Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Techniques for Mapping Sagebrush from Remote Sensing

Type of Project): Research

Project Discipline): Natural

Funding Agency: BLM

Other Partners/Cooperators:

Effective Dates: 9/24/01 to 12/31/05

Funding Amount: $141,755

Investigators and Agency Representative (include name, address, phone, email):

Agency: Roxanne Faliese, BLM, MSO, PO Box 3680, Billings, MT 59107; 406-896-5025

PI: Roland Redmond, Wildlife Spatial Analysis Lab, University of Montana, Missoula, MT 59812; 406 243-4906

Project Abstract:

Purpose: Investigate techniques to develop a vegetation map theme for sagebrush steppe cover types and associated canopy classes for BLM lands.

Objectives:

1. Determine the special threshold for differentiating different sagebrush density classes and sagebrush species from grass and tree dominated vegetation.
2. Use mulit-data LANDSAT 7 TM imagery to classify sagebrush cover types, determine seasonal biomass variability, density classes for coniferous and woodland cover types, and deciduous woodland and woody draw cover types.
3. Develop techniques for technology transfer and shared use of remote sensing technology and applications of Wildlife Spatial Analysis Lab in order to complete image analysis and vegetation classification at the BLM facility.
4. Cooperatively (USFS and BLM) refine vegetation map themes as needed to meet information needs for sagebrush steppe conversation planning and resource management planning.

Outcomes with completion dates (reports, publications, workshops, videos, etc.):

Keywords: sagebrush steppe, vegetation map, remote sensing