

BMP Buffer Grazing Management in Bog Turtle Habitats

This document provides conservation management techniques that meet the nonpoint pollution prevention goals of the Virginia Agricultural Best Management Cost-Share (VACS) Program while protecting the habitats of Virginia's State Endangered (Federally Threatened) Bog Turtle (*Glyptemys muhlenbergii*).

Bog Turtles are semiaquatic and found in boggy wetlands with open canopies. They are commonly associated with cattle grazed wetlands in Southwestern Virginia along the Blue Ridge mountains. Bog Turtles benefit from the grazing of these wetlands as they remove the dense ground cover and suppresses the early successional woody vegetation, which maintains an open canopy. Turtles can benefit from flash-grazing, confining a high density of cattle in a small area for a few days of intensive grazing. Sites for implementation of flash-grazing will be identified through DCR Conservation Application Suite resource reviews and consultation with DWR.

Requirements to be included in the Conservation or Grazing Plan for the impacted project sites as identified by DWR:

- Livestock are permitted to graze the buffers by flash-grazing with the gates to the buffer area open for no more than 7 days during March and April. A fall grazing window may be implemented as well that lasts for no more than 7 days and begins after October 15th (the average local first frost date) and ends no later than November 1st. The participant shall keep a record of grazing access dates.
- At all other times, the gates shall be closed to exclude livestock from the buffer areas to allow vegetation to regrow for adequate winter cover, preventing erosion and limiting nutrients entering streams.
- This flash-grazing management is only allowed in the buffer areas with existing open canopies, as designated on the grazing plan map. All other buffer areas will exclude livestock at all times for the length of the BMP lifespan. Interior buffer fencing may be required to separate the forested buffer areas from the open canopy areas when they are contiguous to prevent water quality impacts in the non-habitat areas.
- During flash grazing periods, gates between the buffer and adjacent pasture are required to be left open to give livestock access to alternative watering sources (the installed troughs) to help limit stream impacts.

- Grazing heights will need to be closely monitored during periods of drought to maintain proper cover for Bog Turtle as well as for erosion impacts to the buffer areas. The duration of a flash graze needs to be determined by forage utilization and soil disturbance, but livestock should be removed by the time average vegetation height is 7 to 8 inches.
- Stream exclusion practices are subject to verification during the practice lifespan. If flash grazing is not managed within the requirements of this plan or is found to be negatively impacting the buffer, the parameters for grazing may be changed or the authorization to graze may be removed.
- A site-specific grazing plan will be developed by the Soil and Water Conservation District (District) to manage for ideal grazing heights and livestock stocking densities.

If this document is used as a “screening tool” by Soil and Water Conservation District staff, and if the landowner is willing to adhere to the recommendations set forth in this document, then a review of the project sites by DWR staff is not required. For any site with a bog turtle hit (using DCR’s Conservation Planning screening tools), the recommended grazing management must be implemented in accordance with this guidance document. If the site is not already mapped in either DCR’s or DWR’s system to generate a hit, DWR must make the determination that the site is eligible to implement these grazing requirements for the project site. An annual report of these project sites must be submitted by District staff to DWR that summarizes projects where this document was part of the VACS Program contract.

*Signage may be provided and installed on the gates entering buffer areas as reminders for the time of year restrictions for the producer. If signage is installed it should read, “Sensitive Wildlife Habitat” and then list the time of year restrictions for that project site.