

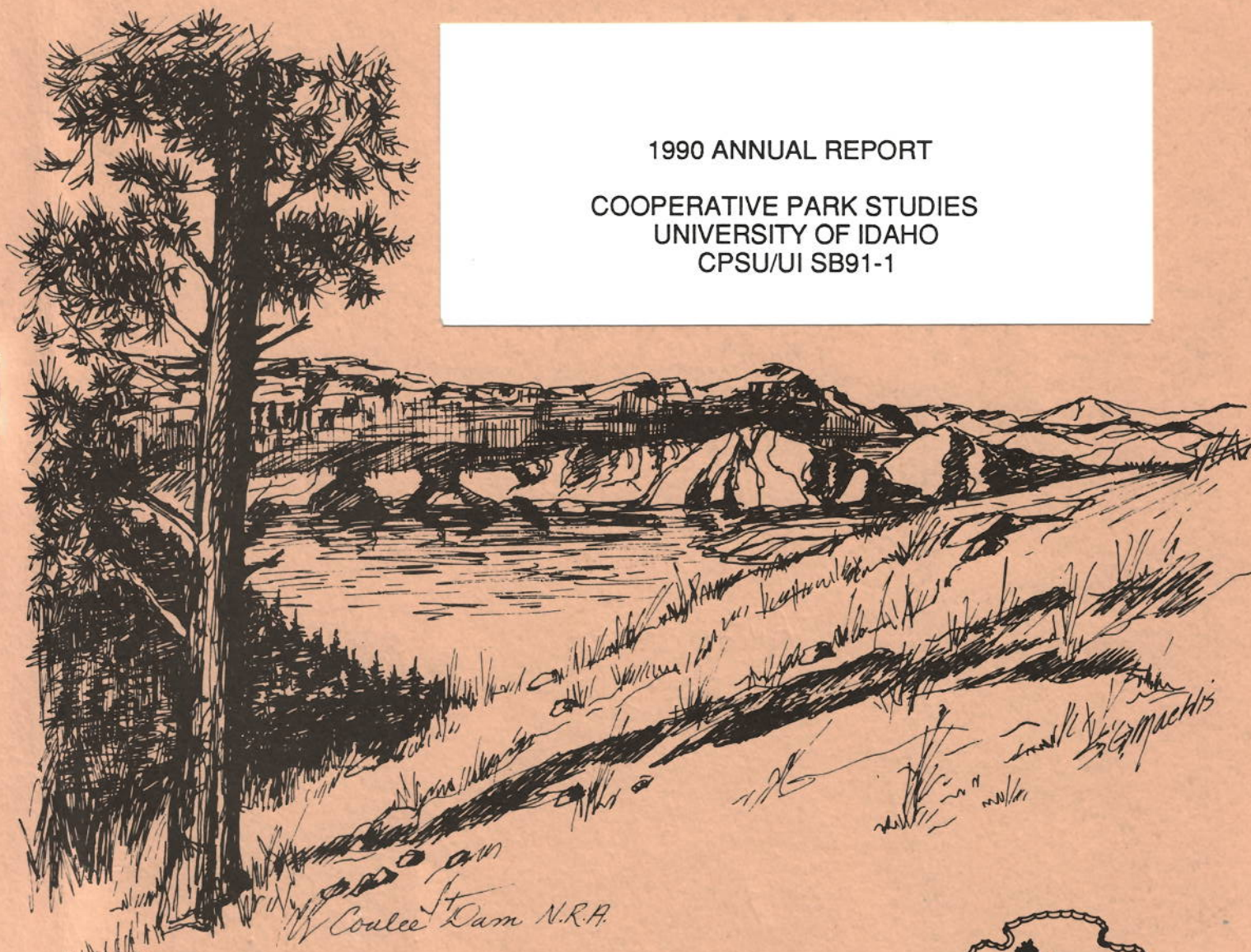
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COOPERATIVE PARK STUDIES UNIT

UNIVERSITY OF IDAHO

1990 ANNUAL REPORT

COOPERATIVE PARK STUDIES
UNIVERSITY OF IDAHO
CPSU/UI SB91-1



University of Idaho
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Moscow, Idaho 83843



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NPS Contracts

CX-9000-8-0005
Administrative Support Services (Biology)

CX-9000-8-0005
Administrative Support Services (Sociology)

PROJECT TITLE: Analysis of long-term vegetation changes and the development of a vegetation monitoring program at Craters of the Moon.

INVESTIGATORS: R. Gerald Wright, Stephen Bunting, Dept. of Range Resources, University of Idaho

PROJECT PERIOD: May 1986 - December 1991

DESCRIPTION:

This project was initiated in 1986 to locate historic photographs which depicted the mosaic of vegetation types in the monument and to retake these photos in as close to an identical manner as possible. To facilitate this, all original photos have been reproduced in 8 x 10 inch prints for field use. Each of the photopoints have been identified on a basemap and will serve as future points to monitor vegetation change. As might be expected, finding poorly labeled (or non-labeled) older photos can be very time consuming. However once relocated, the effort is usually very rewarding, particularly when the time span between photos is large. In the intervening years, approximately 130 photographs have been retaken. The maximum period between the different photos spanned over 60 years. We are still seeking additional sources of photos. In 1988 we obtained the original data and photographs taken on Carey Kipuka in the early 1960s. These transects were remeasured and data analysis is in progress.

Analysis of the comparative photos to date has revealed that the shrub communities at CRMO are phenomenally stable. Conversely, there has been a significant increase (4%/year) in the number of limber pine established within a 0 to 25 year period prior to 1989. Prior to that time, limber pine numbers seemed to be basically stable or slightly declining each year. These results indicated a possible correlation with periods of climate change, e.g., increased moisture, a factor which will be investigated this year. We hope to conclude the project this year, and have the most interesting comparative photos incorporated into an interpretive exhibit for the park.