

Biology Building
March 17, 1932

Dr. J. H. Ohm
15 South Barstow Street
Eau Claire, Wisconsin

Dear Dr. Ohm:

I am in receipt of your letter of March 15 relative to predatory species. I am not in a position to discuss each species individually in great detail, but I am inclosing for your reference a number of carbon copies of manuscripts which I have prepared for publication in various technical and semi-technical journals.

Two of these have to do with a series of articles on hawks and owls which will be running in "The Condor" starting with the next issue. These two treat with the food habits of hawks and owls. If you are interested in the technique of raptor food habits study, I refer you to a paper of mine coming out in the March issue of "The Condor." Another manuscript deals with what original data I have on the food habits of Wisconsin mammalian predators. This is a chapter of a work on the northern bobwhite now in preparation. The fourth manuscript is a general discussion of some of the basic principles of wild life management, which paper will be out in a forthcoming issue of "American Game." I am also inclosing a reprint of a series of articles pertaining to the northern bobwhite; you may not be especially interested in this species, but the general problems discussed may be broadly comparable to those with which you are confronted on your pheasant preserve.

Of course, I am not particularly familiar with the type of country about Eau Claire, having done no work there and having only passed through on a few occasions, so I am reluctant to make specific recommendations. Unless, however, your locality differs more than I think it does from those in which I have conducted my research, I may be safe in indulging in a few generalizations.

I would suspect that the horned owl is probably the most serious game enemy with which you have to contend, though the mere fact that you caught 69 on a 400-acre marsh does not necessarily indicate an extremely heavy population. Of course these owls are not resident; in probability there is seldom more than one or two horned owls hunting over this territory at any given time. Resident horned owl populations even in my best

observational areas rarely exceed a couple birds per square mile. I have a suspicion that most of the individuals you caught were juveniles drifting here and there in the fall.

I do not believe the barred owl constitutes a problem of consequence, as my data do not show it to be much of a game enemy. These data are presented in more detail in the paper on owls. The smaller owls have hardly any objectional habits at all so far as game birds are concerned. I strongly advise against the killing of any owls other than the great horned, and there are times and places, too, where the great horned owl may be a distinct asset. I would hazard a guess that weasels are not overly abundant in your horned owl country.

As to hawks, the only common species I have found to be economically detrimental is the Cooper's hawk, though an occasional redtail or marsh hawk does some mischief. I might make a general statement that the large, slow-moving hawks of the common, soaring type are the ones to leave unmolested except under conditions of extreme provocation. Unfortunately these are exactly the ones to suffer most from the shooting public at large, whereas the swift, darting hawks of the woodlots--those that are most apt to be serious game enemies--almost invariably escape. There is hence a disproportionate human pressure upon just those species which by and large we ought to encourage. The eastern states complain more and more of an undue increase of the medium-sized bird-killing species accompanying an alarming decline of the larger, conspicuous, and most valuable ones.

I have no data on crows, but the species is sufficiently thrifty so that it could doubtless stand considerable persecution without detriment, irrespective of whether or not it does appreciable damage to game. In its ability to stand punishment the crow differs greatly from many of our species of hawks and owls, some of which are down altogether too low in numbers for the safety of the species, to say nothing of economic and ecological considerations.

For a discussion of the food habits of mammalian predators, you will find my chapter perhaps of greater utility than anything I could say in a letter. In short, I advise placing the greatest pressure upon exotic species such as dogs and cats. Most of the other carnivorous mammals are fur-bearers and thus subject to sufficient--if not too much--pressure from hunters and trappers. Certain species, as the grey fox, in my observational counties sometimes become overly abundant, making

advisable special repressive measures, though control policies should be based upon local situations. My data on the food habits of these species is fragmentary anyway except for winter, during which time their depredations on game bird species do not seem unduly serious. It is my idea that most of the damage they do occurs during the warmer months, though on this point I have scant substantiating data.

By and large, I would suggest that you lay the most emphasis upon making the environment favorable for your game from the food and cover standpoint rather than upon predator control. If the environment is right, wild life can maintain itself despite natural enemies. At any rate, native species are perfectly fitted, through thousands of years of association, to cope with native enemies under proper living conditions. If the environment is not right, the species cannot maintain itself even in the absence of predators--that is, in what we consider satisfactory populations.

I do not wish to throw cold water upon your pheasant preserve activities, but I have seen few places in Wisconsin where the environment is really suitable or could be made suitable for the species. You can probably have pheasants, yes, in sufficient numbers so that you have some to look at, but I doubt if you would ever be able to build up populations high enough to justify much shooting. South Dakota's phenomenal pheasant populations are due to definite causes, not the least of which is their great tracts of standing corn; as one who was raised in South Dakota's best pheasant country, perhaps I may be pardoned for expressing a doubt that Wisconsin can ever--or should try--to provide a pheasant environment remotely comparable to that which South Dakota has. *How about management of some native species?*

Back to the original subject. I have little to offer as to the means of reducing predaceous species doing damage except perhaps to suggest that all your men engaged in predator control be responsible individuals able to tell the "good" from the "bad". I am extremely pessimistic on the subject of gun club members or the hunting public doing any worth-while control work; it has been my experience that such campaigns invariably are much more harmful to public interest than they are beneficial. Likewise I am pessimistic on the subject of pole traps for approximately the same reason. If pole traps catch little except the so-called destructive species, well and good; if pole traps ~~take on average 10% of~~ ^{take on average 10% of} ~~kill from~~ practically ~~any~~ beneficial hawks and owls ~~of~~ ^{of} the locality, as well as harmless non-game species, not so good. You are, however, in an infinitely better position than I to know just how your own control measures are working out.

I hope that you will excuse the messy condition of some of the material that I am sending you, but it is the best that I could scrape together in short order. I hope also that you will find it of some value as applicable to some of your problems. I am not attempting to stretch my Dane, Sauk, and Columbia county findings on the ecology of the quail to apply verbatim to your Eau Claire pheasant preserve. Some of our problems may be similar, however.

Yours sincerely,

Paul L. Errington
In Charge, Quail Investigation

PLM:vh

Incl.

The manuscripts I am sending are for the information of you and your associates only. They are not for publication, as most of the material is placed in polished form, with the publishers — or will be.

P.L.E.