

Biology Building  
Madison, Wisconsin  
November 14, 1930

Mr. William F. Grimmer  
Superintendent of Game  
Conservation Department  
Madison, Wisconsin

Dear Mr. Grimmer:

The 30 quail for which I asked you some time ago are to be used in the following experiments. Of course, there will probably be some changes in the winter experimental program submitted, depending largely upon later developments.

Group 1. Grit Experiment.

Six birds to be kept on wire screen from Dec. 15, 1930, until about April, 1931. They are to be fed the same foods eaten by wild quail, but are not to be allowed access to any grit, whatever. The purpose of the experiment is to determine whether or not quail are apt to suffer from grit scarcity during prolonged periods of deep snow, when grit would be difficult or impossible for them to procure.

Group 2. Black Locust Bean Experiment.

Six birds to be fed on an exclusive locust bean diet, coincident with the period when wild quail are eating locust beans in greatest quantities. The locust bean, let it be recalled, is widespread in distribution but of dubious food value.

Group 3. Sweet Clover Seed Experiment.

Four birds to be fed on a diet of sweet clover seed in a manner comparable to that in the locust bean experiment. Bobwhites were not observed to eat any appreciable amount of the abundantly available sweet clover seed the past winter except as a last resort, starvation food. These observations need experimental checking.

Group 4. Sumac Berry Experiment.

Four birds. Experiment of same nature as in groups 2 and 3. Sumac berries are eaten with greater or less frequency throughout the year, but they seemingly are quite inadequate as winter diet.

Group 5. Mixed Nutritious and Innutritious Diet Experiments.

Four birds. Experiments with mixed corn and locust beans and with mixed corn and sumac berries, which food combinations occur often in the wild, but accompanied by no apparent harmful effects. The question to be settled here is whether indigestible or innutritious material has an adverse bearing upon the quails' health, not because of poor food value, but because of its possible accumulative burden upon the quails' digestive system.

Group 6. Check Birds.

Six birds to be retained for normal feeding to check the experiments outlined.

It is likewise desired to conduct other experiments; for example, experiments to test out the relative ability of lone birds (as distinguished from huddled covies) to withstand severe cold. Also some studies are contemplated to ascertain the effect of progressive underfeeding (with limited though high grade food, such as ragweed seed) upon cold resistance.

In all the experiments, the primary object is to clarify certain situations that present themselves again and again in the field, and in which connection natural winter conditions will be duplicated as much about the quail pens as my simple facilities permit.

Although the experiments outlined call for more than the 30 birds, I feel that I can get along with that number by a little judicious manipulation. Nevertheless I want the full 30, if you can spare them, otherwise something will have to be sacrificed somewhere. In probability, none of the small supply I have now will be left for the winter experiments.

I could use the birds about December 15, or approximately the time that I return from my New York-Washington trip. The experiments would stand a better chance of working out as they should, if the newly captive wild birds had a couple weeks or so in which to accustom themselves to their quarters.

As I previously mentioned to you, there will doubtless be considerable mortality in groups 3 and 4, and possibly in 2. I expect to conclude the quail experiments by spring, in which case I will either release the survivors or make proper scientific disposal of them.

I trust that I have made the main features of the project clear.

Yours sincerely,

Paul L. Errington  
Quail Investigation,  
S.A.A.M.I., U. S. Biol. Survey,  
& University of Wisconsin