be here presented. Mr. B. H. Warren, a wellknown ornithologist, in a paper entitled 'What hawks eat,' published in a recent report of the Pennsylvania board of agriculture, states, respecting the red-tailed hawk (Buteo borealis), - the 'hen-hawk' par excellence of eastern North America, — that an examination of the stomachs of one hundred and one examples of this species "revealed in eighty-one chiefly mice and small quadrupeds, also some small birds; nine, chickens; three, quail; two, rabbits; one, a part of a skunk; one, a red squirrel; one, a gray squirrel; three, snakes." In the stomachs of thirty-four red-shouldered hawks (B. lineatus) examined were found. in twenty-three, mice, small quadrupeds, grasshoppers, and coleopterous insects; in nine, frogs and insects; in the remaining two, small birds, hair, and orthopterous insects. Of twelve broadwinged hawks (B. latissimus), four contained mice; three, small birds; four, frogs; one, crayfish and insects. The contents of the stomachs of twenty-nine sparrow-hawks (Falco sparverius) was, in fifteen cases, principally mice with traces of various insects; in six, grasshoppers; in two, coleoptera and grasshoppers; two, meadow-larks; four, sparrows. Nine rough-legged hawks (Archibuteo lagopus sancti-johannis) examined had all fed exclusively upon field-mice. Of eleven marshhawks (Circus hudsonius), the stomachs of five contained mice; of two, small birds; of three, frogs; the other, grasshoppers and rabbit's hair.

The hawks of the genus Accipiter, on the other hand, present a bad record; fourteen out of twenty-four Cooper's hawks (A. Cooperi) being found to contain chickens, seven others, birds, and three, only mice and insects. Of sharp-shinned hawks (A. velox), four out of fifteen contained chickens; nine, small birds; one, mice; and one, insects. On the other hand, it is known that several other species of the hawk family feed almost exclusively upon insects, mice, snakes, and frogs.

Careful examination of the contents of stomachs of owls, of which the results have been published, show that field-mice constitute their principal food, and that grasshoppers and other insects enter largely into the diet of all the smaller species. The larger species add to their usual fare of mice and the smaller mammals, many grouse and rabbits.

In short, enough is known of the regimen of our rapacious birds to show that they are only exceptionally harmful to the farmer; their infrequent raids—mostly by a few species—on the poultry being much more than offset by their destruction of mice, grasshoppers, and other injurious insects.

In this connection, reference may be appropri-

ately made to the letters from farmers and fruitgrowers, as well as bird-lovers, from various parts of the country, addressed to the committee of the American ornithologists' union on bird-protection, detailing the vast injury they recognize as resulting to agriculture from the present wholesale slaughter of birds. An extract from a letter from a farmer in Dexter, Mich., will indicate the general purport of these communications. "The destruction of birds has been and is carried on here to such an extent that it is hardly possible to raise any kind of fruit; even the grapes, as well as the apples, being too wormy for use or sale. Boys, and even sires of families, but not men, go out and shoot swallows, robins, larks, etc. makes no difference if they are nesting; and many a nest of young birds have starved on account of their parents being shot. And the small boy with his sling-shot destroys many - and all for the desire to murder. . . . There is a law to prohibit all this; but those who could enforce it take no interest in the matter. Not a single person saves the skins for gain: the birds are thrown away, or left where they fall. I have protested against the cruelty, but to no purpose, except in a few instances. The game and bird laws should be enforced by men appointed for the purpose, who should receive a salary, so that they may make it a business."

BIRD-LAWS.

Most of the states and territories have on their statute-books laws for the protection of game and fish, regulating the season of hunting and fishing, and providing penalties for the taking of game or fish during certain portions of each year, or, in particular cases, for a series of years. These laws are intended, in most cases, to give protection to 'useful' birds, in addition to the game-birds, and their nests and eggs, at all seasons. In general, these laws are crude and unsatisfactory so far as they relate to supposed useful birds, and also in relation to many others which are either protected merely during certain months, or not at all, as is the case with many of the marsh and shore inhabiting species, such as the herons, terns, gulls, etc. Most of the laws exclude from protection all hawks and owls, crows, jays, and blackbirds, and, in some cases, robins and other kinds of song-birds, woodpeckers, etc. A few of the laws make provision for collecting birds and their eggs for scientific purposes, often in a lax way, but occasionally, as in Maine, with considerable stringency; while the new bird-law of New Jersey prohibits the destruction of song-birds, their nests or eggs, for any purpose whatever. Defective as the present laws now generally are, they would, if thoroughly enforced, prevent the disgraceful slaughter now so general, and untrammelled by any legal interference. As already so many times reiterated in this series of papers, the fault is not so much lack of laws, or inadequate legislation, as the absence of nearly all effort to interpose any obstacles, legal or otherwise, in the way of free slaughter. So apathetic is the public in all that relates to bird-protection, that prosecution under the bird-protection statutes requires, on the part of the prosecutor, a considerable amount of moral courage to face the frown of public opinion, the malignment of motive, and the enmities such prosecution is sure to engender.

None of the bird-laws are above improvement, even in so far as they relate to the protection of game-birds; but, in respect to the non-game birds, nearly all require more or less change. If possible, it would be well to have uniform laws throughout all the states and territories, varying only in respect to the time of the close season, and such other points as difference of season, kind of game to be especially protected, etc., according to local conditions. At present, certain birds are protected in some states which are outlawed in others, or are treated as game-birds in some, and not so treated in others.

Birds, as regards legislation, may well be divided into two classes, - game-birds, and birds which are not such; and the laws relating to each class should be separate and distinct. The gamebirds should be left to the care of sportsmen and game-protective associations, since self-interest on the part of the more intelligent sportsmen will dictate more or less wise legislation for the preservation of the birds on which their sport depends. But in respect to game-birds, public opinion should be so far enlightened as to secure the enforcement of proper legislative enactments; which is notoriously not the case at present. All other birds should be left to the care of bird-lovers and humanitarians, who should see that proper laws for their preservation are not only enacted, but duly enforced. As already shown in preceding pages of this Supplement, those who know best, from having scientifically investigated the subject, are convinced that none of our native birds should be outlawed as unqualifiedly, or even to any serious degree, injurious. A few exceptions might be made, were it practicable; but, in the general ignorance of legislators and of the public generally, — or their inability to make proper distinction through inability to recognize by proper names one kind of hawk, for instance, from another, the safe way is to attempt no such discrimination in legislation. The slight harm resulting from protecting half a dozen species more or less harmful would be more than offset by the indiscriminate destruction which would necessarily result from such a loophole.

The reason for keeping legislation respecting game-birds distinct from that relating to the other species is mainly to avoid conflict of interests respecting such legislation, which is more or less sure to follow in any attempt at combined legislation respecting all birds in one act. Sportsmen's clubs and game-protective associations in attempting to provide proper game-laws often find strong opponents in the game-dealers and market-gunners, who often succeed in defeating judicious legislation. If all birds are treated under the same act, attempts to improve the portions of such acts as relate to useful birds are often prevented through opposition to certain clauses of the game-sections obnoxious to pothunters and game-dealers, as has recently been the case with attempted judicious amendments to the bird-laws in the state of Massachusetts.

There should also be some provision for collecting birds, their nests and eggs, for scientific purposes, in behalf of our natural history museums and of scientific progress in ornithology. already shown in these articles, the birds destroved in the interest of science, notwithstanding the outcry to the contrary from certain sources, are relatively few in comparison to the number destroyed for millinery and other mercenary purposes, - so small as not to materially affect the decrease of any species. But such license, unless rigidly guarded, is liable to abuse, and should be hedged about with every practicable safeguard. The number of such licenses issued in any state should be very small; they should be granted with strictest regard to the fitness of the recipient to be allowed such a favor; and their abuse or misuse made a misdemeanor subject to severe penalties. Obviously, the power to grant them should, so far as possible, be vested in persons having some knowledge of ornithology, or who are able to recognize the difference between collecting birds for scientific purposes and as 'curiosities,' or for traffic other than strictly in the interest of science. It should be further understood that these licenses grant no immunity from the ordinary laws of trespass, or laws against the use of tire-arms at improper times or places, or in violation of any of the provisions of game-protective acts. The system of issuing such licenses has needlessly been brought into disrepute through the gross ignorance and apathy of the general public as to their real purpose and limitations. For most of the abuses of the system there is already abundant remedy. Any person holding such a license, who uses it as a shield against prosecution for illegal or indiscriminate slaughter of birds for any and all purposes, is successful only to such extent as the ignorance or apathy of the community among which his misdeeds are committed happen to give him immunity. The fault is not in reality chargeable to the law, or the system permitting the granting of certificates for scientific collecting. In this matter, as in all else relating to bird-destruction, all that is necessary to prevent abuses is a proper comprehension of the laws relating to the subject, and a public sentiment not only favorable to their enforcement, but watchful against any infringement of their provisions.

With a desire to bring about more intelligent, uniform, and desirable legislation for the protection everywhere, and at all times, of all birds not properly to be regarded as game-birds, the American ornithologists' union committee on birdprotection have had under careful consideration a draught of a bird-law drawn with special reference to its fitness for general adoption throughout the United States and the British Provinces, and with regard to just what birds should be so protected. It is intended as a guide or model, which may serve as a basis for legislation. From its pertinence in the present connection, it is given below in full. Possibly some additional provisions may still be desirable, relating especially to the designation of certain officers to secure its strict observance, the amount of the fine, and whether or not a part of the fine should go to the complainant, features, however, that doubtless may be safely left to legislative discretion.

[An act for the protection of birds and their nests and eggs.]

Section 1.—Any person who shall, within the state of kill any wild bird other than a game-bird, or purchase, offer, or expose for sale any such wild bird, after it has been killed, shall for each offence be subject to a fine of five dollars, or imprisonment for ten days, or both, at the discretion of the court. For the purposes of this act the following only shall be considered game-birds. The Anatidae, commonly known as swans, geese, brant, and river and sea ducks; the Rallidae, commonly known as rails, coots, mud-hens, and gallinules; the Limicolae, commonly known as shore-birds, plovers, surf-birds, snipe, woodcock, sandpipers, tatlers, and curlews; the Gallinae, commonly known as wild turkeys, grouse, prairie-chickens, pheasants, partridges, and qualls.

SECT. 2.— Any person who shall, within the state of take or needlessly destroy the nest or the eggs of any wild bird, shall be subject for each offence to a fine of five dollars, or imprisonment for ten days, or both, at the discretion of the court.

SECT. 3.—Sections 1 and 2 of this act shall not apply to any person holding a certificate giving the right to take birds, and their nests and eggs, for scientific purposes, as provided for in section 4 of this act.

SECT. 4. — Certificates may be granted by [here follow the names of the persons, if any, duly authorized by this act to grant such certificates], or by any incorporated society of natural history in the state, through such persons or

officers as said society may designate, to any properly accredited person of the age of eighteen years or upward, permitting the holder thereof to collect birds, their nests or eggs, for strictly scientific purposes only. In order to obtain such certificate, the applicant for the same must present to the person or persons having the power to grant said certificate, written testimonials from two well-known scientific men, certifying to the good character and fitness of said applicant to be intrusted with such privilege; must pay to said persons or officers one dollar to defray the necessary expenses attending the granting of such certificates; and must file with said persons or officers a properly executed bond, in the sum of two hundred dollars, signed by two responsible citizens of the state as sureties. bond shall be forfeited to the state, and the certificate become void, upon proof that the holder of such a certificate has killed any bird, or taken the nest or eggs of any bird, for other than the purposes named in sections 3 and 4 of this act, and shall be further subject for each such offence to the penalties provided therefor in sections 1 and 2 of this act.

SECT. 5.—The certificates authorized by this act shall be in force for one year only from the date of their issue, and shall not be transferable.

SECT. 6.—The English or European house-sparrow (Passer domesticus) is not included among the birds protected by this act.

SECT. 7.—All acts, or parts of acts, heretofore passed, inconsistent with or contrary to the provisions of this act, are hereby repealed.

SECT. 8. — This act shall take effect upon its passage.

AN APPEAL TO THE WOMEN OF THE COUNTRY IN BEHALF OF THE BIRDS,

The relation of the women of the country to the present lamentable destruction of bird-life has been several times alluded to in the foregoing pages: but the matter is so important, it demands more formal notice in the present connection. The destruction of millions of birds annually results from the present fashion of wearing birds on hats and bonnets. The women who wear them, and give countenance to the fashion, have doubtless done so thoughtlessly, as regards the serious destruction of bird-life thereby entailed, and without any appreciation of its extent or its results, considered from a practical stand-point. Until recently, very rarely has attention been called to the matter, or the facts in the case been adequately set forth. They have therefore sinned. for the most part, unwittingly, and are thus not seriously chargeable with blame. But the case is now different, and ignorance can no longer be urged in palliation of a barbarous fashion. Obviously it is only necessary to call the attention of intelligent women to the subject, as now presented, to enlist their sympathies and their efforts in suppression of the milliner's traffic in bird-As a recent writer (Mr. E. P. Bicknell, secretary of the A. O. U. committee on birdprotection) in the Evening post of this city has not only forcibly appealed to the women in behalf of the birds, but suggested to them certain desirable lines of action, this brief reference to the subject