Project Highlight – SD State Wildlife Grant

Project Type Research

Title Nesting success, brood survival, and movements of long-billed curlews in grazed landscapes of western South Dakota

In a nutshell Like many grassland species, the long-billed curlew has declined due to breeding habitat loss. Mixed-grass prairies in working landscapes provide important nesting areas for this species. This project examined the impacts of livestock grazing regimes on the long-billed curlew.

Relevant Species of Greatest Conservation Need

- Long-billed Curlew (*Numenius americanus*)

Relevant Habitats native rangeland; mixed-grass prairie

Cooperators South Dakota State University (Dr. Kent Jensen)

Purpose To evaluate how livestock grazing regimes impact nesting habitat selection, nest density and nesting success of long-billed curlews; to evaluate how grazing regimes impact long-billed curlew movements and brood survival; and to assess the importance of early-season food availability related to different grazing regimes on long-billed curlew nesting success

Location Stanley County in western South Dakota

Timeframe August 2004 – December 2006

Summary or Important Findings

- 48 nests were located and 43 adult curlews were radiomarked during the study.
- The second year of the study was impacted by a natural range fire on the study site and severe drought conditions; nest predation accounted for 64% of nest failures in 2006.
- Curlews selected nest sites with more junegrass and buffalograss and more forb cover than at random points.
- Only ⅓ of the broods produced by radio-marked curlews produced fledglings, possibly due to avian predation and heat prostration.

Best contact person Dr. Kent (KC) Jensen, South Dakota State University

More Information

Clarke, J. N. 2006. Reproductive ecology of long-billed curlews breeding in grazed landscapes of western South Dakota. M.S. Thesis, South Dakota State University, Brookings, SD. 94 pp.