USDA United States Department of Agriculture

Natural Resources Conservation Service

Grazing Land Photo Monitoring

SD-FS-110

Why Monitor Grazing Lands?

A primary goal of most grazing land managers is to maintain or improve the condition of the vegetation and/or soils on rangeland or pasture. Monitoring helps determine how management affects the vegetation and soil resources, helps determine success of grazing management, and can guide future management decisions. There are many monitoring methods available for grazingland managers, but photo monitoring can be one of the easiest and most effective monitoring methods available.

Using Photo Monitoring on Grazinglands

Photo monitoring allows the land manager to see change over time. There are two photo types that can be used to monitor this change: Landscape Photos and Close-Up photos. These two photo types can be used separately or together to help capture the most information at a certain monitoring location or key area.

1. Landscape Photo

Key Points:

1) This method documents change over time through photographs.

2) Pick a location with the greatest potential to document change or at a predetermined key area.

3) Take photos at the same time of year and from the same location. Take identical photos each year. The best time periods are peak production (mid-summer) or at the end of the grazing season.

4) Focus on vegetation immediately in front of you and provide about one-third horizon.

5) Take detailed notes of that year's observations and conditions (e.g., dry or wet conditions, abundant western wheat grass, bad thistle year, we hit the pasture too hard this spring, etc).

6) Use this information to document changes and to assist in making decisions for future management. Are you meeting objectives based on what you observed between years?

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2. Close-up Photo

Key Points:

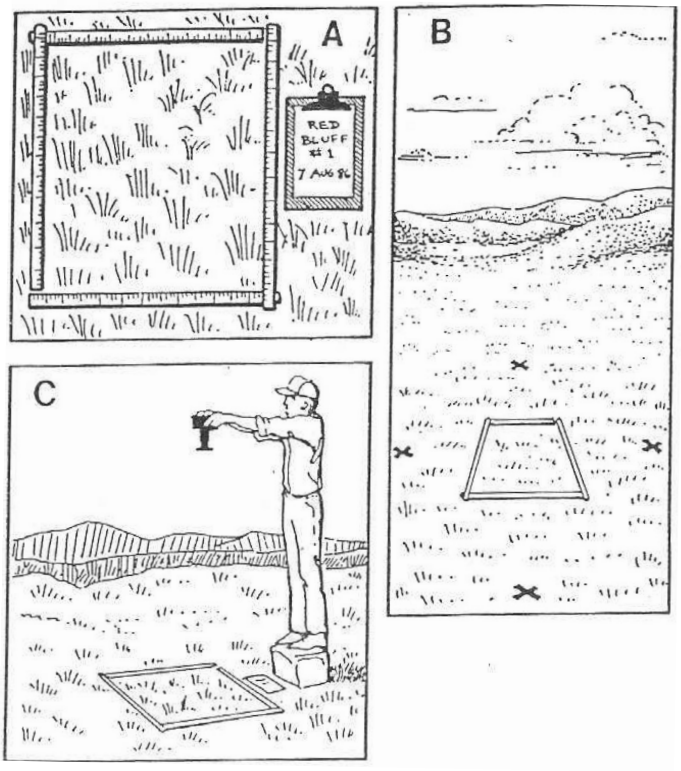
1) This method documents change over time using photos of the ground surface at specific points along a transect. This method monitors ground cover and could potentially reflect plant-species composition and plant vigor.

2) Use of this method should utilize a permanently marked transect and/or permanent photo plot locations.

3) Place a reference frame at predetermined locations along the transect (five per transect typically). The reference frame can be any size that will fit in the photo, but usually no bigger than 3' X 3' in most cases.

4) Stand directly above the photo plot and direct the camera straight down at the reference frame. Take the photo with the camera zoomed to full extent. A step stool may be required (see drawing). Add reference objects such as a tennis ball or golf ball to provide a reference for scale. It is helpful to include a dry-erase board in each photo identifying the location and point along the transect with documentation.

5) Take the photos at the same time each year and make detailed notes of observations. Are you meeting your objectives?



For more information on other monitoring methods, see South Dakota NRCS Range Technical Note 8 – Monitoring Grazinglands (available on the electronic Field Office Technical Guide).