

Conducting species status assessments for 5 focal candidate reptile and amphibian species in longleaf pine ecosystems

Background:

Department of Defense (DoD) installations face great regulatory uncertainty and predictability, and strategic investment in the Species Status Assessment (SSA) process, particularly for focal at-risk and candidate species, offers a novel opportunity to align pre-listing management and conservation to increase regulatory certainty. The SSA framework was recently developed by U.S. Fish and Wildlife Service (FWS) to deliver foundational science for informing all Endangered Species Act (ESA) decisions via an analytical approach. The FWS has an ever-increasing workload and a decreasing staff; given Texas A&M-Natural Resource Institute's (NRI) expertise and capacity in species of concern research, policy, and engagement, and its close working relationships with FWS, there was a great opportunity for NRI to conduct several DoD priority SSAs using the best available science and analysis to be used in making ESA determinations.

Objective:

NRI will work closely with FWS to conduct SSAs for 10 species occurring on military installations. These species include the: gopher tortoise (*Gopherus polyphemus*), southern hognose snake (*Heterodon simus*), Okaloosa darter (*Etheostoma okaloosae*), Black Creek crayfish (*Procambarus pictus*), and alligator snapping turtle (*Macrochelys temminckii*), and will offer additional support to conduct 5 San Clemente Island (SCI) SSAs (SCI paintbrush (*Castilleja grisea*), SCI lotus (*Acmispon dendroideus var. traskiae*), SCI Bell's sparrow (*Artemisiospiza belli clementeae*), SCI larkspur (*Delphinium variegatum ssp. kinkiense*), and SCI bushmallow (*Malacothamnus clementinus*)).

Summary of Approach:

The first step in the SSA process was to form a Core Team and reach out to species experts to provide input and data throughout the process. NRI then conducted an exhaustive literature review and several data requests throughout the SSA process. NRI served as the primary author and conducted analyses for each SSA. Once the SSA was completed and reviewed by species experts and state partners, the SSA went through a peer review process. Once peer review comments were incorporated, a Recommendation Team Meeting was held to determine the status of each species. The SSA results in a scientific report distinct from policy application, which contributes to streamlined, transparent, and consistent decision-making and allows for greater technical participation by experts outside of the FWS, for example, by state natural resource agencies and DoD staff.

Benefit:

Military installations provide habitat for significant populations of federally listed and at-risk species. These species can adversely impact training and testing on military installations due to ESA requirements. Collaboration between partners to develop and promote innovative strategies for proactive conservation of at-risk species and increased flexibility for addressing impacts to both listed species and military missions is critical. Approaches such as conservation agreements, mitigation credit strategies, and projects to increase status information of at-risk species to inform SSAs conducted by the FWS to inform listing and reclassification decisions can be effective in increasing training flexibility for DoD. These efforts will promote and support ecosystem restoration, maintenance, and monitoring on and off military installations to enhance the conservation of at-risk and listed species; increase flexibility for on-installation training; increase regulatory predictability for military services, other federal agencies, and private landowners who engage in proactive conservation; and provide a process for DoD and other partners to share species data that will inform regulatory decisions.

Accomplishments:

Summary of SSAs completed under the Legacy grant from September 2018 through March 2020.

Species	Complete	Reason for SSA
Southern hognose snake	2019	Listing decision
Okaloosa darter	2019	Reclassification
Black Creek crayfish	2020	Listing decision
Alligator snapping turtle	2020	Listing decision
Gopher tortoise	2021	Listing decision*
SCI paintbrush	2019	Reclassification
SCI lotus	2019	Reclassification
SCI Bell's sparrow	2019	Reclassification
SCI larkspur	2019	Reclassification
SCI bushmallow	2019	Reclassification

*covers the listed and candidate portions of the range

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