

**United States Department of the Interior  
Heritage Conservation and Recreation Service**

**National Register of Historic Places  
Inventory—Nomination Form**

See instructions in *How to Complete National Register Forms*  
Type all entries—complete applicable sections

For HCPS use only

received JAN 24 1984

date entered

## 1. Name

historic NA

and/or common Petroforms of South Dakota <sup>TR</sup> Thematic Nomination

## 2. Location

7 sites (4 counties)

street &amp; number See continuation sheet not for publication

city, town vicinity of congressional district

state code county code

## 3. Classification

<b>Category</b>	<b>Ownership</b>	<b>Status</b>	<b>Present Use</b>
<input type="checkbox"/> district	<input type="checkbox"/> public	<input checked="" type="checkbox"/> occupied	<input checked="" type="checkbox"/> agriculture
<input type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in process	<input type="checkbox"/> educational
<input checked="" type="checkbox"/> site	<b>Public Acquisition</b>	<b>Accessible</b>	<input type="checkbox"/> entertainment
<input type="checkbox"/> object	<input checked="" type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial
		<input type="checkbox"/> no	<input type="checkbox"/> military
			<input type="checkbox"/> museum
			<input type="checkbox"/> park
			<input type="checkbox"/> private residence
			<input type="checkbox"/> religious
			<input type="checkbox"/> scientific
			<input type="checkbox"/> transportation
			<input type="checkbox"/> other:

## 4. Owner of Property

name Multiple ownership: See continuation sheet

street &amp; number

city, town vicinity of state

## 5. Location of Legal Description

courthouse, registry of deeds, etc. See continuation sheet

street &amp; number

city, town state

## 6. Representation in Existing Surveys

title See continuation sheet has this property been determined eligible? ☐ yes ☐ nodate 1982 ☐ federal ☐ state ☐ county ☐ local

depository for survey records University of South Dakota Archaeology Laboratory

city, town Vermillion state South Dakota

## 7. Description

Condition		Check one	Check one
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input checked="" type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered (slightly)	moved date _____
<input type="checkbox"/> fair	<input type="checkbox"/> unexposed		

### Describe the present and original (if known) physical appearance

"Petroforms of South Dakota" is a thematic nomination made up of eight representative and unaltered prehistoric archaeology sites. These sites are located in four counties of eastern South Dakota. All sites are configurations of cobble-sized stones located on the surface of the ground. The stones are patterned and outline recognizable zoomorphic and geometric figures in follow-the-dot fashion.

In South Dakota the majority of petroforms are simple circles of stones (usually described as tipi rings: see Malouf 1961), membership in this nomination however, is limited to more complex petroforms. The following criteria was applied to sites listed in this nomination. The petroforms are in their original condition and betray little or no alteration or reconstruction. The petroforms are either clearly zoomorphic in configuration or form a geometric design which is apparently unrelated to residential or other utilitarian needs. In addition the configuration of the petroforms suggest a non-random, preconceived design whose execution required a certain amount of individual or corporate time and labor.

The nomination therefore includes only a small selection (7) of the 31 petroforms surveyed by the 1982 East River Petroform Survey. These eight (described in detail below) appear authentic, unaltered, and representative of prehistoric Native American activities in landscape modification and art.

All eight petroforms are clearly prehistoric although their dates of construction are not known. Each petroform is located on or near outcrops of Pierre glacial till, and is made up of glacial erratic cobbles. These cobbles are deeply embedded in sod so that the general slope and extent of the configuration is often observed due to poor surface visibility. Several of the petroforms nominated here are multi-component sites; that is, a large primary configuration (like a petroform snake) is surrounded by smaller secondary petroforms (usually mosaics and cairns). In such cases the secondary petroforms are considered an intrinsic part of the site and related to the primary petroform on the basis of proximity and mode of construction. All petroforms are located on privately owned grazing land.

Although native Sioux informants have claimed responsibility for the creation of certain (especially) zoomorphic petroforms; the identity of the aboriginal artisans is far from clear. The shapes and sizes of the snake and turtle petroforms is reminiscent of Woodland earthwork figures in neighboring Iowa (Mallam 1976). These same figures play an important role in Mandan mythology (Bowers 1973). As yet exact dating and cultural affiliation of these figures is unknown. Further there is no reason to assume all petroforms are the same age.

With two exceptions the nominated petroforms have been described by previous surveyers. Early South Dakotan antiquarians were often drawn to these exotic figures because of the drama inherent in their scale, setting, and enigmatic subject matter. Hence Helmick (1897), Lewis (n.d.), Todd (1912), Robinson (1914), and W.H. Over (see Sigstad and Sigstad 1973) surveyed and described a variety of complex petroforms located throughout eastern South Dakota. A majority of these sites are destroyed (Abbott, Ranney and Whitten 1982). The eight petroforms nominated here represents the last remaining unaltered complex petroforms in eastern South Dakota.

The nomination is based upon eight weeks of surface survey conducted by the Institute

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National Park Service

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of Rural Anthropology (P.O. Box 1, Vermillion, S.D. 57069) with funding provided by the South Dakota Historical Preservation Center. Field surveyors J. Abbott and W. Ranney under the supervision of R. Whitten (University of South Dakota) conducted a series of site visits and area surveys in order to relocate each previously identified petroform, and examine nearby areas for instances of unreported petroforms. No subsurface testing was carried out. Subsurface testing is recommended in future study of all petroforms in order to ascertain exact dates and cultural associations, however such site disturbance is not necessary for immediate examination and appreciation of these surface features.

The attached inventory forms describe the petroforms included in the nomination.

TABLE 1

Petroforms Categories and Definitions

- I. Petroform: man-made arrangements, patterns and constructions of stones. In South Dakota, petroforms are most often identified as surface features.
- A. Two dimensional petroforms:
1. Effigies: Petroforms which take the shape, in outline, of apparently anthropomorphic or zoomorphic figures.
  2. Alignments: A line of stones. Alignments are rarely (if ever) perfectly straight and may form geometric structures such as "surrounds."
  3. Rings: Petroforms which describe a hollow circle.
  4. Mosaics: Scatters of stones roughly describing circles and ovals. These shapes are filled in with stones suggesting more of a floor of stones than a ring.
- B. Three dimensional petroforms:
1. Cairns: A cairn is mosaic with stones heaped upon the surface.
  2. Petroform with depression: Any of the above categories can exhibit depressions with in them. These pits have several different origins; among them: previous excavations or aboriginal fire pits.

NOTE: To these categories should be added the various petroforms typical of historical remains, but outside the scope of this survey.

## 8. Significance

Period	Areas of Significance—Check and justify below			
<input checked="" type="checkbox"/> prehistoric	<input checked="" type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input checked="" type="checkbox"/> landscape architecture	<input checked="" type="checkbox"/> religion
<input type="checkbox"/> 1400–1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500–1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input checked="" type="checkbox"/> sculpture
<input type="checkbox"/> 1600–1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/
<input type="checkbox"/> 1700–1799	<input type="checkbox"/> art	<input type="checkbox"/> engineering	<input type="checkbox"/> music	humanitarian
<input type="checkbox"/> 1800–1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater
<input type="checkbox"/> 1900–	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input type="checkbox"/> transportation
		<input type="checkbox"/> invention		<input type="checkbox"/> other (specify)

<b>Specific dates</b>	NA	<b>Builder/Architect</b>	NA
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### Statement of Significance (in one paragraph)

Petroforms are examples of landscape modification. Little is known of the origins or reasons for the existence of these complex petroforms, yet they certainly played some ceremonial or religious function, and are presently regarded as a sculptural art form. The petroforms are primarily significant in the category of archaeology and prehistory and this group includes all the known sites in South Dakota which retain their integrity. They are significant primarily in the category of prehistory, and, to a lesser degree, in the categories of landscape, religion and sculpture.

Usually petroforms are considered to be vaguely ceremonial in nature (Wedel 1961). Recently it has become clear that many geometric figures are related to prehistoric astronomy and the placement of stones and lines is in terms of astral events. Zoomorphic and anthropomorphic figures are not only rare examples of Plains representative art, but the choice of subjects appear to be integrated with Plains, especially Mandan, mythology (Bowers 1973).

From the work of previous surveyers it is clear that many more of these complex petroforms existed even fifty years ago than are apparent today. And given the intensity of recent archaeological survey in South Dakota, it is clear that few pristine complex petroforms remain to be discovered. The eight sites nominated here make up the body of the remaining sites worthy of nomination to the register on the basis of their rarity, complexity, and potential for understanding the cultural heritage of region.

## 9. Major Bibliographical References

See attached Continuation Sheet

## 10. Geographical Data

Acres of nominated property Approximately 1 acre each; total of 9 acres.

Quadrangle name See attached Continuation Sheet

Quadrangle scale 1:24 000

### UMT References

A 

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Zone Easting Northing

B 

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Zone Easting Northing

C 

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D 

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E 

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F 

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G 

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H 

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### Verbal boundary description and justification

See attached Continuation Sheets

### List all states and counties for properties overlapping state or county boundaries

state NA code county code

state code county code

## 11. Form Prepared By

name/title Richard G. Whitten

organization USD Archaeology Laboratory

date 9/13/83

street & number University of South Dakota

telephone (605)677-5401

city or town Vermillion

state South Dakota

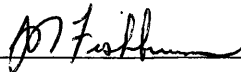
## 12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

☐ national ☒ state ☐ local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature



title SHPO - South Dakota

date 11/6/84

For HCRRS use only

I hereby certify that this property is included in the National Register

  
Keeper of the National Register

date

Attest:

date

Chief of Registration

**United States Department of the Interior**  
**Heritage Conservation and Recreation Service**  
**National Register of Historic Places**  
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## Major Bibliographic References:

## A. Summary references:

Abbott J., W. Ranney, and R. Whitten

1982 Report of the 1982 East River Petroform Survey. Institute for Rural Anthropology,  
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## B. Other sources:

Bowers, A.

1973 Mandan Social and Ceremonial Organization Midway Reprint. U of Chicago.

Helnick, J.M.

1897 "Stone Mounds and Serpents of Hughes County, S.D." Proceedings of the Davenport  
Academy of Sciences. 6:170-172.

Lewis, T.H.

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Malouf, C.

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Robinson, D.

1914 "More Boulder Mosaics," South Dakota Historical Collections 7:539-548. Pierre.

Sigstad, J. Sand Sigstad J.K. (eds.)

1973 Archaeological Field Notes of W.H. Over. Research Bulletin 1. Department of  
Education and Cultural Affairs, Office of State Archaeologist. Pierre.

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1912 "Boulder Mosaics in South Dakota," South Dakota Historical Collections 6:207-214...  
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Multiple Resource Area  
Thematic Group

dnr-11

Name Petroforms of South Dakota Thematic Resources  
State SOUTH DAKOTA

Nomination/Type of Review

Date/Signature

- |     |                            |                    |            |                          |                |
|-----|----------------------------|--------------------|------------|--------------------------|----------------|
| 1.  | Archeological Site 39HD22  | Substantive Review | for Keeper | <u>Gyonne D. Stewart</u> | <u>2/23/84</u> |
|     |                            |                    | Attest     |                          |                |
| 2.  | Archeological Site 39HU66  | Substantive Review | for Keeper | <u>Gyonne D. Stewart</u> | <u>2/23/84</u> |
|     |                            |                    | Attest     |                          |                |
| 3.  | Archeological Site 39HU189 | Substantive Review | for Keeper | <u>Gyonne D. Stewart</u> | <u>2/23/84</u> |
|     |                            |                    | Attest     |                          |                |
| 4.  | Archeological Site 39HU201 | Substantive Review | for Keeper | <u>Gyonne D. Stewart</u> | <u>2/23/84</u> |
|     |                            |                    | Attest     |                          |                |
| 5.  | Archeological Site 39JE10  | Substantive Review | for Keeper | <u>Gyonne D. Stewart</u> | <u>2/23/84</u> |
|     |                            |                    | Attest     |                          |                |
| 6.  | Archeological Site 39JE11  | Substantive Review | for Keeper | <u>Gyonne D. Stewart</u> | <u>2/23/84</u> |
|     |                            |                    | Attest     |                          |                |
| 7.  | Archeological Site 39TU5   | Substantive Review | for Keeper | <u>Gyonne D. Stewart</u> | <u>2/23/84</u> |
|     |                            |                    | Attest     |                          |                |
| 8.  |                            |                    | Keeper     |                          |                |
|     |                            |                    | Attest     |                          |                |
| 9.  |                            |                    | Keeper     |                          |                |
|     |                            |                    | Attest     |                          |                |
| 10. |                            |                    | Keeper     |                          |                |
|     |                            |                    | Attest     |                          |                |