FINAL PROJECT REPORT Clarifying Science Needs for Southeastern Grasslands

1. ADMINISTRATIVE

Principal Investigators:

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Project title: Clarifying Science Needs for Southeastern Grasslands

Date of report: May 21, 2021

Period of performance: August 27, 2018 through April 30, 2021

Actual total cost: \$59,300

2. PUBLIC SUMMARY

Grasslands are important to the biodiversity of the southeastern United States and face a range of threats. Owing to decades of fire suppression, land-use change, and other human activities, total reduction of southeastern grasslands is estimated at 90%, upwards to 100% for some grassland types. Emerging threats to grasslands include climate change and invasive species. In response to these threats, grassland managers and researchers from across the Southeast, led by the Southeastern Grasslands Initiative and the U.S. Geological Survey, organized a multi-stakeholder workshop in January 2020 to provide a scientific needs assessment for grassland species and communities of conservation concern in the southeastern United States. Workshop participants included managers and researchers from across the Southeast region, with diverse expertise on grassland conservation. Participants identified dozens of research priorities and gaps in scientific knowledge, organized into five categories: (1) habitat loss and fragmentation, (2) climate change, (3) changes to disturbance regimes, (4) invasive species, and (5) localized impacts. Through the structured workshop format and an extensive literature review, research priorities were contextualized to help inform the Species Status Assessment (SSA) process under the U.S. Endangered Species Act. This scientific needs assessment can help guide future research on southeastern grassland species and ecosystems to support effective grassland conservation.

3. PROJECT REPORT

For all other final report information, please see:

Noss, R.F., Cartwright, J.M., Estes, D., Witsell, T., Elliott, K.G., Adams, D.S., Albrecht, M.A., Boyles, R., Comer, P.J., Doffitt, C., Faber-Langdoen, D., Hill, J.G., Hunter, W.C., Knapp, W.M., Marshall, M., Pyne, M., Singhurst, J.R., Tracey, C., Walck, J.L., and Weakley, A., 2021, Science needs of southeastern grassland species of conservation concern—A framework for species status assessments: U.S. Geological Survey Open-File Report 2021–1047, 58 p., https://doi.org/10.3133/ofr20211047.

Below is a quote attributable to a stakeholder/partner in the project that describes the way(s) in which results of the project have or will be used.

Grassland associated ecological systems collectively support a high proportion of Federal trust-responsibility taxa in the Southeast, involving many imperiled plants and animals. The workshop and the resulting report were generated to support the U.S. Fish and Wildlife Service's Species Status Assessment process by providing information that could constitute the types and severity of threats that many grassland taxa are subjected, along with identification of priority research needs to fill information gaps. The report is an important contribution for better thinking about ecosystem-level management and conservation of many imperiled associated taxa. For the purposes of the U.S. Fish and Wildlife Service, this document presents an important prototype to help better ensure the survival and recovery of threatened and endangered species, evaluating the conservation status of at-risk taxa, and conservation of birds of conservation concern.

Chuck Hunter

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