

## Agate Fossil Beds National Monument, Accuracy Assessment Metadata

### Identification\_Information:

#### Citation:

##### Citation\_Information:

Originator: U.S. Geological Survey

Originator: Department of the Interior

Publication\_Date: 199805

Title: Accuracy Assessment Points for Agate Fossil Beds National Monument Vegetation Mapping Project

Geospatial\_Data\_Presentation\_Form: database

##### Series\_Information:

Series\_Name: USGS-NPS Vegetation Mapping Program

Issue\_Identification: Agate Fossil Beds National Monument

##### Publication\_Information:

Publication\_Place: Denver, CO

Publisher: USGS Biological Resources Division, Center for Biological Informatics

Online\_Linkage: <http://biology.usgs.gov/npsveg/ftp/vegmapping/agfo/agfoaa.zip>

### Description:

Abstract: The accuracy assessment field work was performed in August and September, 1997 to verify the accuracy of the vegetation communities spatial data developed by the USGS-NPS Vegetation Mapping Program for Agate Fossil Beds National Monument. The data points were randomly distributed stratified according to vegetation association over the project area according to protocols developed by the Program. Points were located by GPS navigation and the community information was collected at the point, without knowledge of the attributes of the vegetation spatial data. The data points were compared to the attributes of the polygon in which they were contained. Attributes of the polygons or accuracy assessment points that did not match were changed during later analysis due to errors in the AA methodology or map attribution errors. A contingency table was completed from the final dataset.

Purpose: To verify the accuracy of the mapped vegetation communities at Agate Fossil Beds National Monument.

### Time\_Period\_of\_Content:

#### Time\_Period\_Information:

##### Single\_Date/Time:

Calendar\_Date: 199708

Currentness\_Reference: Source of data collection

### Status:

Progress: Complete

Maintenance\_and\_Update\_Frequency: None Planned

### Spatial\_Domain:

#### Bounding\_Coordinates:

West\_Bounding\_Coordinate: -103.8

East\_Bounding\_Coordinate: -103.7

North\_Bounding\_Coordinate: 42.44167

South\_Bounding\_Coordinate: 42.40833

Description\_of\_Geographic\_Extent: Agate Fossil Beds National Monument, Nebraska, USA

### Keywords:

#### Theme:

Theme\_Keyword\_Thesaurus: none

Theme\_Keyword: National Park Service

Theme\_Keyword: U.S. Geological Service

Theme\_Keyword: Center for Biological Informatics

Theme\_Keyword: land cover

Theme\_Keyword: vegetation

Theme\_Keyword: alliance

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Theme\_Keyword: association

Place:

Place\_Keyword\_Thesaurus: none

Place\_Keyword: Agate Fossil Beds National Monument

Place\_Keyword: Nebraska

Taxonomy:

Keywords/Taxon:

Taxonomic\_Keyword\_Thesaurus: none

Taxonomic\_Keywords: Standardized National Vegetation Classification System

Taxonomic\_Keywords: vegetation classification

Taxonomic\_Keywords: alliance

Taxonomic\_Keywords: community association

Taxonomic\_Classification:

Taxon\_Rank\_Name: Kingdom

Taxon\_Rank\_Value: Plantae

Access\_Constraints: None

Use\_Constraints: Any person using the information presented here should fully understand the data collection and compilation procedures, as described in these metadata, before beginning analysis. The burden for determining fitness for use lies entirely with the user. For purposes of publication or dissemination, citations should be given to the U.S. Geological Survey and the National Park Service.

Point\_of\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: USGS BRD Center for Biological Informatics

Contact\_Person: USGS-NPS Vegetation Mapping Program Coordinator

Contact\_Address:

Address\_Type: mailing and physical address

Address: Denver Federal Center, Building 810, Room 8000, MS 302

City: Denver

State\_or\_Province: Colorado

Postal\_Code: 80225

Contact\_Voice\_Telephone: (303) 202-4220

Contact\_Facsimile\_Telephone: 303-202-4219

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Browse\_Graphic:

Browse\_Graphic\_File\_Name: <http://biology.usgs.gov/npsveg/agfo/images/agfoaa.pdf>

Browse\_Graphic\_File\_Description: Locations of accuracy assessment sites; low resolution for web browsing. 407 Kbyte.

Browse\_Graphic\_File\_Type: PDF

Security\_Information:

Security\_Classification\_System: None

Security\_Classification: None

Security\_Handling\_Description: None

Native\_Data\_Set\_Environment: UNIX-ARC/INFO

Data\_Quality\_Information:

Attribute\_Accuracy:

Attribute\_Accuracy\_Report: The attributes for the accuracy assessment were recorded in the field in August, 1997. Vegetation associations were identified based on the field key and plant identification. If additional communities were found within a 50 meter radius of the plot center, they were recorded as well. During the analysis, it was concluded that some attributes were in error and changed to match the mapped attributes. This was done by examination of the aerial photographs under stereoscopic view. The attributes were in error due to 1) spatial error in the GPS derived coordinates (4-8 meters), 2) change of vegetation community due to temporal changes, or mis-identification of the community on the ground.

Logical\_Consistency\_Report: All attributes are codes that correspond to vegetation communities and have been checked for typographical and logical errors.

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Completeness\_Report: All points were collected and analyzed.

Positional\_Accuracy:

Horizontal\_Positional\_Accuracy:

Horizontal\_Positional\_Accuracy\_Report: The points were located using a military-style GPS receiver (PLGR), which has a published accuracy of 4-8 meters.

Vertical\_Positional\_Accuracy:

Vertical\_Positional\_Accuracy\_Report: Not applicable

Lineage:

Methodology:

Methodology\_Type: Field

Methodology\_Identifier:

Methodology\_Keyword\_Thesaurus: None

Methodology\_Keyword: Accuracy Assessment

Methodology\_Description: Data points were located by use of a PLGR GPS receiver by Wyoming Natural Heritage Program and Agate Fossil Beds National Monument personnel. Vegetation communities were identified on the basis of a dichotomous field key and plants species present.

Methodology:

Methodology\_Type: Lab

Methodology\_Identifier:

Methodology\_Keyword\_Thesaurus: None

Methodology\_Keyword: Accuracy Assessment

Methodology\_Description: Accuracy assessment points were compiled into an ARCINFO point coverage and intersected with the vegetation community coverage. The resulting INFO file was exported into a text file, imported into a spreadsheet, and the attributes from the accuracy assessment and the spatial data were compared. If the attributes did not compare, an analysis of the mismatch was made and either the AA attribute or the map attribute was changed based on identification of the community on the aerial photo.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: USGS-Biological resources Division

Originator: U.S. National Park

Originator: Department of the Interior

Publication\_Date: 199411

Title: Accuracy Assessment Procedures, NBS/NPS Vegetation Mapping Program

Geospatial\_Data\_Presentation\_Form: document

Publication\_Information:

Publication\_Place: Denver, CO

Publisher: USGS, Biological Resources Division, Center for Biological Informatics

Other\_Citation\_Details: Prepared by: Environmental Systems Research Institute, Inc. Redlands, CA and National Center of Geographic Information and Analysis, University of California, Santa Barbara, CA and The Nature Conservancy, Arlington, VA under contract from U.S. Department of the Interior Biological Resources Division and National Park Service.

Type\_of\_Source\_Media: electronic document

Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Range\_of\_Dates/Times:

Beginning\_Date: 199411

Ending\_Date: Present

Source\_Currentness\_Reference: publication date

Source\_Citation\_Abbreviation: Accuracy Assessment Procedures Document

Source\_Contribution: This document established the procedures and protocols for the accuracy assessment at Agate Fossil Beds National Monument.

Source\_Information:

Source\_Citation:

Citation\_Information:

Originator: U.S. Geological Survey

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Originator: Department of the Interior

Publication\_Date: 199805

Title: Agate Fossil Beds National Monument Spatial Vegetation Data: Cover type / Association level of the National Vegetation Classification System

Geospatial\_Data\_Presentation\_Form: document

Series\_Information:

Series\_Name: USGS-NPS Vegetation Mapping Program

Issue\_Identification: Agate Fossil Beds National Monument

Publication\_Information:

Publication\_Place: Denver, CO

Publisher: USGS, Biological Resources Division, Center for Biological Informatics

Other\_Citation\_Details: Created in large part by Environmental Systems Research Institute, Inc. Redlands, CA under contract from USGS/BRD/CBI.

Type\_of\_Source\_Media: Disc

Source\_Time\_Period\_of\_Content:

Time\_Period\_Information:

Single\_Date/Time:

Calendar\_Date: 199805

Source\_Currentness\_Reference: ground condition

Source\_Citation\_Abbreviation: Spatial data of vegetation communities for Agate Fossil Beds National Monument.

Source\_Contribution: The vegetation spatial data were tested for accuracy with the AA data.

Process\_Step:

Process\_Description: The accuracy assessment field work was performed in August 1997 to verify the accuracy of the vegetation communities spatial data developed by the USGS-NPS Vegetation Mapping Program for Agate Fossil Beds National Monument. The data points were randomly distributed stratified according to vegetation association over the project area according to protocols developed by the Program. Points were located by GPS navigation and the community information was collected at the point, without knowledge of the attributes of the vegetation spatial data.

Source\_Used\_Citation\_Abbreviation: Spatial data of vegetation communities for Agate Fossil Beds National Monument.

Source\_Used\_Citation\_Abbreviation: Accuracy Assessment Procedure Document

Process\_Date: 199708

Spatial\_Data\_Organization\_Information:

Indirect\_Spatial\_Reference: Agate Fossil Beds National Monument is in Sioux County, Nebraska near the headwaters of the Niobrara River. The mound is located 20 miles south of Harrison, Nebraska.

Direct\_Spatial\_Reference\_Method: Point

Point\_and\_Vector\_Object\_Information:

SDTS\_Terms\_Description:

SDTS\_Point\_and\_Vector\_Object\_Type: Point

Spatial\_Reference\_Information:

Horizontal\_Coordinate\_System\_Definition:

Planar:

Grid\_Coordinate\_System:

Grid\_Coordinate\_System\_Name: Universal Transverse Mercator

Universal\_Transverse\_Mercator:

UTM\_Zone\_Number: 13

Transverse\_Mercator:

Longitude\_of\_Central\_Meridian: -105

Latitude\_of\_Projection\_Origin: 0

False\_Easting: 50000

False\_Northing: 0

Scale\_Factor\_at\_Central\_Meridian: .9996

Planar\_Coordinate\_Information:

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Planar\_Coordinate\_Encoding\_Method: Coordinate Pair

Coordinate\_Representation:

Abscissa\_Resolution: 1

Ordinate\_Resolution: 1

Planar\_Distance\_Units: meters

Geodetic\_Model:

Horizontal\_Datum\_Name: North American Datum of 1983

Ellipsoid\_Name: Geodetic Reference System 80

Semi-major\_Axis: 6378137

Denominator\_of\_Flattening\_Ratio: 298.257

Entity\_and\_Attribute\_Information:

Overview\_Description:

Entity\_and\_Attribute\_Overview: The system is organized hierarchically to support conservation and resource stewardship applications across multiple scales. The upper levels of the hierarchy are based on the physical form or structure of the vegetation (physiognomy) and have been refined from the international standards developed by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). The two most detailed levels of the hierarchy are based on the species composition of the existing vegetation (floristics) and reflect the phytosociological standards that were originally developed by European ecologists. The vegetation classification is continually advanced through the collection and analysis of new field data and will be greatly strengthened during the course of the NBS/NPS mapping efforts. National Park Service/Biological Resources Division Vegetation Inventory and Mapping Program for Agate Fossil Beds National Monument, Nebraska, Final Community Association Classification, May 1, 1998. Alliance/Community 01=Populus Deltoides - (Salix amygdaloides) / Salix exigua Woodland 02=Symphoricarpos occidentalis Shrubland 03=Salix exigua Shrubland 04=Stipa comata - Bouteloua gracilis - Carex filifolia Herbaceous Vegetation 05=Calamovilfa longifolia - Andropogon halli Herbaceous Vegetation 06=Upland Disturbance Herbaceous Vegetation 07=Annual-dominated Floodplain Disturbance Herbaceous Vegetation 08=Pascopyrum smithii Herbaceous Vegetation 09=Juncus balticus Herbaceous Vegetation 10=Typha latifolia Western Herbaceous Vegetation 11=Seeded Grassland Herbaceous Vegetation 12=Stipa comata - Bouteloua gracilis Gravel Herbaceous Vegetation 13=Schizachyrium scoparium - Bouteloua (curtipendula, gracilis) - Carex filifolia Herbaceous Vegetation 14=Stipa comata - Bouteloua gracilis - Carex filifolia Herbaceous Vegetation Mosaic 98 =Water Body 99=Urban/Built-Up/Maintained/Road/Road Mowed/Cut and Fill.

Entity\_and\_Attribute\_Detail\_Citation: Grossman, D. Et al. 1994. National Park Service Vegetation Mapping Project, Standardized National Vegetation Classification System 209 pp.

Distribution\_Information:

Distributor:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: USGS BRD Center for Biological Informatics

Contact\_Person: USGS-NPS Vegetation Mapping Program Coordinator

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Address\_Type: mailing and physical address

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Resource\_Description: AGFO Accuracy Assessment

Distribution\_Liability:

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Standard\_Order\_Process:

Digital\_Form:

Digital\_Transfer\_Information:

Format\_Name: HTML

Digital\_Transfer\_Option:

Online\_Option:

Computer\_Contact\_Information:

Network\_Address:

Network\_Resource\_Name: <http://biology.usgs.gov/npsveg/agfo/index.html>

Access\_Instructions: Internet Access

Fees: None

Metadata\_Reference\_Information:

Metadata\_Date: 20011022

Metadata\_Review\_Date: 20100511

Metadata\_Contact:

Contact\_Information:

Contact\_Organization\_Primary:

Contact\_Organization: USGS BRD Center for Biological Informatics

Contact\_Person: USGS-NPS Vegetation Mapping Program Coordinator

Contact\_Address:

Address\_Type: mailing and physical address

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Contact\_Electronic\_Mail\_Address: [gs-b-npsveg@usgs.gov](mailto:gs-b-npsveg@usgs.gov)

Metadata\_Standard\_Name: FGDC Biological Data Profile of the Content Standard for Digital Geospatial Metadata

Metadata\_Standard\_Version: FGDC-STD-001.1-1999

Metadata\_Extensions:

Online\_Linkage: [http://www.nbii.gov/portal/server.pt/community/fgdc\\_metadata/255](http://www.nbii.gov/portal/server.pt/community/fgdc_metadata/255)