



Building Capacity for Managing At-risk Species to Enable Mission Readiness on Military Installations: Spotted Turtle Status Assessment and Surveys

Project # NR-20-002

Background:

Spotted Turtle (*Clemmys guttata*) populations have declined across their range in the eastern United States, and this is particularly true in coastal areas where many Department of Defense (DoD) installations are located. The Spotted Turtle is confirmed present on 39 military sites, is a DoD Mission Sensitive Species, and is currently under review by the U.S. Fish and Wildlife Service (USFWS) for listing under the Endangered Species Act. However, little information is known about the distribution and population status of Spotted Turtles on military lands. Expanding the current knowledge of this species on military installations will enable natural resource personnel to improve Integrated Natural Resource Management Plans (INRMP), thereby promoting mission readiness through support of Spotted Turtle conservation and improved habitat management.



Objective:

The primary objective of this project was to investigate the status, distribution, and abundance of Spotted Turtles on nine military sites located from Massachusetts to Georgia through a standardized monitoring protocol developed for an ongoing conservation research effort supported by the USFWS and participating states. The project aim was to determine Spotted Turtle population distribution and abundance, and to evaluate habitat management opportunities on military sites.

Summary of Approach:

This project conducted a brief (November 2020 to November 2021) but thorough status assessment of Spotted Turtle populations on nine military sites using

a standardized monitoring protocol of high-density trap rapid assessments, demographic assessments, visual rapid assessments, and/or adaptive inventory-based trapping. Military sites that participated in this study included Camps Curtis Guild, Camp Edwards, Fort Indiantown Gap, Joint Base McGuire-Dix Lakehurst, Forts Belvoir, Fort A.P. Hill, Marine Corps Base Quantico, Naval Support Activity Northwest Annex, and Fort Stewart. As traps were monitored for Spotted Turtle captures during deployment, select bycatch encountered during trap checks was also recorded.

Benefit:

These data will improve the understanding of the habitat use and population status of Spotted Turtles on military sites. In addition, the resulting data can be used by installation natural resource managers to better inform INRMP priorities and implement best management practices that support mission readiness and conservation efforts for the Spotted Turtle. Lastly, the methods used in this survey can serve as a replicable model for the additional 30 installations with Spotted Turtle records, as well as the 60 sites with potential habitat and populations. This project enabled nearly 40 people, including those from the DoD, USFWS, state agencies, and non-governmental organizations, working in partnership to provide technical expertise and leadership to promote conservation science and management for the Spotted Turtle.

Accomplishments:

This project successfully accomplished field surveys and status assessments of Spotted Turtle populations on nine military sites. It provides a baseline for population trends and establishes best management practices that can be utilized and implemented at these nine military installations. These best management practices can also be duplicated on the remaining 30 military sites where this species has been confirmed present.

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