



## White Grass Ranger Station Completion Report

**Start Date:** May 27, 2008

**Completion Date:** October 15, 2008

**Project Leader:** Robert Williams, WCHP Project Manager

**Supervisor:** Craig Struble, WCHP Director

### Background:

The White Grass Ranger Station (HS-53) is a one-story, log construction cabin with a gabled wooden roof. It is a contributing resource in the White Grass Ranger Station Historic District, which was listed in the National Register of Historic Places in April 1990. The building is significant under criterion C because it remains a clear statement of the 1930s NPS rustic architectural style in Grand Teton National Park. Constructed in 1930, it was one of the first ranger stations built after the formation of Grand Teton in 1929. Today, it is the only extant example of a horse patrol era station in the park. The White Grass Ranger Station has served as a visitor contact station for the last 75 years. Located at the Death Canyon Trailhead, the building is occupied seasonally by rangers or VIPs who provide information and help to visitors hiking the trails in the surrounding area. Due to the remoteness of the trailhead, the ranger station serves as a critical component to backcountry operations in the park.

### Problem Statement:

Pre-project assessment revealed that the sill logs along the north and south walls were deteriorated. The interior flooring was severely sloped. The stone foundation was failing in several areas, particularly under the south wall. Wooden roof shingles were missing or deteriorated. The north side porch support post was horizontally spliced together and the existing porch decking had been modified from its original appearance.

### Description of Project:

This cyclic maintenance project included replacing wood shingles, repairing/replacing rotted log and log ends, restoring the porch to its original configuration, replacing support members to rectify a sloping floor, and refinishing the cabin floor. All replacements were made with in-kind materials. The majority of preservation work was preformed by a WCHP preservation crew. Roof work was contracted to Abbeglen Construction.

### Summary of Work:

Work on the White Grass Ranger Station began in May 2008. The preservation crew excavated around cabin walls to gain access to rotted sill logs and the failing stone foundation. After excavation, the foundation stones were removed. The non-historic porch flooring was removed, followed by the deteriorated roof support posts on the northeast and southeast corners of the porch. The sloping floorboards on the interior of the ranger station were also removed. This work was completed in early June.

The ranger station was then raised and supported by wood cribbing and jacks. Log work began on the north wall. The north side sill log was deteriorated and needed full replacement. An appropriate replacement was located, planed, sized, and cut to match the existing log. The

deteriorated log was removed and the preservation crew installed the new native lodgepole pine sill log.

Along the south wall, the sill log needed partial replacement. The damaged section of the sill log was from the southeast corner of the cabin to the southeast corner of the porch. This deteriorated section of the log was removed and the partial replacement installed using half-lap joinery. Sill log work was completed on June 12<sup>th</sup>.

The interior flooring was reinstalled and floor support members replaced to allow the seasonal visitor contact VIP to move into the ranger station. Deteriorated boards were replaced in-kind. Interior floorboards were reinstalled to match the existing configuration. This work was completed on June 25<sup>th</sup>.

The roof support posts which were removed in June were deteriorated and needed full replacement. The existing posts were replaced in-kind. Porch post replacement was completed in early July.

Next, the stone foundation was replaced. New concrete piers were poured to add structural support. The stones were reinstalled, shielding the new piers from public view. Missing stones were added to the foundation under the south wall. Foundation work was completed on July 24<sup>th</sup>.

Research for the White Grass Ranger Station project revealed the earliest known photograph of the station from a 1949 park building inventory. This photograph showed the original appearance of the cabin, including the original porch constructed of half-logs running parallel to the north and south walls. The existing porch flooring of 2x6 boards running perpendicular to the north and south walls was removed and replaced to replicate historic conditions. The porch installation was completed on July 29<sup>th</sup>.

Before leaving, the preservation crew cleaned the site and packed equipment and materials. The WCHP's portion of the project was completed on July 31<sup>st</sup>.

Roof work was contracted to Abbeglen Construction. Due to fire danger, the existing wood shingles were replaced with #1 Chemco treated fire retardant wood shingle of corresponding size and shape. Any deteriorated sheathing was replaced. The dates of the roofing contract extended from September 20<sup>th</sup> to October 15<sup>th</sup>.

### **Financial Summary:**

The amount of \$38,200.00 was allocated for the project under cultural cyclic funds. The roofing contract totaled \$8,890.00.

### **Conclusion for Future Preservation:**

The rafter ends above the porch on the east side of the cabin were not addressed in this project. Originally the rafter tails protuded out past the roofline. This exposure led to rot and deterioration. At some point in the cabin's history, the rotted rafter tails were sawn off and the newly exposed edges covered with plywood caps. Now the caps and rafter ends are deteriorating. The caps should be removed and the rafter ends repaired.

**Photographs:**



Photo 1: Replacement of north wall sill log.



Photo 2: Partial replacement of south wall sill log using half-lap joinery.



Photo 3: Completed project, porch and north wall.



Photo 4: Completed project, porch and south wall.