WILLIAMS, G. C. 1966. Natural selection, the cost of reproduction, and a refinement of Lack's principle. Amer. Natur. 100: 687-690.

WINKLER, D. W., & J. R. WALTERS. 1983. The determination of clutch size in precocial birds. Current Ornithol. 1: 33-68.

YOM-Tov, Y. 1974. The effect of food and predation on breeding density and success, clutch size and laying date of the Crow (*Corvus corone L.*). J. Anim. Ecol. 43: 479-498.

100 Years Ago in The Auk



From "A study of the singing of our birds," by Eugene P. Bicknell (1884 Auk 1: 322-332):

The song of the Northern Shrike "may be one of the first that the spring can claim; for that indefinable change that comes into the atmosphere and the sunlight on some days of late winter and leads us to look springward, seems to be as quickly felt by this hardened and cruel bird as by the most tender species which it is wont to make its victims. An unusually vocal bird was observed on February 10, 1877—a morning when winter seemed quietly relaxing from long-continued severity. Perched in the sunlight, on the topmost spray of a tall oak, on an eminence commanding an expanse of changing landscape, it was alternately singing and preening its beautiful plum-

age. The song was a medley of varied and rather disconnected articulations, an occasional low warble always being quickly extinguished by harsh notes, even as the bird's gentle demanor would soon be interrupted by some deed of cruelty."

"It has been claimed that the Butcher Bird attracts birds and small animals by imitating their cries, thus making them its easy prey. It is true that notes similar to the screaming of small birds and the squealing of mice are interspersed through its song; but they are uttered without method, and sometimes actually in conjunction with the most harsh and startling sounds of which the bird is capable."

From "Birds of the Lower Uruguay," by Walter B. Barrows (1884 Auk 1: 313-319):

"So many stories have been told of the breeding habits of these birds [rheas, Rhea americana] that I could probably add nothing of value myself, so I append the following, which was told me by a young man who was born and brought up among Ostriches [rheas]. When an Ostrich has built a nest and laid the

full number of eggs, she is naturally anxious to be able to find the nest again after having wandered away to any distance. This she manages by simply laying eggs at intervals of half-a-mile or so over the adjacent country, placing each egg with its smaller end pointing directly toward the nest!"