LRC-XI-40
IMPROVING THE PUBLIC SERVICE COMMISSION
GUIDELEINES FOR EVALUATING THE SUCCESS
OF RECLAIMED GRASSLANDS

CONTRACTOR: North Dakota State University Animal & Range Sciences Department

PRINCIPLE INVESTIGATOR: Donald R. Kirby, Ph.D.
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PARTICIPANTS

Sponsor	Cost Share
Lignite Energy Council	$5,000
North Dakota State University	10,000
ND Industrial Commission	5,000
Total	$20,000

Project Schedule – 18 Months
Contract Date – 12/9/92
Start Date – 7/1/93
Completion Date – 6/30/94

Project Deliverables
First Status Report – 11/93✓
Second Status Report – 3/94✓
Final Report – 6/94✓

OBJECTIVE / STATEMENT OF WORK

The objective of this program is to determine the relationship between precipitation, temperature, and growing degree days, and herbage yield, seasonality and species diversity for various range sites. Information will be obtained from existing data sets, existing sites and new sites. The data will be used to correlate vegetative parameters with annual climatic phenomena. This relationship could be used to improve the Public Service Guidelines for determining the success of reclaimed grasslands.

STATUS

Complete and useful vegetation and weather data was collected from the Glenharold Mine, BNI Coal's Center Mine, Dickinson Research Center and USDA/ARS at Mandan. Vegetation data includes yield and species composition. Weather data includes precipitation, temperature, number of days greater than 32^{o}C (95^{o}F) per month, and growing degree days per month. Precipitation, temperature and growing degree days were categorized by month, season and year. Statistical analysis of the raw data and modeling information was reported.