

Supplemental Feed and Northern Bobwhites: Considerations and Costs

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Abstract: Northern bobwhite (*Colinus virginianus*) populations are continuing a 30-year downward population trend throughout their range. Managers use supplemental corn (*Zea mays*) and milo (*Sorghum* spp.), trying to reverse the decline of bobwhite populations; however, results are conflicting among the published literature. Supplemental feed can influence bobwhite survival, reproduction, and movements, but only in situations where nutrients are truly lacking. Vitamin A, phosphorus (P), calcium (Ca), carbohydrates, and protein can be important nutrients for captive bobwhite egg production; however, controlled experiments are necessary to determine the impact of these nutrients on wild bobwhite populations. We propose a five-part research agenda to fill the voids in the literature on this topic: 1) evaluate the impacts of all nutrients necessary for bobwhite production in controlled experiments on wild birds; 2) determine which nutrients have the largest impact on bobwhite production, 3) develop a feed that contains the proper amounts of each nutrient; 4) determine a plan for placement and timing of feeding that is biologically relevant to bobwhites; 5) develop and test a set of decision tool for managers that will assist them in implementing a feeding program that meets their needs.

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