

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

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| Project Title: Greater Yellowstone Inventory & Monitoring Network (GRYN): Phase 2 Report Collaboration |
| Type of Project: Technical Assistance |
| Funding Agency: National Park Service |
| Effective Dates: February 15, 2003 – June 30, 2004 |
| Funding Amount: \$10,350 |
| Investigators and Agency Representative: UNIVERSITY CONTACT: Dr. Dan Tinker, Dept. Botany, University of Wyoming, Laramie, WY, 82071, 307.766.4967 (tel), tinker@uwyo.edu NPS CONTACT: Cathie Jean, Program Manager, Greater Yellowstone Network, Forestry Sciences Lab, 1648 S. 7th Ave, Bozeman, MT 59717-2780 406.994.7530, Cathie.jean@nps.gov |
| Project Abstract: The purpose of this project is to provide critical expertise and assistance to Dr. Glenn Plumb with the development and preparation of Chapter III of the Phase 2 GRYN Vital Signs Monitoring Plan. Chapter III is entitled "Conceptual Models" and is intended to explain the understanding of drivers, stressors and ecological effects of selected resource components of the GRYN parks and will provide a basis for identification and selection of appropriate ecological indicators for GRYN park health and integrity. Dr. Dan Tinker is an acknowledged expert in Greater Yellowstone Area forest ecosystem structure and function and will contribute sections to Chapter 3 on coniferous and deciduous forest ecotypes. |
| Outcomes with completion dates: Conceptual models as assigned – April 5, 2003 <ul style="list-style-type: none"> ▪ Park overview & general conceptual models – Bighorn Canyon NRA ▪ Narrative overview – drivers, stressors, function, structure, etc., General schematic model of park, Table of relevant temporal & spatial scales, Map of HUC 6 watershed aggregates, Table of relevant primary ecosystems ▪ Ecosystem overview and conceptual models – Forest ▪ Overview of forest types, drivers, stressors, function, structure, Relevant forest spatial and temporal scales, General forest schematic conceptual model, Forest ecosystem types ▪ Lodgepole Pine, Douglas Fir, Spruce – Fir, Whitebark Pine, Ponderosa Pine ▪ Ecosystem variability across HUC units, forest schematic conceptual model, Table of ecological elements across HUC aggregates List of candidate vital signs – May 2, 2003 <ul style="list-style-type: none"> ▪ Dr. Tinker will travel to Bozeman, MT and participate in a multi-day workshop @ Montana State University to participate in a group setting to identify and select ecological indicators and vital signs for GRYN parks. Chapter 3 Report – May 15, 2003 <ul style="list-style-type: none"> ▪ Dr. Tinker will ensure that ecosystem models and narrative contributions are submitted on schedule and will respond to editorial comment as Dr. Plumb compiles the multi-authored Chapter 3 Report. |
| Keywords: Greater Yellowstone Network; coniferous and deciduous forest ecotypes; inventory and monitoring; vital signs; ecological indicators; conceptual models |
| <u>For Administrative use only:</u> Date Annual Report Received: Date Final Report Received: Publications, etc. on file: |

