SK 441

LIBRARY OF CONGRESS

Save Our Birds and Game.

Methods Whereby Game and Wild Birds Can Best Be Protected and Cared For.

Recommendations as to the Trapping and Care of Quail.

JOSEPH KALBFUS, Secretary of Game Commission.

HARRISBURG: C. E. AUGHINBAUGH, PRINTER TO THE STATE OF PENNSYLVANIA 1910

11-22745

SKAAI



D. OF D. MAY 7 1910

Commonwealth of Pennsylvania.



OFFICE OF THE
BOARD OF GAME COMMISSIONERS,
HARRISBURG, PA.

Jan. 1, 1909

Dear Sir: By act of Assembly, it is made the duty of the Board of Game Commissioners to protect the game and wild birds of this State, I take it this duty extends beyond matters specifically mentioned in the statute. That the purpose of the law is to save the game and wild birds from extinction, and that it is as much my bounden duty to protect the game and wild birds from destruction through the agency of four footed animals, predatory birds, or the elements, as it is to say these same things shall not be taken by man, except under the letter of the law. I cannot believe that the Game law is intended for a purpose other than benefit to all the people of this State, or that it is my duty to arrest a poor man who may kill game out of season, when he needs the same for food, and then stand with folded arms and see game of like kind destroyed by storms, vermin, or wild animals, big or little.

With the idea, then, that it is my duty to give all the protection in my power to the game and wild birds of the State, I desire to make some suggestions.

I will not attempt in this paper, except in a limited way, to touch upon the value of the life work of the birds. I do want it understood, that as the illustration I may use shows the value of the bird named, so each family of our birds has its specialty, each doing a particular work that no other family attempts to do, except to a limited extent.

Professor Surface, Economic Zoologist of this State, tells me that annual loss to Agriculture, in the United States, aggregates scores of millions of dollars from the ravages of plant lice alone. That if that natural increase of plant lice was not curbed in some way, this world would not be inhabitable by man, at the end of ten years.

One of the great protectors of plant lice is our common ant, which carries the egg of the plant louse below the frost line in winter, carries the young louse out and places it on the plant in the spring, getting therefrom, in return, what is known as honey dew, each ant protecting and caring for vast numbers of lice, just as the farmer cares for and protects his cattle, for the return they give.

One of the great destroyers of ants is our common flicker or yellow hammer. This bird is the most terrestrial of all wood peckers, and takes fully seventy-five per cent. of his food on the ground. The examination of many of the stomachs of these birds has proven conclusively that more than one-half of the food of this bird, the year round, is made up of ants, and demonstrated the capacity of a single flicker to consume several thousand ants at one meal.

No game bird seems to have a firmer hold upon the public mind than the common quail, or "Bob White," and a study of this bird, undertaken by the Biological Survey at Washington, demonstrates, by almost limitless examination and experiment, that the economic value of the quail is equalled by but few birds, and exceeded by none. His food supply is more varied than that of most birds, and is almost without exception, drawn from a source through which nothing but good can result. He consumes many things, such as potato bugs, chinch bugs, the cotton boll weavel, certain caterpillars, spiders and other insects, that most birds avoid, and that, when taken at all by such other birds, are eaten to a limited extent only. Professor Surface says, in his Bulletin of January, 1904: "No birds on the farm are more valuable as seed eaters and insect destroyers than the common quail."

In addition to the value of the life work of all game birds, is the value that cannot be expressed in words or figures, of a day afield with gun and dog, and I know there is no sportsman who will not appreciate what I mean, when this is said. There is a benefit derived, that no one who fails to indulge in this sport can realize, a benefit that is not drawn through the killing of the birds only, and that comes to no two men exactly alike. The working of a dog speaks in different language to different men. From the moment the trail is struck until a dead bird, held only by the tip of a wing, is brought and laid at one's feet, all else, business cares and engagements, sorrows and joys outside, are alike forgotten, in the work of that dog.

Three times to my certain knowledge, since I first began to take a special interest in this work, quail, because of severe winters, ravages by vermin, and the slaughter by market hunters, had become almost extinct in Pennsylvania. Three times the sportsmen of this State, as an organization, with a limited number of outsiders, went down

into their pockets and furnished the cash wherewith to buy quail in other States and bring them into this State.

During February, March and April of the year 1906, the Game Commission purchased and brought into this State from Alabama, about 3,700 quail, paying for same at the rate of nine (9) dollars per dozen, 6 males and 6 females. These birds were placed by Deputy Game Protectors in almost every county in the State. The only counties overlooked or passed, being those, like Philadelphia county, not adapted because of its dense population, to the raising of quail, or Cameron county where because of severe winters quail could not live, or counties wherein the people took so little interest in the work of game or bird protection as to either refuse, or neglect, to recommend the appointment of a protector within their borders. Many quail have also been brought into the State by private individuals.

The same thing has been done for many years, and I feel perfectly safe in saying that were it not for this importation of quail, there would not be one single covey in this State to-day. The killing of these birds for the market has to a very great extent been stopped. So, likewise, have been closed the avenues through which live birds can be secured from the outside. A few years ago quail, for propagating purposes, could be secured without limit from almost every State of the South and West. To-day I can count the States upon the fingers of one hand, from which these birds can be secured for any purpose, the supply being limited from these States, and the price three and even five times what it was five years ago. Many of the States that only a few years ago were exporting quail, in apparently unlimited numbers, are to-day trying their best to secure a few thousand, or even hundreds, alive for propagating purposes. is reported that more than 400,000 quail were shipped from Alabama alone during the year 1905. Some 30,000 of this number were shipped alive for restocking purposes. The balance being dead were invoiced to cold storage houses in the North. In 1906 the Legislature of Alabama forbade the shipment of quail, either living or dead, out of Thus another State closed its doors against us in her boundaries. this respect. We are forced therefore, into the position where we must protect and save our own birds if we hope to have any in years to come. Aside from statutory enactment, every citizen and lover of the quail has his work to do. I, therefore, beg each individual, I beg the farmers, who derive more benefit from the life work of all kinds of birds than any other class, I beg the sportsman, with his limited benefits of a day afield, every boy and girl, who takes pleasure in our birds, every professed Christian of this State to "not pass by upon the other side." The winter, figuratively speaking, in its most terrible form is indeed at hand for our birds. Don't let them die.

I assure you in protecting them, you are preserving your best friends and benefiting yourselves.

You may have a few quail in your neighborhood at this time, I beg of you, to be warned in time, care for these few birds before it is too late. It is hard enough for them to battle with vermin in the shape of crows, hawks, foxes, cats, weasels, etc., during that time of the year when their food supply is abundant, and they have the protection afforded by trees and bushes in full leaf, of weeds and grasses, all of which protection is denied them now. To-day almost every step they may take in quest of necessary food, is watched by some keen eyed enemy. You remember how some hawk or house cat or other predatory creature destroyed one, by one, the entire covey of quail, you saw after the season had closed some years ago. You remember that quail seemed to be everywhere one year, after the close of the gunning season, when along came a series of snows, covering the ground to a depth of several inches, and of course reducing the food supply of the birds. You recollect how the snow laid for four, or five, or more, weeks and was followed by a cold rain, lasting for two or more days, ending finally in sleet and followed by zero weather, and this followed perhaps by drifting snows. the first place the curtailed food supply, consequent upon the snow, greatly reduced the vitality of the quail, so that for the first twentyfour hours, after the rains began, they preferred to sit huddled together, even though their stomachs were empty, rather than face the storm, after that, driven by fiercer hunger, they braved the elements, securing no more food than before the rain began, and then, with every feather dripping, chilled to the bone, with still more greatly reduced vitality, they huddled for the last time, to die of cold, or to be smothered in the drifts that followed. I have seen quail, frozen in the sleet, and their remains along stump fences and under brush piles, when the snows had gone in the spring time. I know whereof I speak, and firmly believe that no power on earth can save our quail at such a time unless it be, through trapping and feeding them in captivity. You cannot afford to wait until the rains or the sleet comes, therefore I repeat "Be warned in time."

CAPTURE OF QUAIL.

The law at this time permits the capture of quail from the first of January to the first of April following, for the purpose of keeping them alive during the winter and the additional purpose of separating a covey, but for no other purpose whatever. (See section 30 of the act of May 1st, 1909). And any method through which this can be accomplished without injury to the birds may be used. They may be led into a trap or net (see cut), by line of buckwheat or screen-

ings or other food, and after being captured they may be easily kept in cages or coops of proper dimensions (see cut attached).

Find where the birds are in the habit of feeding or running, set your net or trap in such place.

Notice the strips running lengthwise of net. Their purpose is to widen that part of the net resting on the ground. Without them every particle of food can be taken by the birds without going into the net.

Notice the light board with cross strips laid in the funnel of the net as shown in front view. This board while not absolutely necessary, is a great help in leading the birds into said net. The cross strips hold the food and help the birds to find the opening in the funnel.

Sparrows can well be taken through the use of the same method if the mesh is small enough.

Always keep a sharp watch over your net when it is set, making it a point to look it over frequently each day, otherwise you may cause the destruction of the covey you hope to preserve, for when quail are thus caught in a net they fall easy victims to the attacks of cats, weasels, hawks or other predatory creatures.

Remember it is a violation of the law to trap or net quail for any purpose, excepting that of keeping them alive during the winter or for the purpose of separating a covey. All quail thus taken must be released as soon as the weather is suitable in the spring. The penalty for catching quail in this manner for any other purpose than that above stated as fixed by section 15 of the act of May 1, 1909, is fifty dollars for each offense. This is simply for the taking of the birds in any manner excepting with a gun. There is also a penalty of twenty-five dollars for each bird taken out of season.

CARE OF QUAIL IN CAPTIVITY.

A good plan is to secure a good size room, say fourteen feet by fourteen feet, being sure all openings whereby rats or weasels can enter are closed. Cover the windows with woven wire and leave it open so that plenty of fresh air will be given. The quail is a very hardy bird and is not liable to freeze, so long as it has plenty of food and is kept dry. I recommend that the birds be confined in boxes or coops especially provided for that purpose, said box to be placed in the room previously made vermin proof and well ventilated.

A good box or coop (see cut) can be cheaply and easily made by taking two boards, say four feet in length and nine inches in height (1) not too high or too low. Nail crossways to these two boards other boards, say two and one-half or three feet in length (2), so that the short board will form the bottom and the long boards the

sides of the proposed coop or box. Board up one end (3) placing wire netting, one inch mesh, on the other end. (4) First inserting a strip at the top of that end. (5). This strip serves the double purpose of a support to the sides and a foundation upon which to tack your wire. Eighteen or twenty inches from said wire end, fasten crossways in said form a board the same width of side boards. (6), thus making two compartments. From the middle of this board to the middle of the rear end and running parallel with the sides fasten a second partition (7), thus making three compartments to the box. Before nailing the first described partition cut two openings. (8), about four inches by four inches, placing them so that they will come about the middle of the front end of each of the rear compartments, the purpose being to permit the quail, when frightened or disturbed to retreat through these openings into rear opening that will, when finished, be comparatively dark. Attach the blocks thus sawed out, with hinges, leather or otherwise, to serve as doors, so that the birds can be confined in either or both of the rear compartments as desired.

You are ready now to affix the roof or cover of the coop which in all instances should be made of some rough, course cloth, such as can be obtained by ripping the sewed side and end of a coffee sack. Cut this cloth, so that it will extend over both ends and sides of the box, at least three inches in all directions. Tack a light strip, (9) say one inch square, to the edge of this cloth, that will fall over the sides of the box. Adjust cover so that it extends equally over all parts, then tack securely to the middle division, the one running lengthways. No. 7. You then have a cover that can be turned back from either side to the middle. The birds can be driven to either side compartment and the door fastened with a button. By turning back the opposite side, the box can be easily and readily cleaned. The birds are to be fed and watered in compartment having wire front.

My method of watering is to affix tin boxes or troughs to either side of this compartment. These troughs are attached so that they are half inside (10) and half outside of said compartment and about four inches from the floor. The boxes are so affixed that they can be taken out at pleasure for cleaning purposes. I find that if these watering troughs are placed too near the floor, the quail, which are great scratchers, will keep them constantly filled with dirt.

In affixing water troughs I make a tin box, (11) say three inches deep, four inches wide by ten inches long, soldering on each end about one-third length across said ends a small piece of tin, (12) say two inches in length. This prevents the trough from slipping too far into the box, and serves as a fastening through the use of a button or tack or other appliance that may be considered best. To adjust a trough of this kind I make measurement of same on the box, ex-

actly where I desire to introduce it. I bore an inch hole at each end of this measurement and saw out strip from, hole to hole, as near an inch in width as possible. (13). From each of these holes, exactly where the end of the trough will come and so same can be inserted therein, I make a saw cut at right angles with and above said first named cut, (14) these cuts being about twice as long as trough is high, all together making a figure something like the cut attached, No. 13 and 14, second view. If the cuts are made to correspond with sides of trough there will be no trouble whatever in introducing or removing same at pleasure. If adjusted in this way the troughs can readily be cleaned without danger of having the birds escape, the slot before mentioned being too narrow for a quail to pass through.

For the purpose of giving more light and air, than would be admitted through the cover alone, I suggest boring one inch holes about three inches apart along the outer sides of rear compartments (15) and partitions, placing these holes about three inches from the floor, or about breast high to the bird. If placed too high, or where the birds can readily see objects on the outside, they are more easily frightened, than when holes are placed as before indicated, near their feet.

The sticks or slats attached to the edge of the cloth top can be easily tied with strings to staples driven ito the sides of the box, say one string and staple to each end of said strip and one in the middle. The cloth top can be drawn as tight as you please by means of these strings. Ends can also be tied, thus cutting off all avenues of escape.

In the side of one of the dark compartments I suggest an opening with door, in size, about as in the inside partition, (16) so placed that all parts of said compartments can be reached with your hand thrust through this opening. The birds in this way can be taken at pleasure, without danger of escape to the remainder of the bunch.

I have experimented with a box of this kind and feel confident. I can keep three or even four dozen quail through the entire winter in a coop of this size and construction. Quail are active and energetic and need plenty of room for exercise. The more room the better for them, and I only suggest this size. Larger boxes can be made if considered necessary. Points to be especially remembered are:

Points to be Especially Remembered.

The birds should always be kept out of reach of vermin. Coops should be placed where they are safe from house cats.

The birds should be placed so that the sunshine would be sure to reach them at some time during the day.

They should be kept in a dry, well lighted, cool and airy place. Never in a room artificially heated, or in the dark, or in a damp place.

They should be fed and watered regularly. Quail are great drinkers and should not be stinted in their supply of water. See to it that your throughs are large and that plenty of fresh water is supplied daily.

Mixed food, such as buckwheat, cracked corn, screenings, millet, etc., is best.

Coops should be cleaned frequently.

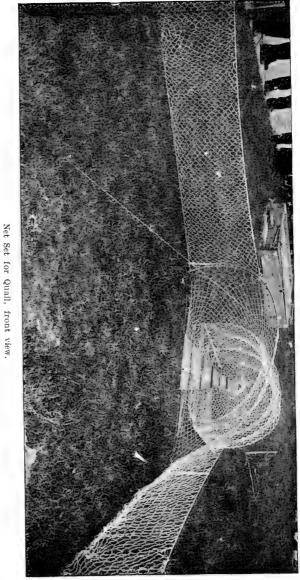
Sand and gravel are as necessary as food.

Road dust or wood ashes should be supplied at least once a week, otherwise you may have trouble with lice.

I think it very important that the boxes or coops should in no instance be higher than twelve inches, nine inches seems to me to be about the correct measure. If the boxes are made too high the birds are very apt to injure themselves in an attempted flight or effort to escape. If too low they are liable to injure the tops of their heads by jumping up against the cover. This disposition of quail to jump makes the placing of a soft cover to the box or coop imperative.

By this method many more birds will be saved than in any other way, as they will not be exposed to storms and to the attacks of their natural enemies. If a room or coop cannot be secured, hang up bundles of unthreshed grain, wheat, rye, buckwheat, millet, or anything that will supply the need, or, better still, build covers under which they can feed, choosing warm, protected corners along fences for this purpose. A good way is to drive two stakes, say ten feet apart, and ten feet from the fence, lay a rail on the stakes, and rails from the fence to this rail, cover with brush or corn stalks. Be sure to leave all sides open, so that the birds, if attacked by an enemy, such as a weasel, or house cat, can readily make their escape. Build the cover about three feet high, so that while there will be plenty of light and air, it will be almost impossible for a hawk to strike the birds while feeding, which will be done if the cover it too high; scatter feed both threshed and unthreshed under this cover, see to it that your efforts are not undone by hawks, or house cats, or other predatory creatures. Two or three covers of this kind will serve a good purpose on any farm, and be followed by a full return for money and labor expended, through the work of the birds.

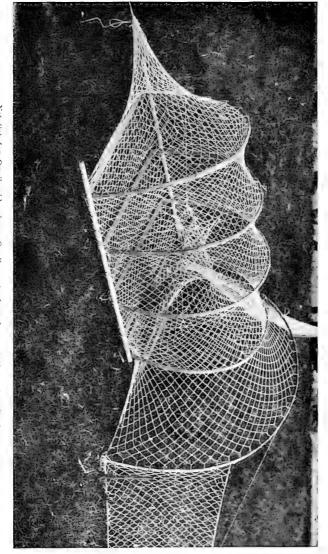
Experiences teaches: That the idea of giving absolute protection to quail for a series of years, or to certain coveys on a farm, is not followed by the best results, unless the covey be trapped and separated, because, frequently two or three or more hen birds will lay in the same nest, the cock birds fight over them, and no hatching be the result. I therefore recommend the trapping of the birds in



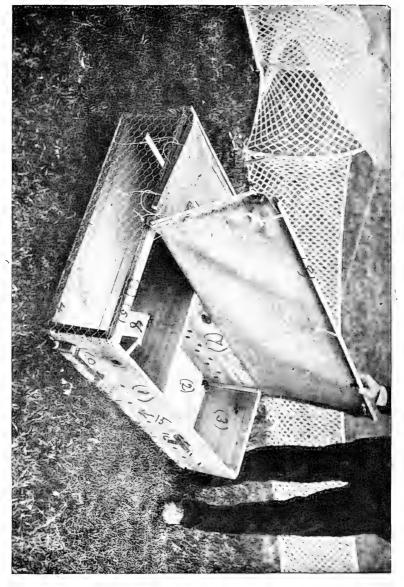
do if the net is left round. Sprinkle feed plentifully inside net, placing less food outside and on leading board.

Net should in all instances have bottom squared so that birds can not reach the food through the sides, as they will

Wings are not an absolute necessity, but will insure the capture of all birds that come within their limits.



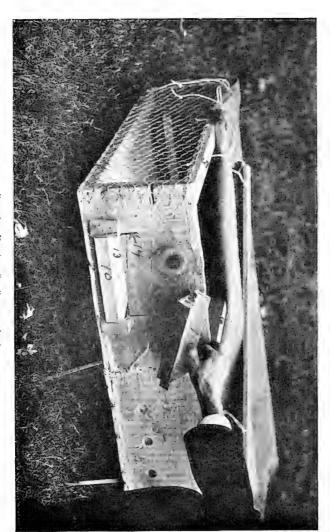
Net Set for Quail, side view. Quail are to be taken out through tail piece.



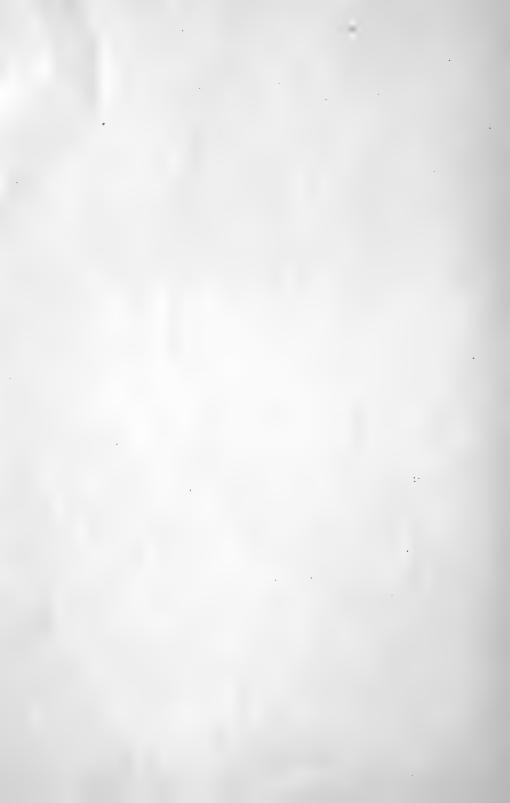
Box for Keeping Quail, first view.

.

.



Box for Keeping Quail, second view.



every instance where it is possible, not only for the purpose of keeping them alive during the winter, but also for the purpose of separating a covey to increase the chances of propagation. Where the birds are trapped they can well be allowed to run together during the greater part of the winter. Two or three weeks before they are to be liberated, divide them into pairs, placing a male and female in a separate box or cage, feed and keep together. The probability is that the birds will mate, in captivity, or at least become so well acquainted that they will mate after their release. This will result in a covey for each pair of birds. By taking the cage or box in which the birds are confined, during the night time, to the place where one hopes to see the birds propagate, taking off the cover or slats, sprinkling food around, and going away quietly, the birds, when daylight comes, will be induced to come out without fright, will feed, move around, feed again, and remain in that locality, without flying to places where they cannot be looked after, or protected.

Another good method is to take the birds to be released into the territory where you wish to place them. Take each bird securely in your hand, reach as far as possible into a brush pile and free the bird. A pair, or two, or more, can be placed in this way with very little trouble. In selecting a location for the birds be sure that they are placed near running water and where plenty of cover, such as briars and brush abound. Don't forget to scatter food frequently, say once or twice a week, at least, until the time comes when vegetation starts and insects become plentiful.

A little judicious handling and feeding will in all probability keep them there until the young are hatched, and frequently cause them to make that place their permanent home. If the covey you have trapped is released in pairs, on different days, on different parts of the farm, the probability is that they will not call together, but instead, will at once make preparations for housekeeping, with the result that several coveys will be found where you now have but one.

It is a well known fact that the male bird generally leads in the flight. I would suggest, therefore, as a means of keeping a pair of quail in a certain locality, that about two days before releasing the birds you pluck five of the large feathers from the tip of one wing of the male bird; this, while not taking from the bird absolutely the power of flight, will cause it to fly in circles and prevent lengthy flights. The feathers will be renewed in about six weeks; in the meantime the birds will become fixed in the locality, and in all probability have housekeeping started.

Sportsmen and others interested in the preservation of the wild turkey should see to it that food of sufficient quality, and in sufficient quantity, be procured and placed during the winter months where it can be secured readily by these, the greatest of all game birds.

Killing of Wild Birds Other Than Game Birds.

I understand and appreciate the feeling of the farmer or fruit grower who sees the birds consuming his limited supply of berries or of fruit. I know his disposition to wreck vengeance, especially when he does not understand, that the previous work done by these very same birds, has made the crop upon which they were then feeding, possible.

Some years ago, I arrested a farmer, living in the neighborhood of Harrisburg, for killing a dozen or more robins in his cabbage patch. He swore at the hearing before the Alderman that these birds were deliberately pulling up his cabbage plants, taking hold of them just as they took hold of a ground worm, pulling and hauling until the plant was torn out by the roots, after which it was cast aside, he saw these birds pull up hundreds of his plants, the law gave him the right to kill birds found destroying property and he had shot them. He was perfectly honest in his declarations in what he thought he had seen, but had not gone far enough in investigation to understand true conditions. A careful examination showed, that not a single plant had been torn up as described, the roots of every plant was in the ground, but the stalk had been cut off immediately below the ground line by wire worms, not cut worms, and we found from three to forty or more of these wire worms, around every plant we examined. The birds were casting aside the alreadyruined cabbage plants in quest of these worms, wherewith to feed their young and this man had unwittingly killed his best friends. Those who drafted the law giving protection to these birds understood the great benefit derived by the agriculturist, and by the horticulturist through the life work of the birds, they recognized the fact that the birds in taking fruit or berries were simply taking pay for services already rendered. They understood how valuable workers in every community were liable to be destroyed by men who did not understand what the birds were really doing, and so they said, that part of prior law which gave men the right to kill birds found destroying fruits or berries, should be stricken out of the law, and so it is.

Prof. Surface, our Economic Zoologist, says the best remedy for the bird evil, if it can be so termed, is to plant berry plants and bushes or fruit trees beyond your needs, so that, although the birds may take a goodly share, you will still have enough and to spare. The professor asserts that the benefit derived from the birds through the destruction of injurious insects repays the farmer many times over for any or all fruit that may be taken.

Professor Hornaday, one of our great Naturalists, says: "All perching birds should be protected and especially the robin." He asserts that the few berries or cherries they may take are very modest compensation for the noxious grubs they picked up from the freshly ploughed field. He says no self respecting man or boy can afford to be guilty of such wrong doing, and no farmer can afford to permit it upon his premises.

Think of the backaches, and sweat and blistered hands saved through the destruction of insects and weeds by our birds, by helping

them you are surely working in your own interest.

Rabbits Killed Out of Season.

The law permits the owner, or the lessee, of real estate, or any member of his or their family and those in their immediate employ, as a protection to trees or to growing crops, to kill rabbits upon their premises during the close season for rabbits, but says, If a rabbit thus killed for the purpose of protection to property, is used for food, the person so using it shall be liable to the penalty imposed by law for killing rabbits during the close season. The reason for this change being, that many farmers and land owners used the rights heretofore given, as a cloak under which they hunted and killed game of different kinds, including rabbits, at all times, forgetting that the game of a state belonged to all the people of that state jointly, and that while the land owner had the right to control his property, he did not have the right to hun't and to kill game, at a time when the resident of the town, who might not be a land owner, could not so hunt.

Whether or not it is necessary at any time to kill rabbits for this reason seems to me to be an open question.

I, some years ago, had an orchard seriously injured by rabbits or mice, or both. Hardly a single tree out of an hundred or more escaped unscathed. As soon as the condition was noticed which was not until many of them had been absolutely ruined, each tree was treated, to the height of about one foot, with ordinary axil grease, that preparation being highly charged with coal tar and strychnine. Dead trees were replaced in the spring by living trees, which were also greased. Several winters have passed since that time and but one single tree has been disturbed, that one a small peach tree, which I have reason to believe, escaped the grease. I presume there are many other effective remedies. I know that a woven wire fence two feet high and one inch mesh will protect the garden from rabbits and have been informed by good authority that rabbits will in all instances refuse to eat anything upon which coal oil has been sprinkled, my informant stating that a mixture of one tablespoonful of

oil to a gallon of water sprayed over the growing garden, while not in any way affecting or injuring the plants, would be most effectual in warding off the attacks of rabbits. This applies to all growing things, trees as well as vegetables.

The rabbit fills an important niche in the economy of nature. Aside from the benefits of recreation derived through hunting, he is a valuable source of food supply to many creatures other than human beings, and owing to the fact that he moves, in the search of food, chiefly in the early evening or at night, is the more readily seen and taken, by the fox, owl, or other night predatory prowler. The more rabbits we have the less liable are foxes and owls and weasels and other animals of this character to prey upon our game or other birds, or upon the farmer's poultry. The more rabbits we have, the less game birds will be killed by the hunter, for the double reason, as I believe, that the great majority of hunters prefer to shoot rabbits, rather than birds, and I know, that when a rabbit hunter and his dog enters an open field or brush lot in the morning, every game bird in that section hikes to tall timber, or more dense cover. The rabbit dog raises the birds too far ahead of his master to be shot, even were he thus disposed. When the bird hunter comes along later, much to his chagrin he finds himself entirely cut out. The rabbit hunter and his dog, are looked upon by the bird hunter about as the sheep man on the plains is viewed by the cattle man, which is with no specially kind feeling or regard, rather the contrary.

The birds and the rabbits each have their place to fill and are each in their place doing more good than harm.

POISON.

We have in this State a law, just and proper, that forbids the placing of poison for the purpose of intentionally killing domestic animals or dogs. The penalty for violation of this act includes imprisonment, as well as a cash penalty. There is still another law that forbids the placing of poison outside of buildings for the purpose of killing wild animals or birds. Still, the Game Commission, through its duly authorized agents, has the right under the law to destroy vermin and predatory wild animals and birds harmful to game and other wild birds in such a way, as to them may seem best.

Experience teaches us that it is next to impossible to reach many of the wild predatory creatures of our State, except through the use of poison. I take it the purpose of placing poison may well be judged from the point where it is deposited or the vehicle used to convey it, and, therefore, in attempting to select methods of conveyance for this remedy, have tried to decide upon certain things not likely to be taken by domestic animals of any kind, or by a dog.

I found that by introducing as much strychnine as will be taken up by an ordinary musket cap into the body of an English sparrow, a mouse, a piece of fish or eel, and dropping same into a stone wall or stone pile, hollow log, or stump along the line of travel of vermin, many animals such as the skunk, the weasel, the mink, and the house cat will be stopped in its predatory career, and such action will add tenfold to the safety of the quail, the wild turkey, the pheasant or any other ground nesting, or ground-feeding birds. The dead body of a rabbit, a chicken, sparrow, or mouse, treated in this way, tied to the end of a stick, say two feet in length, placed in the hollow of a tree near the ground, bait end up, so that the lower portion of the poisoned bait will be above the top of the opening will serve a splendid purpose. Poison may be used in perfect safety in the above ways, the dog not being able to get at it even if so disposed, while smaller animals will be able to reach it easily.

One gentleman recently told me of three weasels he killed in this way with one bait, the bait in this instance being the body of a rabbit, killed by a weasel. A dog is not likely to eat any of the aforementioned bait, even it he should find it in the woods. If placed as directed it will be out of reach, should he pass that way. When the warm rains begin, bait of this kind will quickly be decomposed and rendered harmless, even should it not be taken by vermin. Many a predatory animal and bird will be called down in this way without the aid of a bounty law, or the expense attached thereto. Untold numbers of rats and mice will also be killed, far more in my opinion than would or could be killed by the foxes or weasels, and with no harm to birds, or to any other thing of value to the State.

A TRAPPER'S SECRET.

I have been assured that dogs will not eat the flesh of a musk rat, while cats of all kinds, and foxes are passionately fond of it. I am told, that if you will catch a number of musk rats, place the skinned carcasses in any suitable recepticle, for carrying, tie one of the carcasses to the end of a string, dragging it as you walk through the woods, or brush lot, a fox, cat, mink, weasel, or skunk traveling around at night and striking this trail will surely follow it to the point where you have prepared your entertainment for him. Every trapper in his travels, sees what he terms "likely places for vermin," at each one of these places, the man with the musk rats, builds a cairn, or pile of fairly good sized stones, laid say an inch or two apart, in the centre he places the carcass, or a part of one of his musk rats, and on top a fairly heavy flat stone, on the outside of this pile of stones, where it will be easily found, he places a small piece of musk rat, say about the size of the end of your thumb, nicely loaded with

strychnine, the victim finds this piece and wastes his time in trying to secure the larger piece inside the stone pile until it is too late, the carcass is right beside the stone pile and not away off in the brush, where it could not be found without a good tracking snow. This method is worthy of trial by any who are killing vermin for pelts.

The good done by the crow, through the destruction of mice or insects, does not appear to weigh in the balance against the wrong done by these same birds. The rapid disappearance of prairie chicken in Indiana, Illinois and other prairie States of the west is, it is claimed, directly attributable to the crow, that, from morning to night, month in and month out, preys upon the eggs and young of these birds, and has been known, in very many instances, to attack and kill nearly full grown prairie chickens.

Dr. Warren tells me of a spot in Pennsylvania known to himself where the ground, under a small clump of trees during the laying and nesting time of the wild waterfowl, especially the mud hen, is covered to the depth of several inches by the shells of the eggs of these birds, all of which were stolen by crows, that, in scores and hundreds, sweep over the marshes in that locality, devouring every egg and destroying every young bird they can find. We all know how the robin and very many other of our small birds, during their nesting time, are driven almost to the window sills of our home by the voracious crow, which, to my mind, destroys individually more birds of all kinds, more birds' eggs and more young poultry, than any hawk that ever flapped a wing. A little corn boiled until swollen and soft, with the addition of a little strychnine, will cure the crow of many bad habits. I am told that corn thoroughly soaked in strong salt water will have the same effect upon crows. The brine of a mackerel tub is just the thing for this purpose.

Remember it requires but little salt to kill a chicken, so that corn prepared in this manner should in all instances be so placed in a pile, on a board, on a piece of paper, or in such other manner, as to make its removal easy and complete, after it has served the specific purpose intended. It should never be scattered over a field or be left exposed longer than is absolutely necessary to accomplish the object in view, otherwise you may lose your hens.

The question of placing poison has been considered in very many phases. Experiments of various descriptions have been tried, some upon chickens, some with ducks, some upon turkeys, some upon quail and upon different kinds of wild birds other than game birds, and upon animals. One gentleman, a prominent physician, told me of feeding nux vomica to a chicken, a common hen, in quantities sufficient to have produced fully fifteen grains of strychnine with no injurious result to the hen. The gentleman saying, the only visible effect so far as he could see, was that the hen appeared to have lost

confidence in him. Six quail were repeatedly given excessive doses of strychnine, enough, at each time and to each bird, to have caused the death of several men. The birds seemed to have been wholly unaffected by the poison. One of these birds was afterwards killed by having forced into its craw two or three times the quantity administered in the first instance. Turkeys withstood excessive doses of this poison, while a duck succumbed, after swallowing a small quantity. Crows and blackbirds were easily killed by the administration of small doses. I learned from a reliable source that residents of certain countries had for long periods been in the habit of mixing nux vomica with the food given their chickens at certain times—the purpose being to kill hawks-and that while the poison did not appear in any way to affect the chicken, it was sure to kill any hawk that might within the limit of several hours or days, partake of a chicken thus impregnated. While none of these experiments have been carried to an absolute conclusion, they did determine beyond question, that a fixed quantity of strychnine would not affect all animals and birds in the same way. That many birds appear to be absolutely immune to its effects; that they are wholly unaffected by a dose in quantity sufficient to kill several men; and that many four-footed animals are easily killed through the use of this agent. While our protectors found the dead bodies of many animals killed by this poison, they have not yet discovered the body of one single bird, either game or otherwise, apparently determining beyond question, that strychnine is the solution of the vermin problem, and that when administered as directed by this office in a special vehicle, such as the dead body of a sparrow, or a piece of fish, both of which decompose quickly, and disappear, placed in a special locality, namely on the wild lands of the State; and at a special time, namely, late in the fall, after the close of the game season, and again early in the spring, nothing but good and benefit to the State can result.

Read what Powers and Weightman, manufacturers of drugs, Phila delphia, say upon this subject:

"STRYCHNINE."

"We are occasionally solicited, by persons interested in the poisoning of wolves, squirrels, gophers, and other destructive animals, to suggest some preparation quicker to act, and more certain in results, than Strychnine; but, we know of none.

Strychnine, when of good quality is very active, and excessively poisonous. Its results, as a rule, are quick, uniform, and certain. While this is so, however, and while it operates in the same way upon almost all animals, when the system has been brought decidedly under its influence, (producing violent tonic spasms of the muscles.

like those of tetanus), yet, considerable variation is found in different individuals to resist the poison.

Some persons are powerfully affected by the smallest doses. half a grain of Sulphate of Strychnine has produced death in fourteen minutes, while a case is recorded in which recovery took place after seven grains of Strychnine had been swallowed.

So, in the lower animals, it is found that all are not equally susceptible. One sixth-even on eighth-of a grain, it is said, will kill a large dog. Ten times as much Strychnine is required to kill chickens as other birds, weight for weight; and among mammals the guinea-pig is very insensitive to it.

Where those interested in the destruction of wolves, etc., fail to obtain expected results, they are apt to question the purity of the Strychnine; but, we think it may safely be asserted, that the Strychnine found in our markets is of good quality, and the fault is not with the poison itself.

Experience will suggest, to the trapper and hunter, more accurately than the manufacturer can do, the required amount to be used, and the best methods of preparing the bait. It will also remind him that more Strychnine is required to kill a large, than a small animal; that where size is about the same some may be able to resist a dose that would be fatal to others; and that the same animal may not be, at all times, equally susceptible to its power."

Remember, the law prohibits the placing of poison by the general public in Pennsylvania.

Remember, is using strychnine, that it is a deadly poison, and should in all ways be most carefully handled and cared for.

TREATMENT OF STRYCHNINE POISONING.

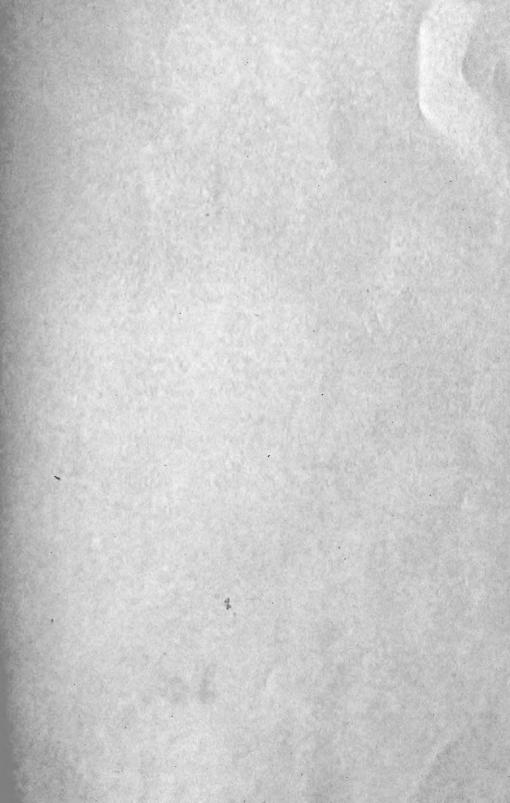
"The antidote is tannic acid to form the insoluble tannate, or a soluble salt of iodine. Then emetics or the stomach pump, followed by perfect quiet, which is very important. Vomet as quickly and as thoroughly as possible. A teaspoonful of common salt to a pint of warm (not hot) water makes a splendid and thorough emetic. Drink as much water thus prepared as possible, then stick your finger down your throat. Antagonists are chloral, chloroform, chamomile oil, phsostigma, tobacco and potassium bromide, the latter being-so slow of action it is rarely available. The bladder must be frequently evacuated, to prevent re-absorbtion of the poison.

If poisoned, use any of these remedies that can be the most easily obtained and send for your physician at once."

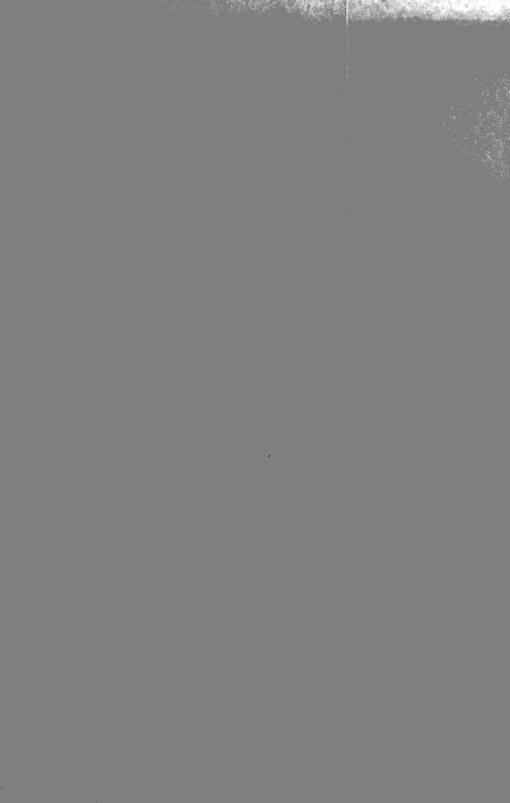
Vermin must be destroyed, if we hope to increase our small game, or other animals or birds, or our wild birds other than game birds. Respectfully yours,

JOSEPH KALBFUS,

Secretary of Game Commission.



0 001 259 379 A



SK 441

1910

