

Isle Royale National Park, Accuracy Assessment Metadata

Identification_Information:

Citation:

Citation_Information:

Originator: U.S. Geological Survey

Originator: Department of the Interior

Publication_Date: 200108

Title: Accuracy Assessment Points for Isle Royale National Park Vegetation Mapping Project

Geospatial_Data_Presentation_Form: database and report

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Isle Royale National Park

Publication_Information:

Publication_Place: Denver, CO

Publisher:

USGS Biological Resources Division, Center for Biological Informatics

Online_Linkage: <http://biology.usgs.gov/npsveg/ftp/vegmapping/isro/isroaa.zip>

Description:

Abstract:

The accuracy assessment field work was performed in July - September, 1998 to verify the accuracy of the vegetation communities spatial data developed by the USGS-NPS Vegetation Mapping Program for Isle Royale National Park. 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.

Purpose:

To verify the accuracy of the mapped vegetation communities at Isle Royale National Park

Time_Period_of_Content:

Time_Period_Information:

Single_Date/Time:

Calendar_Date: 199810

Currentness_Reference: Source of data collection

Status:

Progress: Complete

Maintenance_and_Update_Frequency: None planned

Spatial_Domain:

Bounding_Coordinates:

West_Bounding_Coordinate: -89.125

East_Bounding_Coordinate: -88.4

North_Bounding_Coordinate: 48.2

South_Bounding_Coordinate: 47.8

Description_of_Geographic_Extent: Isle Royale National Park, Michigan

Keywords:

Theme:

Theme_Keyword_Thesaurus: None

Theme_Keyword: National Park Service

Theme_Keyword: U.S. Geological Service

Theme_Keyword: The Nature Conservancy

Theme_Keyword: Aerial Information Systems

Theme_Keyword: Center for Biological Informatics

Theme_Keyword: land cover

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Theme_Keyword: vegetation
Theme_Keyword: community
Theme_Keyword: association
Theme_Keyword: land use
Theme_Keyword: Environmental System Research Institute

Place:

Place_Keyword_Thesaurus: None
Place_Keyword: Isle Royale National Park
Place_Keyword: Michigan
Place_Keyword: Lake Superior

Temporal:

Temporal_Keyword_Thesaurus: None
Temporal_Keyword: Data Represents May 1996 and August 1994

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:

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Contact_Organization: USGS BRD Center for Biological Informatics
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Browse_Graphic:

Browse_Graphic_File_Name: <http://biology.usgs.gov/npsveg/isro/images/isroaa.pdf>
Browse_Graphic_File_Description: 242 kb
Browse_Graphic_File_Type: PDF

Taxonomy:

Keywords/Taxon:

Taxonomic_Keyword_Thesaurus: None
Taxonomic_Keywords: Standard National Vegetation Classification System
Taxonomic_Keywords: plant communities

General_Taxonomic_Coverage:

Vegetation Alliances of the National Vegetation Classification System (October 1995)

Taxonomic_Classification:

Taxon_Rank_Name: Kingdom
Taxon_Rank_Value: Plantae
Applicable_Common_Name: plants

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

The attributes for the accuracy assessment were recorded in the field in July - September, 1998. 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

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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 differences between observation team identifications.

Logical_Consistency_Report:

All attributes are codes that correspond to vegetation communities and have been checked for typographical and logical errors.

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. Vegetation communities were identified on the basis of a dichotomous field key and plant 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: U.S. National Biological Survey

Originator: U.S. National Park Service

Originator: Department of the Interior

Publication_Date: 199411

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

Geospatial_Data_Presentation_Form: procedure report

Publication_Information:

Publication_Place: Denver, CO

Publisher:

USGS, Biological Resources Division, Center for Biological Informatics

Other_Citation_Details:

Prepared by: Environmental Systems Research Institute; Redlands, CA and National Center for 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 National Biological Survey and National Park Service.

Type_of_Source_Media: electronic document

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

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Beginning_Date: 199411

Ending_Date: Present

Source_Currentness_Reference: publication date

Source_Citation_Abbreviation: Veg Mapping Program Accuracy Assessment Procedures

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 July - September, 1998 to verify the accuracy of the vegetation communities spatial data developed by the USGS-NPS Vegetation Mapping Program for Isle Royale National Park. 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 Isle Royale National Park.

Source_Used_Citation_Abbreviation: Accuracy Assessment Procedure Document

Process_Date: 199810

Spatial_Data_Organization_Information:

Direct_Spatial_Reference_Method: 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: 16

Transverse_Mercator:

Scale_Factor_at_Central_Meridian: 0.9996

Longitude_of_Central_Meridian: -105

Latitude_of_Projection_Origin: 0

False_Easting: 0

False_Northing: 0

Planar_Coordinate_Information:

Planar_Coordinate_Encoding_Method: coordinate pair

Coordinate_Representation:

Abscissa_Resolution: 371.951 m

Ordinate_Resolution: 371.951 m

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: 297.257

Entity_and_Attribute_Information:

Overview_Description:

Entity_and_Attribute_Overview:

The National Vegetation Classification Standard 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 existing vegetation (floristics) and reflect the phyto-sociological standards that were originally developed by European ecologists. The vegetation

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classification is continually advanced through the collection and analysis of new field data and will be greatly strengthened during the course of the USGS-NPS mapping efforts. Data file attributes include species, alliance, community element, and land cover.

- 01,Jack pine - black spruce / feathermoss forest (forest phase)
- 02,Spruce - fir / feathermoss forest
- 03,White cedar - boreal conifer mesic forest
- 04,White cedar - (mixed conifer) / alder swamp (open phase)
- 05,Black spruce / dwarf-shrub swamp complex
- 06,White cedar - (mixed conifer) / alder swamp (closed phase)
- 08,Maple - yellow birch - northern hardwoods forest (sugar maple phase)
- 09,Maple - yellow birch - northern hardwoods forest (mixed phase)
- 11,Red oak - sugar maple forest
- 12,Paper birch / bush honeysuckle - fir forest
- 13,Aspen - birch / boreal conifer forest (mixed aspen-birch phase)
- 15,Aspen - birch / sugar maple - mixed hardwoods forest (mixed phase)
- 17,Black ash - mixed hardwood swamp complex
- 18,Northern tamarack rich swamp
- 19,Balsam fir / paper birch forest
- 20,White spruce - balsam fir - aspen forest
- 21,White cedar - yellow birch forest (cedar - birch phase)
- 22,Jack pine - black spruce / feathermoss forest (woodland phase)
- 23,White spruce woodland alliance
- 25,Aspen - birch / boreal conifer forest (sparse canopy phase)
- 26,Common juniper rocky krummholz
- 27,Boreal rocky shrubland
- 28,Speckled alder swamp
- 29,Dwarf shrub fen complex
- 30,Poverty grass barrens
- 31,Bluejoint eastern meadow
- 32,Sedge meadow complex
- 49,Red maple - ash - birch swamp forest
- 50,Yellow birch - (spruce) forest
- 51,Boreal pine rocky woodland
- 53,Aspen - birch / boreal conifer forest (woodland phase)
- 54,Spruce - fir and sugar maple - yellow birch mosaic
- 55,Aspen - birch / sugar maple - mixed hardwoods forest (paper birch phase)
- 56,White pine - aspen - birch forest
- 60,Northern (laurentian) igneous / metamorphic moist cliff scrub
- 61,Great Lakes bedrock lakeshore
- 63,Great Lakes cobble / gravel lakeshore
- 67,Great Lakes bedrock lakeshore - (undifferentiated bedrock)
- 83,White cedar - balsam fir / leatherleaf / black crowberry krummholz
- 88,Canada yew mixed shrubland
- 90,Balsam fir woodland
- 98,Water
- 99,Urban/built-up
- 10A,Maple - yellow birch - northern hardwoods forest (yellow birch phase)
- 16A,Aspen - birch / sugar maple - mixed hardwoods forest (aspen phase)
- 16B,Aspen - birch / boreal conifer forest (aspen phase)
- 16C,Aspen - red maple forest
- 17A,Black ash (cedar) - mixed hardwoods swamp complex
- 19A,Balsam fir - aspen - paper birch forest
- 19B,Balsam fir / Canada yew - devils club forest
- 25A,Aspen - red maple rocky woodland
- 32A,Sedge / sphagnum meadow complex

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50A, White cedar - yellow birch forest (mixed phase)
53A, Spruce - fir - aspen open forest
67A, Great Lakes cobble / gravel lakeshore - (undifferentiated gravel)

Entity_and_Attribute_Detail_Citation:

U.S. National Biological Survey, U.S. National Park Service, Department of the Interior November 1994, Accuracy Assessment Procedures, NBS/NPS Vegetation Mapping Program, Denver, CO, USGS, Biological Resources Division, Center for Biological Informatics, Prepared by: Environmental Systems Research Institute; Redlands, CA and National Center for 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 National Biological Survey and National Park Service. electronic document
http://biology.usgs.gov/npsveg/standards/NPSVI_Accuracy_Assessment_Guidelines_ver2.pdf

Distribution_Information:

Distributor:

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Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Format_Name: HTML

Digital_Transfer_Option:

Online_Option:

Computer_Contact_Information:

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Network_Address:

Network_Resource_Name: <http://biology.usgs.gov/npsveg/isro/index.html>

Access_Instructions: Internet Access

Fees: None

Metadata_Reference_Information:

Metadata_Date: 20010511

Metadata_Review_Date: 20100601

Metadata_Contact:

Contact_Information:

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Contact_Organization: USGS BRD Center for Biological Informatics

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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