

Isle Royale National Park, Field Plots Metadata

Identification_Information:

Citation:

Citation_Information:

Originator: U.S. Geological Survey Department of the Interior

Publication_Date: 199808

Title: Field Plot Points for Isle Royale National Park Vegetation Mapping Project

Geospatial_Data_Presentation_Form: Database

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

Other_Citation_Details:

Created in part by Environmental Systems Research Institute, Inc. Redlands,
CA under contract from USGS/BRD/CBI.

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

Description:

Abstract:

Vegetation field plots at Isle Royale National Park were visited, described, and documented in a digital database. The database consists of 2 parts - (1) Physical Descriptive Data and (2) Species Listings.

Purpose:

The vegetation plots were used to describe the vegetation in and around Wind Cave National Park and to assist in developing a final mapping classification system.

Provide National Parks with the necessary tools to effectively manage their natural resources. Plot data are collected and analyzed to develop a classification (using the Standardized National Vegetation Classification System) and description of vegetation types in preparation for photointerpretation and mapping of the Park's vegetation types.

Supplemental_Information:

Isle Royale National Park was authorized on March 3, 1931; it was formally established in 1940, and officially dedicated in 1946. Most of the park's land area (98%) was designated as a Wilderness area in October 1976, and later additions increased the total Wilderness to 99% of the park. The park was designated an International Biosphere Reserve in 1980.

Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199706

Ending_Date: 199709

Currentness_Reference:

Ground Condition and as written in report: Plot sampling was conducted from June 4, 1997 to September 23, 1997.

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

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South_Bounding_Coordinate: 47.8

Description_of_Geographic_Extent:

Isle Royale National Park, Michigan and environs. Isle Royale National Park is an archipelago of islands located in the northwestern region of Lake Superior close to the United States-Canada border. The park is located about 60 miles northwest of Michigan's Keweenaw Peninsula, about 22 miles east of Grand Portage, Minnesota, and about 35 miles southeast of Thunder Bay, Ontario.

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: Environmental System Research Institute
Theme_Keyword: association
Theme_Keyword: vegetation classification
Theme_Keyword: sampling plots
Theme_Keyword: alliance
Theme_Keyword: land cover
Theme_Keyword: vegetation
Theme_Keyword: community
Theme_Keyword: land use
Theme_Keyword: vegetation plots

Place:

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

Taxonomy:

Keywords/Taxon:

Taxonomic_Keyword_Thesaurus: None
Taxonomic_Keywords: vegetation classification
Taxonomic_Keywords: Standardized National Vegetation Classification System
Taxonomic_Keywords: alliance
Taxonomic_Keywords: community association
Taxonomic_Keywords: plant communities

Taxonomic_System:

Classification_System/Authority:

Classification_System_Citation:

Citation_Information:

Originator:

United States Department of the Interior,
National Biological Survey and National Park Service

Publication_Date: 19941101

Title: Standardized National Vegetation Classification System

Edition: Version 1

Geospatial_Data_Presentation_Form: Document - Classification System

Series_Information:

Series_Name: NBS/NPS Vegetation Mapping Program

Issue_Identification: Final Draft

Publication_Information:

Publication_Place: Redlands, California

Publisher: ESRI

Other_Citation_Details: Created under contract to the USGS-BRD-CBI by The Nature Conservancy.

Taxonomic_Procedures:

Vegetation associations were identified; no specimens nor vouchers were collected as a part of this process.

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Taxonomic_Completeness:

Conforms with FGDC standardized vegetation classification system.

Taxonomic_Classification:

Taxon_Rank_Name: Kingdom

Taxon_Rank_Value: Plantae

Applicable_Common_Name: plants

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 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

Contact_Electronic_Mail_Address: gs-b-npsveg@usgs.gov

Browse_Graphic:

Browse_Graphic_File_Name: <http://biology.usgs.gov/npsveg/isro/images/isroplots.pdf>

Browse_Graphic_File_Description: Locations of vegetation plot samples; low resolution for web browsing.

Browse_Graphic_File_Type: PDF

Cross_Reference:

Citation_Information:

Originator: U.S. Geological Survey, Department of the Interior

Publication_Date: 19990909

Title: Isle Royale National Park, Plot Database

Geospatial_Data_Presentation_Form: Database

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

Other_Citation_Details:

Created in large part by Environmental Research Institute, Inc. Redlands, CA under contract from USGS/BRD/CBI.

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

Cross_Reference:

Citation_Information:

Originator: U.S. Geological Survey, Department of the Interior

Publication_Date: 200009

Title: Isle Royale National Park, Accuracy Assessment

Geospatial_Data_Presentation_Form: Database

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Isle Royale National Park

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Isle Royale National Park

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.

Online_Linkage: <http://biology.usgs.gov/npsveg/isro/isrorpt.pdf>

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

Physical description - Descriptive plot data were collected for 182 sites whose vegetation represents a full spectrum of alliance types present within Isle Royale National Park and its immediate surroundings. Attributes collected for each site include: a unique plot identification code, park name, quad name, UTM coordinates, UTM projection, plot survey date, surveyor's name, length, width, photo type, elevation, slope aspect, topographic position, landform, surface geology, Cowardin System category, hydrology, surface material description, soil texture, soil drainage, leaf phenology, leaf type, and physiognomy. Species - Descriptive plot data were collected for 182 sites whose vegetation represents a full spectrum of alliance types present within Isle Royale National Park. Species - this database, is the second of two databases containing plot field data, delineates species and stratum information. Individual species described at each of 182 plots is listed, one line per species, with the following information: Plot Identification Code, Numeric Species Code, Species Name, Species Cover Plantcode, and Strata Code, height, cover, and an alpha-numeric strata code.

Logical_Consistency_Report:

Physical description - Entries for each of the listed attributes are in the form of consistent groupings of either textual or numerical descriptors. Species - Entries for each of the listed attributes are in the form of consistent groupings of either textual or numerical descriptors, as defined above under "Attribute Accuracy Report".

Completeness_Report:

Physical description - Descriptive entries for each of the 182 plots are complete for each of the applicable attributes listed in the database. Species - One species is entered per line, by plot code, with multiple species listed for each plot, one per row. Plot codes and species names are complete for each row, but some species codes, cover and strata information is missing (because it was not present on the original field forms).

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

X,Y UTM coordinates representing each of the 71 plots were collected via GPS under selective availability with post processing for differential correction. The differentially corrected GPS coordinates have accuracies in the X and Y direction of +/- 2 to 5 meters.

Vertical_Positional_Accuracy:

Vertical_Positional_Accuracy_Report:

Elevations for plots were obtained from the USGS 24,000 quad maps for Isle Royale, and are estimated to be +/- 15 m.

Lineage:

Methodology:

Methodology_Type: Field

Methodology_Identifier:

Methodology_Keyword_Thesaurus: None

Methodology_Keyword: releve

Methodology_Keyword: plot

Methodology_Keyword: sampling

Methodology_Description: Field sampling using releve plots

Source_Information:

Source_Citation:

Citation_Information:

Originator:

National Biological Survey (Now USGS/Biological Resources Division)

USGS-NPS Vegetation Mapping Program
Isle Royale National Park

Originator: and National Park Service

Publication_Date: 199411

Title:

Standardized National Vegetation Classification System; protocol document for the USGS-NPS Vegetation mapping Program

Geospatial_Data_Presentation_Form: protocol document

Edition: Final Draft

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Protocol documents

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS/BRD, Center for Biological Informatics

Other_Citation_Details:

Report prepared under contract by The Nature Conservancy, 1815 N. Lynn Street, Arlington, Virginia 22209 and Environmental Systems Research Institute, 380 New York Street, Redlands, California 92373

Online_Linkage: http://www.fgdc.gov/standards/projects/FGDC-standards-projects/vegetation/NVCS_V2_FINAL_2008-02.pdf/

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199411

Ending_Date: 2010

Source_Currentness_Reference: Publication Date and indefinitely

Source_Citation_Abbreviation: SNVCS protocol document

Source_Contribution:

This document describes and defines the vegetation classification system which is to be used for describing and mapping the vegetation at Isle Royale National Park

Source_Information:

Source_Citation:

Citation_Information:

Originator: USGSBRD, Center for Biological Informatics

Publication_Date: 20000909

Title:

Classification of the Vegetation of Isle Royale National Park

Geospatial_Data_Presentation_Form: isro classification document

Series_Information:

Series_Name: USGS-NPS Vegetation Mapping Program

Issue_Identification: Isle Royale National Park

Publication_Information:

Publication_Place: Denver, CO

Publisher: USGS/BRD, Center for Biological Informatics

Other_Citation_Details:

This report was generated by The Nature Conservancy under contract to the USGS/BRD, Center for Biological Informatics

Online_Linkage: <http://biology.usgs.gov/npsveg/isro/isrorprt.pdf>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199706

Ending_Date: 199709

Source_Currentness_Reference: Ground Condition, summer 1997

Source_Citation_Abbreviation: isro sample and classification

Source_Contribution: Report summarizing plot data collection effort

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Source_Information:

Source_Citation:

Citation_Information:

Originator:

United States Dept. of the Interior, National Biological Survey (now USGS Biological Resources Division) and the National Park Service

Publication_Date: 199412

Title: Field Methods for Vegetation Mapping

Geospatial_Data_Presentation_Form: report

Publication_Information:

Publication_Place: Denver, CO

Publisher:

USGS/Biological Resources Division, Center for Biological Informatics

Other_Citation_Details:

This report was generated by The Nature Conservancy under contract to the USGS/BRD, CBI

Online_Linkage: <http://biology.usgs.gov/npsveg/standards/fieldmethodsrap.pdf>

Type_of_Source_Media: Online

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 199412

Ending_Date: 2010

Source_Currentness_Reference: Publication Date and indefinitely

Source_Citation_Abbreviation: field methods protocol document

Source_Contribution:

This document defines the methods and protocols for field data collection to be used as part of the USGS-NPS Vegetation Mapping Program

Process_Step:

Process_Description:

The following describes the tasks performed by The Nature Conservancy to produce descriptive data for 182 vegetation sampling plots in two separate database files. The second of the three contains listings of individual species found in each plot, along with height and cover estimates, and strata delineations. The SPECIES LISTING database contains line entries for each species including the Plot Code, Numeric species code, full scientific species name, cover estimate, a unique alphanumeric species identifier (plant code), listings of individual strata found in each plot, along with cover estimates and height (strata) delineations. The STRATA LISTING database contains line entries for each strata including the Plot Code, full species name, height, cover, and Strata delineation. Plot sites were selected subjectively because of the heterogeneity of the vegetation and the small number of samples per type. Since aerial photos were not available at the time of plot selection, visual reconnaissance was conducted at the summit of the bluff to examine vegetation patterns for the purpose of plot placement. Plot data were manually recorded on field forms on-site, and subsequently keyed into the database files described herein. Information in the plot database was then used to develop the classification system and plant identification keys contained in the ISLE ROYALE SAMPLING AND CLASSIFICATION REPORT.

Process_Date: 19990909

Source_Used_Citation_Abbreviation: SNVCS protocol document

Source_Used_Citation_Abbreviation: Field Methods for Vegetation Mapping

Source_Produced_Citation_Abbreviation: isro sample and classification

Source_Produced_Citation_Abbreviation: isro Vegetation Descriptions

Process_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Jim Drake

Contact_Organization: The Association for Biodiversity Information

Contact_Position: Vegetation Program Manager

Contact_Address:

Address_Type: Physical Address

USGS-NPS Vegetation Mapping Program
Isle Royale National Park

Address: 1313 5th Street SE
Address: Suite 314
City: Minneapolis
State_or_Province: MN
Postal_Code: 55414
Country: USA
Contact_Voice_Telephone: 612-331-0729
Contact_Electronic_Mail_Address: jdrake@abi.org

Cloud_Cover: 0

Spatial_Data_Organization_Information:
Direct_Spatial_Reference_Method: vector

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: 100
Ordinate_Resolution: 100
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:

Each of 182 vegetation plots has attributes for physical description, species and strata. Physical description - (Plot number, plot code, common name, scientific name, state, park name, quad name, utm zone, map project, gps file, raw utm x, raw utm y, corrected utm x, corrected utm y, surveyors date, surveyors, length, width, photos, permanent, elevation, slope, aspect, topographical position, landform, surficial geology, cowardin system type, hydrography, bedrock, large rock, small rock, sand, litter duff, wood, bare soil, other soil, soil texture, soil drainage, leaf phenology, leaf type, and physiology). Species - (sp_code is a project specific code for each species found, species is the scientific name for that species, spcover is the species present and the percent cover for each species, plant code is the first two letters of the genus and first two letters of the species. If the code are not unique a number is added to make the code unique). Strata - (height and cover are average percent cover of that particular species, 1 = 0-10%, 2 = 10-25%, 3 = 25-60% and 4 = 60-100%, pstrata is the type of vegetation, T1 = emergent, T2 = canopy, T3 = sub-canopy, S1 = tall shrub, S2 = short shrub, H = herbaceous, N = non-vascular, V = vine/liana, and E = epiphyte).

Entity_and_Attribute_Detail_Citation:

Field Methods for Vegetation mapping, December 1994. Prepared for: the United States Department of the Interior, National Biological Survey (now the USGS Biological Resources Division) and the National Park

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Isle Royale National Park

Service. Prepared by: The Nature Conservancy, and Environmental Systems Research Institute.
<http://biology.usgs.gov/npsveg/standards/fieldmethodsrrpt.pdf>.

Distribution_Information:

Distributor:

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

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Distribution_Liability:

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The information contained in these data is dynamic and may change over time. The data are not better than the original sources from which they were derived. It is the responsibility of the data user to use the data appropriately and consistent within the limitations of geospatial data in general and these data in particular. Any related graphics (if available) are intended to aid the data user in acquiring relevant data; it is not appropriate to use the related graphics as data.

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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/isro/index.html>

Access_Instructions: Internet Access

Fees: None

Metadata_Reference_Information:

Metadata_Date: 20010222

Metadata_Review_Date: 20100601

Metadata_Contact:

USGS-NPS Vegetation Mapping Program
Isle Royale National Park

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

Contact_Electronic_Mail_Address: 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