buffalo were in as good condition as the elk, but I was sorry to see among the six or seven specimens only a single cow. She is apparently heavy with calf. There was recently a contest for the supremacy of this small herd, and after many battles the young bull overcame him who till then had been the master of the herd. The last fight took place near the top of the hill already spoken of, and at its close the young bull knocked his senior down and then butted him all the way down the hill, rolling him over and over until he reached the foot.

Not far from the large animal house are small outdoor cages, in which are confined some admirable specimens of Esquimaux and other dogs, three gray wolves, two coyotes, one of them—if it is a coyote—red, like a red wolf, and half a dozen beautiful kit foxes. Here too is a great cage, built about a growing pine tree, in which half a dozen Clarke's crows have their home.

Below these animals—under the hill—are the deer, which, like all the other animals here, seem to be in perfect condition. Mr. Blackburn showed us a crippled doe, whose left hindleg had been broken in two places, about New Year's, by a vicious buck. Mr. Blackburn had put the leg in plaster and there seemed every prospect that the bone would make a good union and that the doe would get well.

No one thing impressed me so much during my visit to the park as the admirable condition of all the animals on exhibition there. The site is wonderfully beautiful, much taste, skill and judgment has been displayed in laying out the grounds, and there is ample room; but in a zoological garden all these things count for nothing if the animals, on account of which the garden exists, are thin, mangy and unhealthy. I have seen many collections of animals, but never one where the specimens were so universally healthy as at Washington. This may be accounted for in part by the season of the year at which the visit was made, and in part by the unusual amount of range which many of the herbivorous animals have, but there can be no doubt that the excellent health of the specimens here shown is due chiefly to the constant supervision and intelligent care which is given them by Mr. Blackburn, the head keeper. I talked a good deal with him and soon learned that he knows the secret of preserving the health of the creatures committed to his care. Such knowledge may fairly be called unusual among men occupying his position, who, however interested they may be in their specimens, too often lack the experience and the common sense to treat them as they ought to be treated.

The sun had set while we were standing looking at the buffalo, and I suppose that I had fallen into a reverie,

have the blacks, orange and browns of the carapace or dome, often upper part of the shell, very bright and variegated, while in others they are dingy and poorly marked. Last summer I photographed some of these box-tortoises and found it by no means an easy thing to do. One of these pictures of mine is shown in the accompanying engraving. It was a beautifully marked specimen, about two-thirds grown, yet the yellow and black of the shell could not be made to show in the photograph. He would move his head as quick as a flash, and draw in his feet and tail on the slightest provocation. On the trial here shown, however, I got these all out in nice shape.

About the end of April or the beginning of May we sometimes begin to meet with the young of this species. They occur in the wood paths, under the leaves by the fences, or in the damp hollows in the timber lands. They are cunning little fellows, very gentle and vary greatly in size and color. Like their parents they will readily feed upon any of the garden berries, angling worms, bits of meat, insects or mushrooms. On warm days they enjoy a dip in cool water and doubtless take the opportunity to drink a little, though turtles and tortoises can go a long time both without food or water. A very foolish notion is still widely prevalent in the country about this tortoise and it is to the effect that one of them will drive out the rats if kept in the cellar of a house infested by them. Even so well known a naturalist as Dr. DeKay must have had a lurking notion that there might be some truth in this myth and he tried the experiment, with the result that in a few days he found the poor box-tortoise in his cellar partly devoured by the merciless rats. One of these *Chelonians* can be drowned by being kept under water for half an hour or so, but there is no truth in the story that they avoid water altogether. Indeed, I have found them wading in shallow streams, and I once tried one by placing him on a small island in a pond. As soon as he found out his predicament, the reptile took boldly to the water which was several feet deep, and with great dispatch, but by very awkward swimming withal, soon swam the distance of several feet to reach the mainland. The full account of these experiments will be found in a brief contribution to *Nature* (Oct. 31, 1889), that I published a few years ago. As a rule the box-tortoise is a gentle animal, but then again specimens will be met with that are as cross and as vicious as they can possibly be; likewise, some of them make good subjects for the photographer of living animals, while others completely wear his patience out by their perversity.

All the land species of these reptiles are called tortoises, while those that inhabit either fresh or salt water are known as turtles. Some of the former are called terrapins. The word tortoise evidently arose from the old French, *tortis*, meaning twisted, referring to the form of

the front legs. I do not know the origin of either turtles or terrapin, though the former may have been derived from tortoise. As a whole they compose a very compact group of the *Reptilia*, termed the order *Chelonia*, about 250 species of them being known. Dr. Günther has very truly said that "*Chelonians* possess great tenacity of life, surviving injuries to which other reptiles would succumb in a short time. The heart of a decapitated tortoise continues to beat for many hours after every drop of blood has been drained from the body, and the muscles of the trunk and head show signs of reflex action twenty-four hours after the severance of the spinal cord. The longevity of tortoises is likewise a well-known fact." Several years ago I personally made some of these experiments on a few box-tortoises, and am prepared to fully confirm what Dr. Günther has said above. He is also right about tortoises living to a great age, some of the species over a century, and I should not be surprised that our box-tortoise might, under proper conditions, be kept alive in confinement for more than half that time. The breeding habits of these reptiles are truly extraordinary; every imaginable phase and fancy of them being characterized by great deliberation and utter disregard for the length of time it consumes in their accomplishment—quite in keeping, indeed, with their slow growth of body and the remarkable ages to which they attain.

RHODE ISLAND BIRD NOTES.

PROVIDENCE, R. I., Feb. 21.—*Editor Forest and Stream:* In looking over my note book for 1895 I find that I have a record of seventy-six species of birds observed, all but seventeen of which were found within the city limits.

In January we found the black-crowned night herons sitting like gray sentinels in the tall pines of the park swamp, where they have passed several winters safe from harm. They probably find subsistence in the open spring holes and the outlet of the park lakes.

This same swamp is a great place for birds; here in winter the little brown wren can be found playing hide and seek among the roots and dirt of the upturned trees, with unruffled plumage and tail always at the same angle. Flocks of tree sparrows winter here with their friends, the black-cap titmice and golden-crowned kinglets. These latter birds are very tame while with us. I have stood in a clump of pines in a driving snowstorm, and had them fly so close to my face that I could feel the wind from their wings. They are cheerful little birds, always hunting for grubs, apparently happy in the roughest weather. The brown creeper is another busy little bird, but a hard one to find, its markings are so nearly like the bark of the trees which it frequents. This bird starts at the ground and runs up the tree trunks to the lower branches, and then with a rolling note he is off for fresh hunting grounds.

In February I found all of the above birds with the addition of crows, bluejays and flickers. I watched a bluejay hold an acorn under one foot and hammer it until he succeeded in getting out the meat, when he dropped the shell and wiping his bill on a small twig he flew to his stone house for more.

On March 18 I heard the first song of the song sparrow, and recorded the arrival of my first purple grackle, and counted five flickers, and a number of juncos and white-bellied nuthatches were also seen. The first pair of bluebirds were found on March 24, within the city limits; the next were seen in April in the country while on a trout-trip; they were scarce last year, and we shall watch for them more carefully this spring.

On May 5 I found a screech owl's nest in an oak. The old bird was looking out of her doorway or I should not have noticed it, but I did not disturb her and hope she raised her brood in peace. In the spring and summer robins, orioles and vireos were very common, nesting in the trees of the resident portion of the city.

Scarlet tanagers and rose-breasted grosbeaks are becoming more common with us, and I saw more last year than ever before, but the grosbeaks are rather shy and have to be hunted for. In August the night herons were still in the park swamp, and I think they breed there in the tall pines, as a number of bulky nests can be seen in those trees.

We had a rubythroat that stayed around the flower beds all summer and into the fall, Sept. 22 being the last day we saw him on his favorite perch on the telephone wire.

On Nov. 3 while walking through a cedar and pitch pine grove I was startled by a *whir, whir!* a few feet in front of me, and looked up just in time to see a pair of Bob Whites disappear over the treetops. About 20ft. to the left I heard a rustle and carefully looking behind a small cedar saw Bob No. 3. He walked out in the open, looked at me for an instant and then went up in the air like a rocket. A little further on the fourth and last one went up and away.

I was almost home when *honk! honk!* came down to me from the sky, and looking up I saw a string of geese flying due south. There were about fifty of them, as near as I could count. Why is it that the *honk!* of the wild goose stirs the blood in our veins? Does it arouse the savage that still lies dormant in most of us? John Burroughs says: "I hurry outdoors when I hear the clarion of the wild gander; his comrade in my heart sends back the call."

In December we tramped down to where Gaspeel Point runs its long yellow finger out into the blue waters of Narragansett Bay. Here we found shore larks running along the sands searching for food; white gulls were flying low over the water, and far out in the bay a flock of ducks were resting, keeping a sharp eye open for gunners. In a hollow back of the point we found a downy woodpecker, black-capped titmice, tree sparrows and goldfinches in winter plumage.

NUTHATCH.

Grizzly Bears in Labrador.

DR. ROBT. BELL, of the Dominion Survey, says that a paradox to zoölogists is the presence of the grizzly bear in the forested area of Central Labrador, as he does not occupy the intervening country which lies between that peninsula and his Western home in the Rockies. Two hundred and nine species of birds have been noted, but with the exception of the two species of ptarmigan, game birds are not plentiful. Forty-five species have been discovered since Dr. Coues prepared his list thirty-six years ago.

Bird Notes.

SPRINGFIELD, Ill., Feb. 24.—Sunday, Feb. 16, I observed the first robin. A few days of zero weather followed, and after that and up to date mild and springy. This morning, while taking a three-mile drive in the country, I saw and heard a number of bluebirds, also meadow larks. I was informed afterward that the latter had been around for a number of days. Last year I noticed the first robin Feb. 27 and bluebirds March 8. T. M. S.

BELLEVILLE, Ont., Feb. 25.—Mr. A. Dulmage, fur buyer, recently purchased the skin of a small silver fox, which was shot within twenty miles of this city, also three cross fox skins. Pine grosbeaks, which are rare visitors, are here in large numbers. This is the third time within fifteen years that they have wandered hither from their Northern home. The birds are remarkably tame. A high-holder was seen here yesterday. This is the earliest visit of this migrant that has come to the knowledge of the scribe.

R. S. BELL.

ASBURY PARK, N. J., Feb. 28.—*Editor Forest and Stream:* I saw to-day near Woodbridge, N. J., a large flock of blackbirds and robins, the first I have noticed this season. It is to be hoped that these harbingers of spring have not made their debut prematurely. Strange, isn't it? how those familiar sights stir up the blood and intensify one's longings for the fields, the streams and woodland delights.

LEONARD HULIT.

SPRINGFIELD, Mass.—On Feb. 15 I was riding in Chicopee Falls when a big red-breasted robin alighted on a tree right over the street. I stopped my horse, and my companion and I feasted our eyes on the rare sight. We were within 20ft. of him.

A. B. U.

Dr. Elliott's African Expedition.

DR. D. G. ELLIOTT, Curator of the Field Columbian Museum in Chicago, sailed on Wednesday, March 4, from New York, on his contemplated trip to Africa. As stated some weeks ago in FOREST AND STREAM, Dr. Elliott expects to visit Mashonaland for the purpose of there collecting specimens of large African mammals for the Field Museum. He is accompanied by the chief taxidermist of the museum, and there can be no doubt that, with reasonable good fortune, the results of this expedition will be important. Dr. Elliott goes from here to England, where he will learn all the latest news about the little-known country which he proposes to visit. He has recently been in consultation with Dr. A. Donaldson Smith, the well-known African explorer who recently returned from the Dark Continent.

Dr. Elliott's armament will consist of both English and American weapons. He expects to take at least two .50-100 Winchester rifles, and will probably purchase in London two 12-bore Paradox guns. He may also take some Männlicher rifles, of the effective work of which we have recently heard so much.

The news which Mr. Elliott receives in London about the abundance of large animals in the different districts of Eastern Africa will determine his course from there on. He may go to Mashonaland, or perhaps to Somaliland, and possibly even into the country of the warlike Masai. He can hardly reach East Africa before May or June next, and after he leaves the coast nothing will be heard of him until he returns to it again. It is likely that he will spend six months in the interior, and may return to this country some time next winter.

The Linnæan Society.

THE annual meeting of the Society will be held in the American Museum of Natural History on Tuesday evening, March 24, at 8 o'clock, and a public lecture will be delivered in the lecture hall of the American Museum of Natural History, Seventy-seventh street and Eighth avenue, on Tuesday evening, March 3.

March 3, public lecture, William Libbey, "Two Months in Greenland," illustrated by lantern slides.

March 24, L. S. Foster, "Remarks on Twenty Species of Birds frequently observed in New York City and Vicinity."

Walter W. Granger, "Mammals of the Bitter Creek Desert, Wyoming," postponed from meeting of Feb. 25.

WALTER W. GRANGER, Sec'y.

AMERICAN MUSEUM OF NAT. HISTORY.

Game Bag and Gun.

FIXTURES.

March 16 to 21, 1896.—Second annual Sportsmen's Exposition, under the auspices of the Sportsmen's Association, at Madison Square Garden, New York city. Frank W. Sanger, Manager.

REARING PHEASANTS.

HOLLAND, Mich., Feb. 20.—*Editor Forest and Stream:* Our game and fish protective association has lately completed an addition to our pheasantry, and as I have had the rearing of the pheasants in charge for the past two years I will, for the benefit of clubs or individuals desiring to rear these birds with which to stock our woods and fields, give a description of our yards and breeding coops and our method of rearing and feeding the young.

For a breeding pen of five birds our yards are 8x16ft. and 5½ft. high, covered with 2in. mesh wire poultry netting. Perhaps 2ft. higher would be better, although I do not know as it would, for we have not had a bird killed by flying against the top when frightened. We had a supply of 4ft. netting on hand, so used that. The yards are boarded up 1½ft. at the bottom; use 1ft. wide stuff sunk 6in. in the ground. In each run we have two perches, 1½ and 3ft. from the ground; upon these the pheasants like to sit and preen themselves. At one end of each yard, and connected with it, is a coop or box 1½x3x1½ft., with a sloping roof to shed the rain. One-half of this roof serves as a door, and to make things safer a sliding door is arranged inside. Owing to the abundance of English sparrows, all grain fed is placed inside the box in a trough made by nailing a narrow piece of board at an angle on one side of the box. A small shelf upon which to place the drinking fountain may be put up. A door with a sort of entry to keep out rain or snow is made in the front of the

box; also a window, 8x10in., covered with glass and protected on the inside by wire netting.

The birds often resort to this box during heavy rains, or to scratch in the sand when there is snow on the ground. Always build your yards on high, dry ground, and arrange them so that the boxes will face the south. The different yards should be connected by gates, so that one may pass from one to the other, as it is sometimes necessary to do in gathering the eggs.

Our nesting or hatching boxes are 15x15x15in., with a sloping roof serving as a door. No bottom is made for these boxes; simply fasten a piece of 1in. mesh wire netting on, so cats or other animals cannot dig under and get the eggs or the sitting hen. Attach to this box a run 4ft. square and 18in. high, sunk 6in. in the ground, and covered with 1in. mesh netting. On top, at the end next the box, make a door 1ft. wide and the full width of the run; really, you make two doors by cutting this door in two about 1ft. from one end. You can use the small door for watering and feeding, and the larger one for convenience in catching the young pheasants when you wish to remove them to a larger run.

When the birds are 4 to 6 weeks old you will need to give them more room. Our runs for birds after this age are 4x8ft. and 2ft. high, boarded up 1ft. at the bottom and covered with 1in. mesh netting. The coops attached to this are 24x24x24in.

Now, as to sitting hens. Get bantams if you possibly can. I have used larger hens with success, but they are so clumsy and heavy that many eggs are sure to be broken and young birds stepped upon and killed. We have a fine flock of buff Pekin bantams which we will use this year. They are just the right size, have an abundance of fluff feathers and make good mothers and sitters. Should any one desire eggs or young stock next fall, we can supply them.

Before setting the hen dust her feathers full of Persian insect powder and place some in the nest, which is best made of a fresh sod hollowed out in the center beneath and covered with a little straw or chaff. Occasionally before the eggs hatch pour a little water around the edges of the sod so that they will not get too dry. Eggs will not hatch well without moisture.

All the eggs in a sitting do not hatch in the same length of time, therefore it is well to remove the young chicks soon after they are hatched to a warm place until you are sure no more eggs will hatch. If you do not do this your hen may leave her nest as soon as a few birds are out of the shell, for you know that pheasants run about soon after hatching, and the hen is apt to follow them.

For the first few days keep hen and chicks in a small coop or box, where the hen cannot move around much. In three or four days the chicks will be quite strong and will have learned the call of the hen. You can then put them back in the nesting box and run, and leave them there for about a month, after which remove to the larger runs. Do not crowd young pheasants too much; when 3 months old they require nearly as much room as the old birds. Do not allow the young chicks to get wet or they will die. I cover the smaller runs every night and during rains with old matting, oil cloth, etc. Keep plenty of straw in the boxes, so that they may have a dry and warm place in which to roost.

Food for the newly hatched birds should consist of eggs boiled hard, chopped fine, shells and all, and mixed with about an equal quantity of ground barley; add to this a little animal meal, and once a day some bone meal. For the first week feed four or five times per day. After that three times will be sufficient and then you can begin to add a little grain to their diet. At four weeks grain can compose half the food, after which you may give less and less barley and eggs each week. After ten or twelve weeks they will need no more of the egg. Wheat and cracked corn, with a little barley, is about all you need in the line of grain. From the first give plenty of green food, such as clover, grass, lettuce, etc., each day; also a little chopped meat every day or two. Keep plenty of pure, fresh water where they can get it. It is best to use the patent drinking fountains, for if you use an open vessel many young birds will be drowned.

We are stocking with the English ring-neck. I have had no success with the Chinese pheasants imported from Oregon. Out of thirty hatched none lived over a month.

Last year we sold a number of sittings of eggs from our English ring-necks to different clubs and individuals who wished to stock with pheasants. This year we have a larger breeding stock and can furnish a few sittings at \$5 per sitting.

The birds we liberated last spring have done exceedingly well, and we feel very much encouraged. One pair reared nine young, and all were alive a short time ago. Reports of flocks of five, eight, twelve and seventeen are frequently made.

Pheasants are our coming game bird, and those interested in game protection and propagation should investigate the matter. In my opinion money spent on importing Southern quail is wasted, for a hard winter kills them off.

ARTHUR G. BAUMGARTEL,
Sec'y-Treas. Rod and Gun Club.

Hard Times and Game Laws.

I HAPPENED to be in Peekskill last Saturday evening, and while I was walking up from the station two young fellows passed me, and I heard the following dialogue:

"I say, Jim, how 're you getting on?"

"Oh, very well."

"How the deuce can you say you are gettin' along very well when you haven't done a stroke of work in three months? These are the hardest times I have ever seen. The times are so hard that you can't go shootin' nor you can't go fishin'. Take these laws just as they are at the present time; now look at it; if a duck comes up the river I can't shoot it; if I do there will be one of those game detectors after me; and I read in the paper a little while ago that Grover went duck shooting and shot them by the back load. Then look at the fishin' laws. Why, a poor devil like me can't go down here and catch a bass that weighs ½lb. or less; if you do another one of these detectors is around. I tell you these times have got to change. Mills ain't a-runnin', can't get any work, can't go a-shootin' or nothin'; what the deuce are we goin' to do?"

H.

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