

ESTABLISHMENT OF PERMANENT PHOTO STATIONS ON NATURAL AREAS IN THE  
PRAIRIE GROVE VOLUNTEERS REGION OF THE NATURE CONSERVANCY  
VOLUNTEER STEWARDSHIP NETWORK OF ILLINOIS

## INTRODUCTION

Monitoring of changes in the vegetation conditions is an important aspect of long-term land management that is often neglected due to lack of equipment, funds, or man-power. Photographs cannot replace quantitative sampling, but they can provide illustration of: 1) long-term changes in vegetation structure of a natural community, 2) responses of vegetation communities to management activities, such as prescribed burning and brush cutting, 3) trends or condition changes in areas of concern such as highly erodible areas, very sensitive communities (i.e. fens, seeps, etc.), or endangered species populations. Photographs can also supply baseline information for potential restoration in areas where management may not yet be possible.

## PROJECT OBJECTIVES

The objects of this project were:

- 1) to establish permanent photo stations on natural areas that are managed by volunteer stewards (solely or in cooperation with professional land managers) within the Prairie Grove Volunteers (PGV) region of the Illinois Chapter of The Nature Conservancy's (TNC) Volunteer Stewardship Network (VSN)
- 2) to develop, standardize, and document repeatable photographic monitoring procedures for these sites
- 3) to locate and copy, whenever possible, historical photographs that exist for natural areas within the designated PGV region. The original locations from which these photographs were taken may then serve as potential positions for permanent photo stations.

## MATERIALS AND METHODS

Photo stations were established on 18 of the 23 sites within the Prairie Grove Volunteers Region with the cooperation of volunteer stewards, professional land managers, and individuals that have taken historical photographs of the areas. The remaining sites will have stations established this coming (1999-2000) fall or winter.

At each natural area, 1 to 7 photo stations were marked by one, or a combination of, the following: 1) metal tree anchors, rods, or metal fence posts placed in the ground, 2) aluminum, numbered tags placed at the base of 1 to 3 reference trees, or 3) using already established fence posts or other reference items. Black and white (or occasionally color) photographs were taken with a 35 mm camera at each station. At many stations, photographs were taken at the four cardinal directions (N, S, E, W) unless the situation warranted modification to these. Information pertaining to the site, station, camera settings, directions of focus, exposures, photographic objectives, etc. were documented on a standardized form (see attached).

Copies of the associated information and photographs will be maintained in files of the regional ecologist, and the sites' stewards. Another copy will be archived in the Illinois Natural History Survey library as a reference document, thereby providing easier accessibility to all those interested. A copy of information and photographs for the Nature Preserves in the PGV region will be given to the Illinois Nature Preserves Commission, as requested. Copies of individual site information will also be made available to professional land managers of the site if desired.

Stations will be monitored by the volunteer steward(s) for the site, the volunteer regional ecologist of the local TNC VSN region, or otherwise assigned personnel. Stations may also be monitored by professional staff for the area if desired. Black and white photographs are scheduled to be retaken at each station every 3 to 5 years depending on management objectives and available resources. Some stewards have elected to take color photographs or slides from the photo stations during the interim years.

#### CONCLUSIONS

The Prairie Grove Volunteers region of the TNC VSN encompasses four counties (Champaign, Vermilion, Ford, Iroquois) in the east-central area of Illinois. There are currently 23 actively managed sites within the PGV region. The majority of these sites are high quality natural areas recognized by the Illinois Natural Areas Inventory. Twelve of the areas are designated Illinois Nature Preserves, 3 are University of Illinois-owned natural areas, 1 is a Natural Heritage Landmark, and 1 site includes a segment of the Middle Fork of the Vermilion River that has been designated a National Scenic River.

The photographs taken will provide a valuable archive to the site conditions as they presently exist. The establishment of permanent stations, and standardization and documentation of methods will enable photographic monitoring of these natural areas in a consistent, repeatable manner. Photographs taken regularly over several years from designated points can provide long-term documentation of changes which can help gauge results of land management activities, and supply information to aid decisions for future management and research needs.

#### ACKNOWLEDGEMENTS

The Prairie Grove Volunteers would like to acknowledge and thank the Department of Natural Resources, Division of Natural Heritage and the Wildlife Preservation Fund Advisory Committee for their selection of this project in to the Small Project Program. Without this funding, this project could not have been undertaken. The permanent photographic records resulting from this project will provide valuable historic documentation of natural resource conditions on these sites, not only for use by current land managers, but to all those that may be interested in the near and distant future.

The Prairie Grove Volunteers would also like to thank all the stewards and volunteers that provided assistance in this project. A special thanks is extended to James O. Smith for his valuable insight and information on areas he has been monitoring in Vermilion County for the past several years.

**Report of Activities:** conducted by the volunteer regional ecologist, site stewards, and additional volunteers in regards to project "Establishment of Permanent Photographic Stations on Natural Areas in the Prairie Grove Volunteers Region of The Nature Conservancy Volunteer Stewardship Network of Illinois"

Permanent photographic stations were established on 18 of the 22 sites under active management in the Prairie Grove Volunteers Region. The remaining 4 are scheduled to be completed this coming (1999) fall or winter.

Natural Area	# of stations	General location of stations	Type of stake set	# of people on site	hours on site	Date
Bonnie's Prairie Nature Preserve	3	1) upland sand prairie and sand pond, 2) upland sand area, nw area of preserve, 3) mesic sand prairie, sand pond, southern area of preserve	1) tree anchor, 2) tree anchor, 3) 1/2" metal rebar	4	2	12/04/98
Brownfield Woods	3	1) south-central area of the site, upland woods, 2) south-central area of the site, bottomland woods, 3) ne area of the site, upland woods	1,2,3 used already established grid posts (numbered fence posts)	1	1.5	04/21/99
Burr Oak Grove		to be done this fall or winter				
Busey Woods		to be done this fall or winter re-take photos at 1970's stations				
Fairchild Cemetery Nature Preserve	3	1) north-east 1/4 of the preserve, hazel grove, 2) nw corner of preserve, 3) se corner of the preserve	1) grave marker, 2) grave marker, 3) already established fence post	5 2	1 1.5	set: 11/24/98 photos: 06/17/99
Forest Glen Seep Nature Preserve	1	1) near the approximate center of the seep area	1) 1/2" metal rebar	2	1	04/02/99
Horseshoe Bottom Nature Preserve	5	1) view of hill prairie from river bank; 2) north end of hill prairie, 3) swamp white oak area, 4) wetland/spring, 5) old field	1) none, 2) tree anchor, 3,4,&5) metal fence posts	5	4	01/01/98
Howard's Hollow Seep Nature Preserve	1	1) near the northern end of the seep	1) 1/2" metal rebar	2	1	04/02/99
Loda Cemetery Prairie Nature Preserve	4	1) se corner of preserve, 2) sw corner of preserve, 3) nw corner of preserve, 4) ne corner of preserve	1,2,3,&4) used preserve corner posts	2	1	12/18/98
Middle Fork Woods Nature Preserve	4	1) between ephemeral ponds, 2) top of ravine, se section of preserve, near old picnic grove, 3) middle of drainage, erosion, 4) north central area of preserve, upland woods	1) tree anchor type, 2) 1/2" metal rebar, 3) none, 4) 1/2" metal rebar, two trees tagged	5	2	04/03/98
Middle Fork Wetland Restoration	3	1) at the east end of the wetland, 2) about midway along the wetland on the southern side, 3) west end of the wetland, in the prairie restoration	1,2,&3) metal fence post	2	1	07/03/98
Nettie Hart Woods	7	throughout the woods	1-7, used already established grid markers (numbered fence posts)			12/98
Orchid Hill		possibly to be done this fall or winter				
Patton Woods	4	1) near woods' entrance, 2) station 22), 3) station 19, 4) station 16	1) used trail marker, 2, 3,&4) used marker posts	1		12/18/97
Paxton Railroad Prairie	1	1) set in the approximate center of the prairie	1) used other reference points	2	1	07/11/98

Natural Area	# of stations	General location of stations	Type of stake set	# of people on site	hours on site	Date
Pellville Cemetery Prairie	4	1) ne corner-post of preserve, 2) se corner-post of preserve, 3) sw corner-post of preserve, 4) nw corner-post of preserve	1,2,3,&4) used cemetery corner posts	2	1	05/15/99
Prospect Cemetery Prairie Nature Preserve	5	1) south-central prairie area, 2) nw corner of preserve, 3) ne corner of preserve, 4) se corner of preserve, 5) sw corner of preserve	1) tree anchor type, 2,3,4,&5) used preserve corner posts	2	1	12/18/98
Russell Duffin Woods Nature Preserve	2	1) near the southern end of the preserve, 2) near southern end of the preserve, at the top of the steepest ravine	1) ½" metal rebar, 2) ½" metal rebar	2	1	04/02/99
Shortline Railroad Prairie		to be done 7/31/99				
Tomlinson Cemetery Prairie Nature Preserve	4	1) ne corner of preserve, 2) se corner of preserve, 3) sw corner of preserve, 4) nw corner of preserve	1,2,3,&4) used preserve corner posts	1	1	03/26/99
Trelease Woods	6	1) sw area of the woods, woods edge, 2) south-central woods edge, 3) east-central woods, 4) east-central woods, north pond, 5) north-central woods, 6) center of woods	1-6) used already established grid posts (numbered fence posts)	1	3	04/21/99
Windfall Prairie Nature Preserve	4	1) north end of hill prairie, 2) southern area of hill prairie, 3) southern area of upland woods, 4) old field	1) ½" metal rebar, 2) tree anchor type, 3) none, used wooden NP sign, 4) ½" metal rebar	5	4	11/24/98