

United States Department of the Interior National Park Service National Register of Historic Places Registration Form

This form is for use in nominating or requesting determination for individual properties and districts. See instruction in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Snogo Snow Plow

other names/site number 5LR.11068

2. Location

street & number Rocky Mountain National Park (ROMO) [N/A] not for publication

city or town Estes Park [X] vicinity

state Colorado code CO county Larimer code 069 zip code 80517

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this [X] nomination [] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [X] meets [] does not meet the National Register criteria. I recommend that this property be considered significant [] nationally [] statewide [X] locally. ([] See continuation sheet for additional comments.)

State Historic Preservation Officer

Signature of co-certifying official/Title

Date

Office of Archaeology and Historic Preservation, Colorado Historical Society

State or Federal agency and bureau

In my opinion, the property [] meets [] does not meet the National Register criteria.
([] See continuation sheet for additional comments.)

Signature of certifying official/Title

Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

Signature of the Keeper

Date of Action

- entered in the National Register
[] See continuation sheet.
- determined eligible for the
National Register
[] See continuation sheet.
- determined not eligible for the
National Register.
- removed from the
National Register
- other, explain
[] See continuation sheet.

Snogo Snow Plow
Name of Property

Larimer County/ Colorado
County/State

5. Classification

Ownership of Property
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property
(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property
(Do not count previously listed resources.)

Contributing	Noncontributing	
<u>0</u>	<u>0</u>	buildings
<u>0</u>	<u>0</u>	sites
<u>1</u>	<u>0</u>	structures
<u>0</u>	<u>0</u>	objects
<u>1</u>	<u>0</u>	Total

Name of related multiple property listing.
(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed in the National Register.

0

6. Function or Use

Historic Function

(Enter categories from instructions)

TRANSPORTATION

Current Functions

(Enter categories from instructions)

NOT IN USE

7. Description

Architectural Classification

(Enter categories from instructions)

NO STYLE

Materials

(Enter categories from instructions)

foundation_____
walls_____

roof_____
other METAL
SYNTHETICS

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

Snogo Snow Plow
Name of Property

Larimer County/ Colorado
County/State

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey

- recorded by Historic American Engineering Record

Areas of Significance

(Enter categories from instructions)

TRANSPORTATION
ENGINEERING

Periods of Significance

1932-1952

Significant Dates

1932

Significant Person(s)

(Complete if Criterion B is marked above.)

N/A

Cultural Affiliation

N/A

Architect/Builder

KLAUER MANUFACTURING COMPANY

Primary location of additional data:

- State Historic Preservation Office
- Other State Agency
- Federal Agency
- Local Government
- University
- Other

Name of repository:

Colorado Historical Society
Rocky Mountain National Park

Snogo Snow Plow
Name of Property

Larimer County/ Colorado
County/State

10. Geographical Data

Acreage of Property less than one

UTM References

(Place additional UTM references on a continuation sheet.)

- | | | | | |
|----|------|---------|----------|----------|
| 1. | 13 | 452506 | 4468104 | (NAD 27) |
| | Zone | Easting | Northing | |
| 2. | | | | |
| | Zone | Easting | Northing | |
| 3. | | | | |
| | Zone | Easting | Northing | |
| 4. | | | | |
| | Zone | Easting | Northing | |

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Bill Butler, Park Archaeologist
organization Rocky Mountain National Park date August 18, 2005
street & number 1000 U.S. Highway 36 telephone 970/ 586-1332
city or town Estes Park state Colorado zip code 80517

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

- A **USGS map** (7.5 or 15 minute series) indicating the property's location.
- A **Sketch map** for historic districts and properties having large acreage or numerous resources.

Photographs

Representative **black and white photographs** of the property.

Additional Items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name Rocky Mountain National Park (ROMO) Superintendent: Vaughn Baker
street & number 1000 U.S. Highway 36 telephone 970/ 586-1332
city or town Estes Park state Colorado zip code 80517

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 *et seq.*)

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

National Register of Historic Places Continuation Sheet

United States Department of the Interior
National Park Service

Snogo Snow Plow
Larimer County/ Colorado

Section number 7 Page 1

DESCRIPTION

Located within the National Register listed Utility Area Historic District within Rocky Mountain National Park, the Snogo Snow Plow was manufactured by the Klauer Manufacturing Company of Dubuque, Iowa, in 1932. Currently the plow sits outside in the Utility Area among other park equipment and maintenance vehicles.

The four wheel drive plow is a 1932 Model F, No. 107 and is painted orange. The gasoline engine (Number 15210) is a "Climax Blue Streak" R-61, inline 6-cylinder, valve in head, with a 6-inch bore by 7-inch stroke, producing 175 horsepower at 1200 RPM. The engine and its components actually sit behind the cab at the rear of the vehicle. Dual horizontal augers (with shear pins) in the front of the plow forced snow into an in-line rotor fan turning at 350 RPM. The 1931 catalog claims the plow could remove snow with a depth of up to 35 feet (probably not in one pass), and was capable of throwing the snow up to 100 feet on either side of the plow; park photographs of the plow in action show that these claims are not exaggerated.

Other exterior features include original lights below the windshield, wipers mounted under a hood over the windshield, and two square windows at the base of the front of the cab. A large metal step on either side provides access to the doors of the cab, which sits approximately three to four feet above the ground. Interior features not seen on other plows of the time include controls that could be operated from inside a closed cab, windows that rolled up and down, and a heater mounted under the seat to keep the driver warm.

The width of the plow was designed to be 7 feet 10 inches in order to fit inside the garages of the day. The Snogo has a 125 gallon gas tank, which was claimed to be enough for 24 hours of operation. The Snogo was also equipped with an eight speed gear box that resulted in speeds of one quarter mile per hour in low, and up to 25 miles an hour in high gear when not moving snow.

Snogo Snow Plow at work
on Trail Ridge Road, 1941-
photo courtesy of RMNP.



**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**Snogo Snow Plow
Larimer County/ ColoradoSection number 8 Page 2**SIGNIFICANCE**

The 1932 Snogo Snow Plow is eligible for the National Register of Historic Places under Criterion A in the area of Transportation. The plow was used on Trail Ridge Road, the highest continuous highway in the United States and a major feature of the park, to open the road for tourists. As an increasingly mobile and automobile-oriented society began to demand access to national parks, the parks were forced to develop roads to accommodate the nature enthusiasts and touring travelers. With the development of roads, the parks also had to deal with maintenance; the Snogo Snow Plow was one of the tools used to provide access to Trail Ridge Road and various other roads within the park. The period of significance begins with the plow's arrival in 1932 and ends in 1952, when the plow ceased to operate within the park.

The Snogo Snow Plow is also eligible under Criterion C in the area of Engineering. Innovative for its time, the plow included then state-of-the-art features such as the use of an auger and blower to remove snow, the placement of all controls within a closed, heated cab, and roll up windows. The Snogo is a rare remaining example of this type of equipment, and has all of its original materials and components. Snogo Snow Plows were of great use in the mountainous and snowy national parks throughout the country; Klauer Manufacturing Company produced 39 plows. The plows at Yosemite and Crater Lake national parks were in use until sometime in the 1940s, but were probably retained until the 1950s, as was the plow at Rocky Mountain National Park. Research has determined that the machines at Yosemite and Crater Lake no longer exist. The fate of the other 36 Model F snow blowers is unknown, but it is quite possible that the Snogo Snow Plow in Rocky Mountain National Park may be the last model of this innovative machine in existence.

Historic Background

The national Good Roads Movement began an effort to improve road conditions for bicycle enthusiasts in the late nineteenth century. By the early part of the twentieth century, the movement had evolved into an attempt to create a network of federal, state, and local roads. It was part of the Progressive movement and scientific planning to improve economic efficiency and life in America. Many people believed that railroads would continue to serve rural communities and roads would not be important. However, the decreasing cost of automobiles made them available to the growing middle class, which in turn lent support to Good Roads. Until the early twentieth century, road construction was the responsibility of local communities, and it took Progressive campaigning to convince communities to give up local control and join a standardized state and national system. In addition, urban businessmen, some farmers, planners, and engineers all supported the movement and a nationally coordinated construction of roads. President Woodrow Wilson was a proponent of the program, resulting in the Federal Aid Road Act of 1916 that financed the beginning construction of this network (Kaszynski 2000).

Though some small resorts existed in what would become the park, and a few hotels stood in nearby Estes Park, the establishment of Rocky Mountain National Park in 1915 was an important part of expanding and developing the tourist industry of Colorado, drawing people from not only the United States, but internationally as well (Wyckoff 1999:78-100). With the increasing number of people traveling to the park, the need for roads was quickly evident. "As was the case with the park system nationally, opening Rocky Mountain to auto travel became an early priority (Wyckoff 1999:99). Fall River Road construction started in 1913, Trail Ridge Road in 1929, along with other secondary roads and trails. Since its dedication in 1932, Trail Ridge Road has been one of the most important

National Register of Historic Places Continuation Sheet

United States Department of the Interior National Park Service

Snogo Snow Plow
Larimer County/ Colorado

Section number 8 Page 3

resources in the park and to the state of Colorado. The road crosses the Continental Divide and is the highest continuous paved road in the United States at 12,120 feet, and most park visitors travel over it during their stay. Locals and visitors from afar anxiously await the Memorial Day opening of the road with dignitaries from the National Park Service and communities on either side of the Divide formally cutting a ceremonial ribbon. The first trip "over the top" is exhilarating with 10 to 20 foot high banks of snow stacked on either side of the road. Accessibility to the high altitude tundra is a major focus of the park's mission and a major visitor experience that is unparalleled in the National Park system.

The Snogo at Rocky Mountain National Park

The history of the park's Snogo is told in a manufacturing data card, a few memos, letters, and photographs. Records from Schmidt Engineering and Equipment, Inc. show that the plow was shipped by railroad to the park from Dubuque, Iowa, on November 30, 1932. E. B. Rogers was the superintendent of the park at the time. Parts were ordered on January 3, 1949 and May 12, 1951.

In addition to the importance of the plow to Trail Ridge Road and other roads in the park, the Snogo was directly associated with the war effort during World War II as the *Superintendent's Monthly Report* for January 1943 notes that, "The park Snogo snowplow was shipped December 3 on a loan basis to the Rapid City, South Dakota, Air Base, to keep the landing field free of snow this winter. It is to be returned here in the spring."

The park gave the plow to the Town of Estes Park on May 15, 1952. The Snogo was running and used as a snowplow until 1979 when the engine's exhaust pipe was left uncovered. The engine filled with snow and water and the engine ceased to run. The town returned the plow to the park at no cost in 1979. It was formally accessioned (No. 867) as Rocky Mountain National Park museum property on October 12, 1988. For several years after it ceased to operate, the plow was put on display in the National Historic Landmark (NHL) Beaver Meadows Headquarters and Administration Building parking lot so visitors could enjoy "Rocky's First Snowplow." Currently the plow sits outside in a parking lot and is still not operable. It is the intent of the park to restore the 70 year old vehicle for use in parades and other local festivities, such as the annual opening of Trail Ridge Road in addition to celebrating the 75th anniversary of the opening of Trail Ridge Road in 2007 and the 100th anniversary of the park in 2015.

Klauer Manufacturing Company

The Klauer Manufacturing Company was founded in 1870 by Peter Klauer as a hardware and tin shop in Dubuque, Iowa. Still in the Klauer family, the company currently employs 200 people and makes a wide variety of sheet metal products. The company sold off the snow plow portion of the business to Schmidt Engineering and Equipment, Inc., in 2000. The Schmidt group, though merged with another company, continues to manufacture snow removal equipment in New Berlin, Wisconsin. According to Klauer records, only 39 snow blowers of this model were produced between December 10, 1928, and November 9, 1934. Crater Lake National Park purchased a two-auger blower in 1929, and a three-auger machine in 1936. Yosemite National Park purchased a two-auger plow in 1931, another in 1934, and a three-auger machine in 1937.



National Register of Historic Places Continuation Sheet

United States Department of the Interior National Park Service

Snogo Snow Plow
Larimer County/ Colorado

Section number 8 Page 4

Advancing technology during the 1920s made plows like the Snogo possible. Innovative features not seen on other plows were the provision that all controls could be operated from inside a closed cab, it had windows that could be rolled up, and a heater was mounted under the seat. The mechanization of the plow including the auger mechanism with shear pins and a central blower was a new idea in the 1930s. The closed cab and heater along with internal controls contributed greatly to the comfort of the operator as winter temperatures at high altitude are often well below zero. The closed cab controls, roll up windows, heater, and the huge gas tank made this plow efficient – much more so than the typical plows attached to regular automobiles and trucks.

An interview by phone with a Klauer employee of 56 years, Bill Thul, reveals that this may indeed be the last Snogo Snow Plow in existence. At the present time (2005), he is unaware of any other Snogo Snow Plows. A newspaper article in his possession, from sometime around 2000, notes that Big Bear Ridge, a ski resort in California, claimed the oldest rotary plow in use in that state. The plow was noted to be 43 years old, which would date to approximately the 1950s, making the Rocky Mountain National Park plow at least 20 years older. Internet research did not turn up any documentation of the California plow's continued existence.

Snogo Advertisement, circa 1931- image courtesy of RMNP



**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**

Snogo Snow Plow
Larimer County/ Colorado

Section number 9 Page 5

BIBLIOGRAPHY

- Atkins, D. Ferrel. National Register nomination on Trail Ridge Road (5LR.502). Colorado Historical Society, Office of Archaeology and Historic Preservation, July 25, 1983.
- Kaszynski, William. *The American Highway: The History and Culture of Roads in the United States*. Jefferson, NC: McFarland & Company Inc., 2000.
- Klauer Manufacturing Company website, accessed December 15, 2005.
<http://www.klauer.com/klauerhistory.html>
- Perney, Pierre. Auto Shop Foreman, Rocky Mountain National Park.
- Rocky Mountain National Park museum and archival records.
- Saldibar, Joseph P., III. *The Lost Motor City: Indianapolis Automobile Manufacturers 1900-1966*. Masters Thesis, Ball State University, 1998.
- Schmidt Engineering and Equipment, Inc., 1905 South Moorland Road, New Berlin, Wisconsin 53151-2321; (262) 784-6066. Research by Sue Jesion and Dave Bickelhaupt.
- "Snogo: The Super Snow Remover" Catalog, ca. 1931 from Klauer Manufacturing Company; 1185 Roosevelt Avenue, P.O. Box 59, Dubuque, Iowa 52004-0059; (319) 582-7201; www.klauer.com
- "Snogo: Service Parts List for Models T & F: Machines No. 37, 38, 43, 45 and up, January 30, 1930. No. 50". Klauer Manufacturing Company, Dubuque, Iowa.
- "Snogo Order Form" for Rocky Mountain National Park, dated 1932.
- Stephen, Mark. Historian, Crater Lake National Park, P.O. Box 3, Crater Lake, Oregon. 97604.
- Superintendent's Monthly Report*, January 1943, Rocky Mountain National Park archives.
- Thul, Bill. Klauer Manufacturing Company employee of 56 years. Phone interview by Chris Geddes on December 27, 2005.
- Wyckoff, William. *Creating Colorado: The Making of a Western American Landscape, 1860 – 1940*. New Haven, CT: Yale University Press, 1999.

**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**Snogo Snow Plow
Larimer County/ ColoradoSection number 10 Page 6**GEOGRAPHICAL DATA****VERBAL BOUNDARY DESCRIPTION**

The nominated property includes the Snogo Snow Plow plus the land directly beneath it within the boundaries of the National Register listed Utility Area Historic District. The boundary of the Utility Area Historic District is comprised of the following UTM's (NAD 27):

1- 13, 452760mE/ 4467820mN	5- 13, 452125mE/ 4468100mN
2- 13, 452760mE/ 4468225mN	6- 13, 452120mE/ 4467989mN
3- 13, 452700mE/ 4468240mN	7- 13, 452182mE/ 4468982mN
4- 13, 452360mE/ 4468100mN	8- 13, 452620mE/ 4467820mN

(These UTMS correspond to the UTMs listed as A-H on the 1988 amendment/additional documentation to the 1982 National Register nomination.)

BOUNDARY JUSTIFICATION

The Snogo Snow Plow is currently stored in the maintenance area of Rocky Mountain National Park's Utility Area National Register Historic District. The plow is parked in a row of vehicles opposite the auto shop. This setting is appropriate for the snow plow as it sits with other maintenance vehicles. Although the snow plow is not currently operational, its location may shift within the Utility Area Historic District as it undergoes restoration or wherever it may be parked within the Utility Area Historic District once operational. The vehicle may occasionally leave the verbal boundary for parades and demonstrations, but will be parked and stored within the Utility Area Historic District's boundary as defined above.

**National Register of Historic Places
Continuation Sheet****United States Department of the Interior
National Park Service**Snogo Snow Plow
Larimer County/ ColoradoSection number ___ Page 7**PHOTOGRAPH LOG**

The following information pertains to photograph numbers 1-4 except as noted:

Name of Property: Snogo Snow Plow
Location: Larimer County/ Colorado
Photographer: Bill Butler
Date of Photographs: 2004
Negatives: tif format on CD (CD on file with National Park Service in Washington DC)

Photo No. Photographic Information

- 1 Exterior view of snow plow.
- 2 Exterior view of snow plow, showing augers.
- 3 Exterior view of snow plow, showing engine.
- 4 Interior view of snow plow cab, showing steering wheel and controls.

National Register of Historic Places Continuation Sheet

United States Department of the Interior
National Park Service

Snogo Snow Plow
Larimer County/ Colorado

Section number ___ Page 8

USGS TOPOGRAPHIC MAP
Longs Peak Quadrangle, Colorado
7.5 Minute Series

PLSS: 6th PM, T5N, R73W, Sec. 34
SE¼, NW¼, NW¼, NE¼
Elevation: 7780 feet

