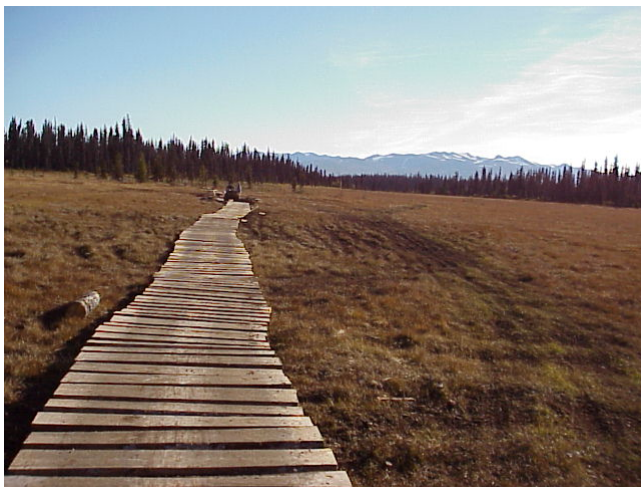


HOMER SOIL AND WATER CONSERVATION DISTRICT



Caribou Lake Trail Annual Field Report 2004 Field Season



October 14, 2003



July 22, 2004

Prepared By

**Lindsay Winkler
Program Management Consultant
Homer Soil and Water Conservation District
www.homerswcd.org**

December 2004

Cover Photos: These photos illustrate the changes in the wetland areas in a one year time period. The photo on the left was taken on October 14, 2003, and the photo on the right was taken on July 22, 2004. Note how vegetation is able to grow back after a trail corridor is constructed.

**HOMER SOIL AND WATER
CONSERVATION DISTRICT**



**Caribou Lake Trail Annual Field Report
2004 Field Season**

Prepared By

**Lindsay Winkler
Program Management Consultant
Homer Soil and Water Conservation District
www.homerswcd.org**

December 2004

ACKNOWLEDGEMENTS

The Homer Soil and Water Conservation District thanks the Snomads, the Rivers, Trails, and Conservation Assistance Program of the National Park Service, and Cook Inlet Keeper for providing guidance and technical support to this project since its inception.

Special thanks to District Board Members Chris Rainwater, Steve Gibson, Jim VanOss, and Otto Kilcher for providing consistent guidance on project design, location, and construction methods. Thanks to Shirley Schollenberg, Al Poindexter, Bridget Paule, and Hans Klausner for their continued involvement in the project and helping to make it a success. The District greatly appreciates the time Kevin Meyer invested in this project. Also, thanks to Spud Dillon and Mickey Todd for keeping this project at the forefront of their efforts, and for the endless marking of the trail. And the District would like to thank Cliff Larson of the Department of Natural Resources Division of Mining, Land, and Water for assisting with numerous issues and for his knack at photographing the trail. In addition, the District would like to thank Ronnie Maurer, Mark Kinney, James Eller, Brett Nelson, and Aimee Rohner of NRCS for their design, specifications, and volunteer efforts on the trail. Finally, the editing efforts contributed by Seth Ex and Devony Lehner with this document created clarity where it was lacking, thank you.

The volunteers that have provided their valuable time on this trail project have the District's most sincere appreciation, including Joe Covault, Dave Brann, Jaime Gable, Bob Shavelson, Sara Zielin, Emily Bryant, the students of the District's Natural Resources Technology class, and Aiko the dog for bear protection and endless enthusiasm. Special thanks to Derek Reynolds who provided over 100 hours of volunteer time on the trail this year and to Bruce Willard for loaning the District Trail Crew his truck to haul bridge materials to the trailhead site and for maintaining the access road.

The District would like to thank its contractors that made this effort possible this summer, including Homestead Endeavors, Entwood Forestry, East Road Services, and Jim Ryder. Special thanks to the Ionia, Inc. for the use of their merry tiller.

This project was made possible by the State Recreational Trail Grant Program, the Natural Resources Conservation Service Wildlife Habitat Incentive Program, Spenard Builders Supply, and the continued support of the Snomads.

TABLE OF CONTENTS

Field Report

- Introduction 1
- Design and Construction 1
- Project Accomplishments 2
- Discussion 3
- Conclusion 4

Appendices

- Crew and Project Management
Recommendations 5
- Crew and Project Management Ideal
Recommendations 6
- Sample Trail Crew Weekly Report
Template 7

CARIBOU LAKE TRAIL 2004 ANNUAL FIELD REPORT

Introduction

Since the winter of 2001, the Homer Soil and Water Conservation District and its partners have worked to design and construct a sustainable trail with secured legal access to Caribou Lake, east of Homer, Alaska. This project was inspired in the fall of 2000 by an Alaska Department of Fish and Game presentation that documented landscape impacts resulting from backcountry ATV use on the Lower Kenai Peninsula. The Caribou Lake vicinity was one area cited in the report. The presentation also prompted a local snowmachine and ATV organization called the Snomads to approach the District for assistance addressing the issues outlined within.



Figure 1: Kevin Meyer of the Rivers, Trails, and Conservation Assistance Program of the National Park Service facilitates the initial Caribou Lake Trail meeting.

At the same time, the National Parks Service Rivers, Trails, and Conservation Assistance (RTCA) Program sought a demonstration project to be a model for effective wetland trail construction in Alaska. Cook Inlet Keeper (Keeper) became involved at this time, providing mapping resources and technical expertise in the development of wetlands and adjacent areas. Thus, a diverse partnership was formed between the Homer District, Snomads, Keeper, and RTCA to address the issues raised in the Fish and Game report and to respond to user concerns.

issued a land use permit allowing the partnership to design and construct a trail to Caribou Lake that will minimize the impact of ATVs and serve as a multiple-use recreational trail.

In 2003, the Alaska Department of Natural Resources Division of Mining, Land, and Water

The Caribou Lake Trail, when completed, will be 7.5 miles long, and will cross approximately 2.25 miles of wetlands and 5.25 miles of uplands.

Design and Construction

During the design phase, the project partners evaluated several types of trail hardening methods. The most suitable method was a puncheon boardwalk design pioneered by John Coila of Homestead Endeavors. The design is essentially a US Forest Service boardwalk modified to suit available resources and location constraints. Some existing Homestead Endeavors boardwalks are still in



Figure 2: The District Trail Crew and volunteers construct the boardwalk using a modified design of the method pioneered by Homestead Endeavors.

use after almost twenty years. Kevin Meyer of RTCA and Homestead Endeavors have developed draft specifications illustrating how this trail hardening method is used in the area.

Homestead Endeavors and the draft specifications provided guidance on the practical application of the boardwalk design. To accommodate wildlife and users, the Homer District modified the boardwalk design in the following ways:

- The space between boards was reduced to one inch, from the previous two to three inch spacing. This reduces the potential for wildlife entrapment.
- Waning edges of the boards were alternated to decrease the space between them and create a smoother boardwalk surface.



Figure 3: The sawmill used by Homestead Endeavors to mill planks for the Caribou Lake Trail Project.



Figure 4: Spud Dillon, Snomads member, assists Andy Pollak of the District Trail Crew on Volunteer Day at the trail.

In 2004, the Homer District set a goal of increased boardwalk production and hired Homestead Endeavors to mill boards and a trail crew to construct the trail. Together, the trail crew and Homestead Endeavors constructed approximately 5800 linear feet of boardwalk, averaging 550 linear feet per week in the field. Due to the remote location of the trail, the trail crew worked four, ten-hour days and camped in the backcountry. The District provided limited camping gear, food, and supplies to the crew.

Four days of training were conducted prior to the construction season to ensure the safety of the crew and integrity of the trail project. Trail crew training included project orientation; chainsaw safety, use and cleaning; and base camp setup.

While local homesteaders have been able to construct similar boardwalks for \$5/linear foot by providing their own labor free of charge, the Homer District was able to keep costs to an average of \$10/linear foot for boardwalk construction and \$4/linear foot for milled boards.

Project Accomplishments

Through funding support from the Natural Resources Conservation Service's Wildlife Habitat Incentive Program, the State Recreational Trail Program, the Snomads, and materials donated by Spenard Builders Supply to design and construct the Caribou Lake Trail. NRCS engineers provided design approval in early July, allowing the District to begin the 2004 field season.



Figure 5: Buck Jones of East Road Services uses an excavator to widen a section of the trail.



Figure 6: District consultant Hans Klausner and trail crew leader Seth Ex constructed railings and decking on the bridges in August 2004.

The 2004 field season accomplishments:

- The trail crew and volunteers completed approximately 5800 feet of boardwalk;
- Bridges were installed over two streams intersecting the trail;
- Stumps were removed and the trail smoothed out by East Road Services on six miles of the trail. The Snomads and the Homer District funded this work jointly. East Road Services cleared the final uplands section of the trail as a donation to the project.

The Homer District installed bridges at the Moose Creek and Darki Creek crossings. The bridges consist of trailer flatbeds approximately 42 feet long, and the Moose Creek bridge was upgraded with a treated wood deck and railings. The Darki Creek bridge is used by heavy equipment during the winter and a modified railing design will be addressed in 2005.

The trail crew put in eleven weeks of work, and community members and landowners donated over 300 hours of service to the project.

Discussion

The Spruce Bark Beetle Epidemic has caused widespread devastation in mature Alaskan spruce forests. As the spruce trees affected by the epidemic die and decay, the soundness of local timber increasingly is an issue. Future projects need to examine the quality of local spruce stands to determine project viability. The increasing scarcity of sound local timber also poses a threat to ongoing Caribou Lake Trail maintenance. Stockpiling boards now for future maintenance can mitigate this issue.



Figure 7: This photo illustrates the impact of the spruce bark beetle infestation (Photo courtesy of the Kenai Peninsula Borough).

The project partners should agree to discuss design specifications, crew expectations, and general project improvements prior to the 2005 field season. Specific recommendations provided by project management and the trail crew are included as appendices to this report.

Conclusion

The Caribou Lake Trail project has been rendered as one of the first successful collaborative resource management efforts on the Lower Kenai Peninsula. This is largely due to the combination of local knowledge and technical expertise that has been provided during project development and implementation. In 2005, the project partners will complete the boardwalk, and establish a trailhead on state land that houses a parking area, safety information, facilities, and trail maps.



Figure 8: The 2004 Trail Crew, from left to right, Dennis Feeney, Project Manager Lindsay Winkler, Trail Crew Leader Seth Ex, and Andy Pollak.

Appendix 1: Crew and Project Management Recommendations

To facilitate discussions for next year's fieldwork, the crew and the project manager compiled a list of recommendations, prioritized by necessary and ideal improvements. Necessary recommendations fall under the following categories:

- Meeting basic trail crew safety needs
- Creating documentation for weekly accomplishments
- Increased training for crew

The following table has been created with specific tools that may be used to meet project needs.

2005 Field Season Improvements	Purpose	Estimated Cost
Satellite Phone	Lack of reception with VHF radio caused concern amongst crew and project management; a satellite phone guarantees access to medical services should the need arise	\$1000-\$2000
GPS Unit	A GPS unit allows the crew to give their coordinates to medical personnel in the event of an emergency.	The District's Natural Resources Class has several GPS units which the crew may be able to utilize
Additional chainsaw sharpening training	The Trail Crew could improve efficiency in product generation, and the District would benefit from a decrease in overtime costs dedicated to chainsaw sharpening	Additional Training, \$100 (four hours). Note: the trail crew leader spent approximately four overtime hours / week re-sharpening chains damaged by improper sharpening in 2004 (implementing this training would save \$960 of overtime costs over a ten-week period).
Weekly Crew Reports	Crew Reports will allow the District to document weekly accomplishments	Approximately 2 hours per week (trail crew leader and project manager), \$400
Working Winch	In 2005, the crew will be working in wetter conditions (in the last section of the trail), and will be traveling longer distances to and from the trailhead, a winch will allow them to be more self-sufficient	Approximately \$550 installed on a new machine, or could be incorporated into the request for a second machine for next year
Estimated Cost to Implement Necessary Improvements		\$1,090 to \$2,090

Appendix 2: Crew and Project Management Ideal Recommendations

While Appendix 1 contained the necessary improvements that should be met in the 2005 field season, other additions to the project, while not necessary, will make the project more cost effective through the efficient use of available resources.

2005 Field Season Ideal Improvements	Purpose	Estimated Cost
Chainsaw Upgrades, two Stihl 460, one 361	This will increase production and provide the trail crew with saws better suited for the workload of this project (e.g. flattening of the stringers)	\$900
Leave No Trace Training	Adding this training will provide additional education for the crew, and the training can be passed on to volunteers working with the District	\$800
Four Wheelers	The smaller four wheeler limited the number of boards that could be hauled back and forth between the mill and the work site. With a more powerful ATV, the crew could carry more boards per trip, increasing production and decreasing overall project costs.	No change to budget (\$1000 already exists in the budget for this item)
Stockpiled boards, approximately 300-500	This will allow volunteer crews to maintain the trail more easily without having to haul planks out to the trail. In addition, the continuing deterioration of wood in the vicinity of the project site suggests stockpiling boards now will maintain the longevity of the project.	\$1200-\$2000
Digital Camera for Crew	The crew is out on the project continuously and will be able to capture the project in progression	Digital camera can be borrowed from Homeostasis Consulting
Estimated Costs to Implement Ideal Improvements		\$2900-\$3800



*Homer Soil and Water Conservation District
Sample Trail Crew Weekly Report Template*

Date(s): _____

Project: _____

Report Prepared by: _____
Name/Title

Sections worked on: _____
GPS Coordinates/Name of Section

Trail footage completed: _____
Indicate boardwalk, trail opened, tread

Progress included: _____

Challenges faced: _____

Additional tools/supplies requested: _____

Please list volunteers that assisted your crew this week (please use back of report for additional names):

Name	Hours	Tasks accomplished
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Additional comments: _____

Initials: _____
Trail Crew Leader Date Supervisor Date