Focal Areas of
Conservation Significance

Tags
Resilience, Focal Areas, Area
Name

Summary

Resilience concerns the ability of a living system to adjust to climate change, to moderate potential damages, to take advantage of opportunities, or to cope with consequences; in short, its capacity to adapt. In this project we aim to identify the most resilient examples of key geophysical settings (e.g. sand plains, granite mountains, limestone valleys, etc.) to provide conservationists with a nuanced picture of the places where conservation is most likely to succeed over centuries. The project had three parts: 1) identifying and mapping the geophysical settings, 2) developing a quantitative estimate of resilience for each setting based on landscape complexity and permeability, and 3) identifying key linkages that may be important in facilitating climate-induced regional movements. The final products include the identification of sites with high or low estimated resilience and overlays of these sites with the TNC portfolio of important biodiversity sites. The products were presented in an ecoregional context, highlighting sites with the highest estimated resilience for each setting within each ecoregion.

Description

Focal areas were created from above average 1,000 acre hexagons. Above average 1,000 acre hexagons were dissolved by adjacency and then manually split by landscape characteristics to create groups of hexagons in similar landscape context. These focal areas are created to facilitate landscape conservation and planning. For detailed field applications see pdf document focalareafielddefinitions.pdf.

Credits

The Nature Conservancy, Eastern Division, 2012. For More information contact: Melissa_Clark@tnc.org

Use limitations

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Extent

West -83.550344 East -58.771121
North 51.800121 South 33.304278

Scale Range
  Maximum (zoomed in) 1:5,000
  Minimum (zoomed out) 1:150,000,000

ArcGIS Metadata

Topics and Keywords

  * CONTENT TYPE Downloadable Data

Citation

  * TITLE TNC_Focal_Areas

  PRESENTATION FORMATS * digital map

Resource Details

  DATASET LANGUAGES * English (UNITED STATES)

  SPATIAL REPRESENTATION TYPE * vector

  * PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS
  10.1.1.3143

  CREDITS
    The Nature Conservancy, Eastern Division, 2012. For More information contact: Melissa_Clark@tnc.org

  ARCGIS ITEM PROPERTIES
    * NAME TNC_Focal_Areas
    * SIZE 1.560
    * LOCATION
      * ACCESS PROTOCOL Local Area Network

Extents

  EXTENT
    GEOGRAPHIC EXTENT
      BOUNDING RECTANGLE
        EXTENT TYPE Extent used for searching
        * WEST LONGITUDE -83.550344
        * EAST LONGITUDE -58.771121
        * NORTH LATITUDE 51.800121
        * SOUTH LATITUDE 33.304278
        * EXTENT CONTAINS THE RESOURCE Yes

  EXTENT IN THE ITEM'S COORDINATE SYSTEM
    * WEST LONGITUDE 1100466.500000
    * EAST LONGITUDE 2744905.000000
    * SOUTH LATITUDE 1576746.625000
    * NORTH LATITUDE 3284245.500000
    * EXTENT CONTAINS THE RESOURCE Yes

Resource Constraints

  CONSTRAINTS
    LIMITATIONS OF USE
      The Nature Conservancy reserves all rights in data provided. All data are provided as is. This is not a
      survey quality dataset. The Nature Conservancy makes no warranty as to the currency,

Spatial Reference

ARCGIS COORDINATE SYSTEM
* TYPE Projected
* GEOGRAPHIC COORDINATE REFERENCE GCS_North_American_1983
* PROJECTION NAD_1983_Albers
* COORDINATE REFERENCE DETAILS
  PROJECTED COORDINATE SYSTEM
    X ORIGIN -16901100
    Y ORIGIN -6972200
    XY SCALE 266467840.99085236
    Z ORIGIN -100000
    Z SCALE 10000
    M ORIGIN -100000
    M SCALE 10000
    XY TOLERANCE 0.001
    Z TOLERANCE 0.001
    M TOLERANCE 0.001
    HIGH PRECISION true
    WELL-KNOWN TEXT
    PROJCS["NAD_1983_Albers",GEOGCS["GCS_North_American_1983",DATUM["D_North_American_1983",SPHEROID["GRS_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Albers"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",96.0],PARAMETER["Standard_Parallel_1",29.5],PARAMETER["Standard_Parallel_2",45.5],PARAMETER["Latitude_Of_Origin",23.0],UNIT["Meter",1.0]]

REFERENCE SYSTEM IDENTIFIER
* VALUE 0

Spatial Data Properties

VECTOR
* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS
  FEATURE CLASS NAME TNC_Focal_Areas
  * OBJECT TYPE composite
  * OBJECT COUNT 1010

ARCGIS FEATURE CLASS PROPERTIES
  FEATURE CLASS NAME TNC_Focal_Areas
  * FEATURE TYPE Simple
  * GEOMETRY TYPE Polygon
  * HAS TOPOLOGY FALSE
  * FEATURE COUNT 1010
  * SPATIAL INDEX TRUE
  * LINEAR REFERENCING FALSE

Distribution

DISTRIBUTION FORMAT
* NAME Shapefile

TRANSFER OPTIONS
* TRANSFER SIZE 1.560

Fields

DETAILS FOR OBJECT TNC_Focal_Areas
* TYPE Feature Class
* ROW COUNT 1010

FIELD FID
* ALIAS FID
* DATA TYPE OID
* WIDTH 4
* PRECISION 0
* SCALE 0
* FIELD DESCRIPTION
  Internal feature number.

* DESCRIPTION SOURCE
  Esri

* DESCRIPTION OF VALUES Sequential unique whole numbers that are automatically generated.

FIELD OBJECTID
* ALIAS OBJECTID
* DATA TYPE Integer
* WIDTH 9
* PRECISION 9
* SCALE 0
* FIELD DESCRIPTION
  Internal feature number.

* DESCRIPTION SOURCE
  ESRI

* DESCRIPTION OF VALUES Sequential unique whole numbers that are automatically generated.

FIELD Shape
* ALIAS Shape
* DATA TYPE Geometry
* WIDTH 0
* PRECISION 0
* SCALE 0
* FIELD DESCRIPTION
  Feature geometry.

* DESCRIPTION SOURCE
  ESRI

* DESCRIPTION OF VALUES Coordinates defining the features.

FIELD UID
* ALIAS UID
* DATA TYPE Integer
* WIDTH 9

* PRECISION 9
* SCALE 0
FIELD DESCRIPTION
    Focal area unique ID.

DESCRIPTION SOURCE
    The Nature Conservancy

FIELD Shape_Area
    * ALIAS Shape_Area
    * DATA TYPE Double
    * WIDTH 19
    * PRECISION 0
    * SCALE 0
    * FIELD DESCRIPTION
        Area of feature in internal units squared.

    * DESCRIPTION SOURCE
        ESRI

    * DESCRIPTION OF VALUES Positive real numbers that are automatically generated.

FIELD Shape_Leng
    * ALIAS Shape_Leng
    * DATA TYPE Double
    * WIDTH 19
    * PRECISION 0
    * SCALE 0
    FIELD DESCRIPTION
        Length of feature.

    DESCRIPTION SOURCE
        ESRI

FIELD FA_NAME
    * ALIAS FA_NAME
    * DATA TYPE String
    * WIDTH 100
    * PRECISION 0
    * SCALE 0
    FIELD DESCRIPTION
        Focal area name.

    DESCRIPTION SOURCE
        The Nature Conservancy

FIELD CAN
    * ALIAS CAN
    * DATA TYPE SmallInteger
    * WIDTH 4
    * PRECISION 4
    * SCALE 0
    FIELD DESCRIPTION
        Flag for if the focal area is in Canada. 1 if in Canada: 0 if in the United States.

    DESCRIPTION SOURCE
        The Nature Conservancy

FIELD PART_ECO
* ALIAS PART_ECO
* DATA TYPE SmallInteger
* WIDTH 4
* PRECISION 4
* SCALE 0
FIELD DESCRIPTION
Flag for if the ecoregion is partially assessed ecoregions. Results in partial ecoregions may be biased and could be misleading. 1 if in partial ecoregion; 0 if in full ecoregion.

DESCRIPTION SOURCE
The Nature Conservancy

FIELD CLASS
* ALIAS CLASS
* DATA TYPE SmallInteger
* WIDTH 4
* PRECISION 4
* SCALE 0
FIELD DESCRIPTION
The dataset includes a two level prioritization based on whether the site meets both climate resilience criteria and contains significant current biodiversity targets. 1 if Priority Climate and Current Biodiversity Area; 2 if Priority Climate Area.

DESCRIPTION SOURCE
The Nature Conservancy

FIELD LANDCOM
* ALIAS LANDCOM
* DATA TYPE Double
* WIDTH 19
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Landscape complexity score stratified by setting and ecoregion.

DESCRIPTION SOURCE
The Nature Conservancy

FIELD LOCCON
* ALIAS LOCCON
* DATA TYPE Double
* WIDTH 19
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Local connectivity score stratified by setting and ecoregion.

DESCRIPTION SOURCE
The Nature Conservancy

FIELD I_RESSCORE
* ALIAS I_RESSCORE
* DATA TYPE Double
* WIDTH 19
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Integrated resilience score stratified by setting and ecoregion.

FIELD FLOW_CON
* ALIAS FLOW_CON
* DATA TYPE Double
* WIDTH 19
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Amount of concentrated regional flow in the focal area.

FIELD PER_CONF
* ALIAS PER_CONF
* DATA TYPE Double
* WIDTH 19
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Percent of site with confirmed Nature Conservancy portfolio targets.

FIELD Matrix_For
* ALIAS Matrix_For
* DATA TYPE Double
* WIDTH 19
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Acres of Nature Conservancy matrix forest in the focal area.

FIELD Rare_Spec
* ALIAS Rare_Spec
* DATA TYPE Integer
* WIDTH 9
* PRECISION 9
* SCALE 0
FIELD DESCRIPTION
Number of Nature Conservancy viable locations of a rare species population.

FIELD Ex_Comm
* ALIAS Ex_Comm
* DATA TYPE Integer
* WIDTH 9
* PRECISION 9
* SCALE 0
FIELD DESCRIPTION
Number of Nature Conservancy portfolio exemplary natural community.

DESCRIPTION SOURCE
The Nature Conservancy

FIELD OSI_Broad
* ALIAS OSI_Broad
* DATA TYPE String
* WIDTH 10
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
The OSI factors are included in the dataset under the heading "OSI broad" the included resilient areas particularly high in landscape complexity (L), diversity of settings (D), local connectedness (I), underrepresented settings (calcareous [C] or silt [S]), flow concentration areas (F). Many focal areas scored high in one or two factors but some scored above the mean for five factors at once. Their codes read "CLDFI" and "CSLDI." These are included in the GIS dataset in the field "OSI_Broad".

DESCRIPTION SOURCE
The Nature Conservancy

FIELD OSI_NARROW
* ALIAS OSI_NARROW
* DATA TYPE String
* WIDTH 10
* PRECISION 0
* SCALE 0

Metadata Details

* METADATA LANGUAGE English (UNITED STATES)
* METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format

SCOPE OF THE DATA DESCRIBED BY THE METADATA * dataset
SCOPE NAME * dataset

* LAST UPDATE 2012-11-12

ARCGIS METADATA PROPERTIES
METADATA FORMAT ArcGIS 1.0
METADATA STYLE FGDC CSDGM Metadata
STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2012-11-07 16:10:05
LAST MODIFIED IN ARCGIS FOR THE ITEM 2012-11-12 10:07:01

AUTOMATIC UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2012-11-08 15:16:23

Thumbnail and Enclosures

THUMBNAIL
THUMBNAIL TYPE JPG

FGDC Metadata (read-only)