

Habitat Restoration for Grassland-Dependent Birds in the San Marcos Foothills Preserve

Organization: Channel Islands Restoration

Project Period: January 2019 – December 2020

Amount: \$64,540

Location: San Marcos Preserve, Santa Barbara County

Project Description: The San Marcos Foothills Preserve is a 200-acre permanently protected nature preserve that is owned by Santa Barbara County. Channel Islands Restoration (CIR), in partnership with the San Marcos Foothills Coalition has prepared a native grassland restoration plan that will expand native grassland on the Preserve to support populations of grassland-dependent birds. CIR proposes to restore up to 45 acres of the Preserve to native perennial grassland through the initiation of a grazing program. This project will support 2-years of a grazing program that will allow sheep to graze 45 acres during 2 grazing periods per year. The restored grassland will benefit many insects, mammals, reptiles, and is expected to particularly increase the presence of grassland-dependent bird species such as grasshopper sparrows, lark sparrows, western meadowlarks, burrowing owls, loggerhead shrikes, and white-tailed kites.



Photos taken by Michael Mulroy on the San Marcos Foothills Preserve in Spring 2019 (left to right: loggerhead shrike, California quail eggs, American Kestrel)

Progress: During their second year of grazing, 2020, over 400 sheep grazed on 53 acres of grassland on the San Marcos Foothills Preserve in January and again in April/May. All sheep were removed from the Preserve on May 14th. A total of 4 bird monitoring surveys were conducted this year by Michael Mulroy during the breeding

season, March-June. A total of 69 species were observed on the Preserve this year, 15 more species than last year during the same period. However, they are yet to see an increase in the number of species knowingly breeding on the preserve. All bird monitoring data was recorded on eBird.org and [individual bird checklists](#) are available. All [verified bird breeding observations](#) were submitted to the Santa Barbara County Breeding Bird Study and are available online. Vegetative monitoring from this year showed an increased growth of native grasses and increased seed production in response to the sheep grazing and less thatch build up in grazed areas. Their qualitative and quantitative monitoring suggests that the grazing is beginning to restore ecological functions including provision of habitat for birds that are dependent on grasslands.

Table 1. Summary of vegetation monitoring data from August 2020. Data was averaged over 20 circular plots with a 15 ft radius throughout the Preserve.

Vegetation Monitoring Metric	Average Amount
Total Vegetative Cover	20%
Bare Ground	34%
Thatch Cover	44%
Thatch Depth	1.9 inches