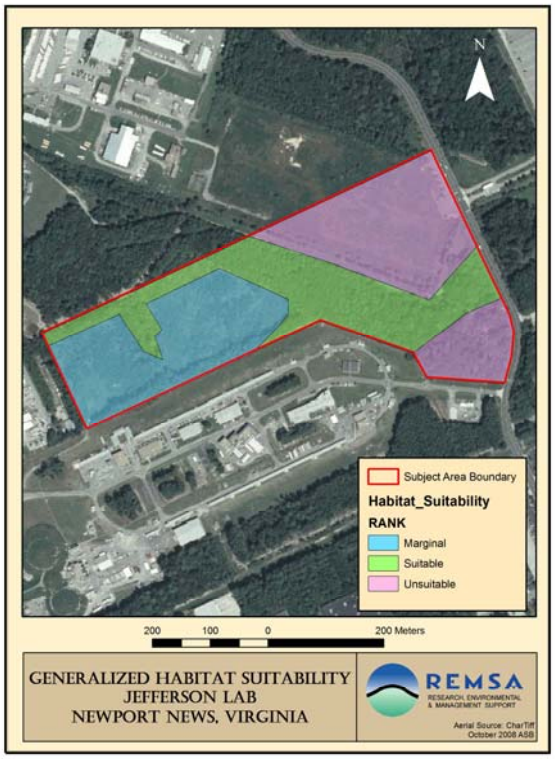
PROJECT SUMMARY:

Endangered Species (Fauna) Survey, with Special Emphasis on the Canebrake Rattlesnake (*Crotalus horridus*), of Future Construction Sites at Jefferson Lab (Thomas Jefferson National Accelerator Facility), Newport News, Virginia

Dates: September - October 2008
Job Number: E18-08
Client: Jefferson Science Associates and the US Department of Energy



Description: REMSA conducted general faunal habitat surveys for the possible presence of listed (endangered/threatened) at the Jefferson Lab, Newport News, VA. These surveys were designed to complement the Virginia Department of Game and Inland Fisheries and Virginia Department of Conservation and Recreation database reviews and to provide a more comprehensive view of potential impacts to threatened and endangered animal species.

The primary objective of this project was to assess the habitat in and around the future construction footprint within ~65 acres of the Jefferson Lab to determine if suitable habitat exists for rare animal species. Although the habitats of all threatened and endangered animal species known for the region were considered, the primary consideration was the presence of potential habitat for the canebrake rattlesnake (*Crotalus horridus*). This consideration is a direct result of a 2008 unofficial and uncorroborated sighting for a juvenile *C. horridus* on the Jefferson Lab by a subcontractor not affiliated with REMSA.

Based on assessments of the habitat within the survey area, it was REMSA's opinion that less than 20 acres of subject area would be considered suitable for canebrake rattlesnakes. Mature deciduous-pine habitat located within the survey area contained the overstory and understory species composition, leaf litter, logs and treefalls, potential hibernation sites, and prey that are used by canebrakes in southeastern Virginia. Based on research conducted on the movement patterns and habitat use of canebrake rattlesnake in Chesapeake, Virginia, canebrakes do not regularly use young pine habitats; thus, the young pine habitat located within the site is at best only marginally suitable. The field habitat of the study area was considered unsuitable habitat for Canebrakes primarily due to the lack of ground vegetation.

Habitat requirements for the remaining threatened and endangered amphibian (3 species) and bird species (6 species) were not found during field surveys on the site, and thus, the presence of and of these species is unlikely. The most common reason was the lack of suitable breeding habitat.