

## Biological Hotspot (VT)



### Tags

Biota, Vermont, Element Occurrence Record, Biological Hotspot, Biological Diversity

### Summary

These polygons, which are taken to represent areas of high biological significance or diversity, were mapped by analysts working for the Vermont Biodiversity Project. The stated goal of the VBP is "to maintain ecological integrity in a manner that insures the long- term viability of all native species and natural community type in Vermont within their natural range." To this end, the VBP sought to identify a network of areas of high biodiversity value that deserve conservation attention. The effort to map biological hotspots is one of several complementary strategies undertaken to achieve this goal.

### Description

This dataset is the result of an effort to map biological "hotspots" in Vermont based on the "element occurrences" in the Nongame and Natural Heritage Program database. The NNHP database, compiled and maintained by the VT Department of Fish and Wildlife, records over 4000 locations of rare, threatened, and endangered plants, animals, and exemplary natural communities throughout the state. 2332 of the highest quality and rarest of these point locations were mapped, and polygons were drawn economically around concentrations of mapped points. An attempt was made to include point locations characteristic of a given landscape or region (an escarpment and talus slopes, for example, or a region of hills and rich fens) within individual polygons. 544 of the 2332 occurrences were not included within drawn polygons-- these more dispersed occurrences are candidates for finer-scaled conservation measures.

### Credits

Nongame and Natural Heritage Program, VT Dept of Fish and Wildlife Elizabeth H. Thompson, The Nature Conservancy Spatial Analysis Lab, School of Natural Resources, University of VT

### Use limitations

VCGI and the State of Vermont make no representations of any kind, including but not limited to the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied with respect to the data.

### Extent

West -73.454064 East -71.623762

North 45.012451 South 42.723181

### Scale Range

Maximum (zoomed in) 1:5,000

Minimum (zoomed out) 1:150,000,000

### ArcGIS Metadata

#### Topics and Keywords

THEMES OR CATEGORIES OF THE RESOURCE biota

\* CONTENT TYPE Downloadable Data

PLACE KEYWORDS Vermont

THEME KEYWORDS biota

THESAURUS

TITLE ISO 19115 Topic Category

THEME KEYWORDS element occurrence record, biological hotspot, biological diversity

## Citation

\* TITLE ECOLOGIC\_HOTSPOTS\_POLY

PUBLICATION DATE 2000-07-14

EDITION 2000

PRESENTATION FORMATS digital map

SERIES

NAME Biological Hotspots in Vermont from VT Biodiversity Project

OTHER CITATION DETAILS Tile Structure - STATE

## Citation Contacts

RESPONSIBLE PARTY

ORGANIZATION'S NAME

VCGI CONTACT'S ROLE

publisher

CONTACT INFORMATION

ADDRESS

DELIVERY POINT Burlington, VT

RESPONSIBLE PARTY

ORGANIZATION'S NAME David E. Capen

CONTACT'S ROLE originator

## Resource Details

DATASET LANGUAGES English (UNITED STATES)

STATUS completed

SPATIAL REPRESENTATION TYPE vector

GRAPHIC OVERVIEW

FILE NAME

FILE DESCRIPTION GIF

FILE TYPE GIF

## SUPPLEMENTAL INFORMATION

The point coverage of NNHP element occurrences used to generate the polygons in this dataset is available from VCGI. It was current as of March, 1999. Point locations in the publicly available dataset are approximate only, and species or community names associated with the points are not given (to protect the innocent). For a further discussion of the methodology of the Vermont Biodiversity Project, and how these data fit into it, see the Technical Report of the VBP, available on-line at ...

\* **PROCESSING ENVIRONMENT** Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; ESRI ArcGIS 10.0.4.4000

## CREDITS

Nongame and Natural Heritage Program, VT Dept of Fish and Wildlife Elizabeth H. Thompson, The Nature Conservancy  
Spatial Analysis Lab, School of Natural Resources, University of VT

## ARCGIS ITEM PROPERTIES

- \* **NAME** ECOLOGIC\_HOTSPOTS\_POLY
- \* **SIZE** 0.076
- \* **LOCATION**
  - \* **ACCESS PROTOCOL** Local Area Network

## Extents

### EXTENT

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

**EXTENT TYPE** Extent used for searching

- \* **WEST LONGITUDE** -73.454064
- \* **EAST LONGITUDE** -71.623762
- \* **SOUTH LATITUDE** 42.723181
- \* **NORTH LATITUDE** 45.012451
- \* **EXTENT CONTAINS THE RESOURCE** Yes

### EXTENT

#### DESCRIPTION

Publication Date

#### TEMPORAL EXTENT

**DATE AND TIME** 2000-07-17

#### EXTENT IN THE ITEM'S COORDINATE SYSTEM

- \* **WEST LONGITUDE** 424788.840000
  - \* **EAST LONGITUDE** 569075.190000
  - \* **SOUTH LATITUDE** 25200.110000
  - \* **NORTH LATITUDE** 279142.160000
- \* **EXTENT CONTAINS THE RESOURCE** Yes

## Resource Points of Contact

### POINT OF CONTACT

**ORGANIZATION'S NAME** VT Center for Geographic Information  
**CONTACT'S ROLE** point of contact

#### CONTACT INFORMATION

##### PHONE

**VOICE** (802) 882-3000  
**FAX** (802) 882-3001

##### ADDRESS

**DELIVERY POINT** 58 South Main Street, Suite 2  
**CITY** Waterbury  
**ADMINISTRATIVE**

AREA VT POSTAL  
CODE 05676  
E-MAIL ADDRESS <<http://www.vcgi.org>>

HOURS OF SERVICE 9-5, M-F

## Resource Maintenance

RESOURCE MAINTENANCE  
UPDATE FREQUENCY unknown

## Resource Constraints

LEGAL CONSTRAINTS  
ACCESS CONSTRAINTS other restrictions

### OTHER CONSTRAINTS

Access constraints: VCGI and the State of Vermont make no representations of any kind including, but not limited to the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied with respect to the data.

LEGAL CONSTRAINTS  
USE CONSTRAINTS other restrictions

### OTHER CONSTRAINTS

Use constraints: Additions and updates are made regularly to the Nongame and Natural Heritage Program database. The dataset used to delineate the polygons in this coverage was current as of spring of 1999. Not all areas of the state have been systematically sampled for occurrences of rare, threatened, or endangered species or significant communities. This dataset must be considered a first attempt, and by no means the last, to map biological hotspots in Vermont. It is intended to be used only as a tool for planning and development.

SECURITY CONSTRAINTS  
CLASSIFICATION  
unclassified  
CLASSIFICATION SYSTEM  
N/A  
ADDITIONAL RESTRICTIONS No security considerations.

## CONSTRAINTS

### LIMITATIONS OF USE

VCGI and the State of Vermont make no representations of any kind, including but not limited to the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied with respect to the data.

## Spatial Reference

### ARCGIS COORDINATE SYSTEM

- \* TYPE Projected
- \* GEOGRAPHIC COORDINATE REFERENCE GCS\_North\_American\_1983
- \* PROJECTION NAD\_1983\_StatePlane\_Vermont\_FIPS\_4400
- \* COORDINATE REFERENCE

### DETAILS

### PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 32145  
X ORIGIN -5123000  
Y ORIGIN -14708800  
XY SCALE 450278912.53279358

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\_StatePlane\_Vermont\_FIPS\_4400",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["Transverse\_Mercator"],PARAMETER  
["False\_Easting",500000.0],PARAMETER["False\_Northing",0.0],PARAMETER["Central\_Meridian",-72.5],PARAMETER  
["Scale\_Factor",0.9999642857142858],PARAMETER["Latitude\_Of\_Origin",42.5],UNIT["Meter",1.0],AUTHORITY ["EPSG",32145]]

#### REFERENCE SYSTEM IDENTIFIER

VALUE 32145

- \* CODESPACE EPSG
- \* VERSION 7.4.1

#### Spatial Data Properties

##### VECTOR

- \* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

##### GEOMETRIC OBJECTS

FEATURE CLASS NAME ECOLOGIC\_HOTSPOTS\_POLY

- \* OBJECT TYPE composite
- \* OBJECT COUNT 65

##### ARCGIS FEATURE CLASS PROPERTIES

- \* FEATURE TYPE Simple
- \* GEOMETRY TYPE Polygon
- \* HAS TOPOLOGY FALSE
- \* FEATURE COUNT 65
- \* SPATIAL INDEX FALSE
- \* LINEAR REFERENCING FALSE

#### Data Quality

##### SCOPE OF QUALITY INFORMATION

RESOURCE LEVEL dataset

##### DATA QUALITY REPORT - CONCEPTUAL CONSISTENCY

MEASURE DESCRIPTION None

##### DATA QUALITY REPORT - COMPLETENESS OMISSION

MEASURE DESCRIPTION None

##### DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY

MEASURE DESCRIPTION None. Attribute items beyond the Arc/Info "default 4" are "bpr" (biophysical region) and "acres." The biophysical regions of Vermont were used as a spatial framework for the delineation of "hotspot" polygons (coverage "biophysrg," available from VGCI). Values for item "bpr" are the number of the biophysical region in which the hotspot polygon occurs (or the one in which the largest part of the hotspot occurs). "Acres" values are computed from the "area" item in the coverage

polygon attribute table.

DATA QUALITY REPORT - ABSOLUTE EXTERNAL  
POSITIONAL ACCURACY  
MEASURE DESCRIPTION N/A

DATA QUALITY REPORT - ABSOLUTE EXTERNAL  
POSITIONAL ACCURACY

MEASURE DESCRIPTION Coordinates for NNHP points are only approximate, and polygons were drawn economically, but freely, around element occurrence concentrations mapped at a RF of 1/250,000. Hotspot polygons should be seen as advisory, and interpreted cautiously.

## Lineage

### PROCESS STEP

WHEN THE PROCESS OCCURRED 2000-07-17

DESCRIPTION Documented dataset for distribution-- Charles Ferree, University of Vermont/School of Natural Resources/Spatial Analysis Lab

### SOURCE DATA

DESCRIPTION Locations of rare, threatened and endangered species & significant communities.

### SOURCE CITATION

TITLE EcologicFauna\_ENDANGER

PUBLICATION DATE 1999-03-16

PRESENTATION FORMATS digital map

### RESPONSIBLE PARTY

ORGANIZATION'S NAME VT Dept Fish & Wildlife

CONTACT'S ROLE

originator

### RESPONSIBLE PARTY

ORGANIZATION'S NAME

VCGI CONTACT'S ROLE

publisher

### CONTACT INFORMATION

ADDRESS

DELIVERY POINT Burlington, VT

## Distribution

### DISTRIBUTOR

#### CONTACT INFORMATION

ORGANIZATION'S NAME VT Center for Geographic Information

CONTACT'S ROLE distributor

#### CONTACT INFORMATION

PHONE

VOICE 802/882-3000

FAX 802/882-3001

#### ADDRESS

DELIVERY POINT 58 South Main Street, Suite 2

CITY Waterbury

ADMINISTRATIVE

AREA VT POSTAL

CODE 05676

COUNTRY US  
E-MAIL ADDRESS [info@vcgi.org](mailto:info@vcgi.org)

HOURS OF SERVICE 9am -  
5pm, M-F

ORDERING  
PROCESS

TERMS AND FEES No charge when downloading from the internet, and when no custom processing is required.

DATE OF AVAILABILITY 2000-10-23

TURNAROUND TIME About 5 days.

INSTRUCTIONS

Standard Ordering Instructions: Download from web site or mail-fax a copy of the VCGI 'Data Request Form' which is available from the VGIS web site [http://www.vcgi.org/dataware/order\\_forms](http://www.vcgi.org/dataware/order_forms); Technical Prerequisites: ESRI Arc/Info, ArcView, or ArcExplorer software.

ORDERING  
PROCESS

DATE OF AVAILABILITY 2000-10-23

INSTRUCTIONS

Custom Order Process: Mail or Fax a copy of the VCGI 'Data Request Form' which is available from [http://www.vcgi.org/dataware/order\\_forms](http://www.vcgi.org/dataware/order_forms); Technical Prerequisites: ESRI Arc/Info, ArcView, or ArcExplorer software.

TRANSFER OPTIONS

ONLINE SOURCE

DESCRIPTION EcologicHabitat\_HOTSPOTS

DISTRIBUTION  
FORMAT

\* NAME Shapefile

SPECIFICATION Format Specification: ESRI Shapefile format (compressed to ZIP format); Format Information Content: geospatial data

FILE DECOMPRESSION TECHNIQUE ZIP decompression software

TRANSFER OPTIONS

\* TRANSFER SIZE 0.076

ONLINE SOURCE

LOCATION [http://www.vcgi.org/dataware/default.cfm?layer=EcologicHabitat\\_HOTSPOTS](http://www.vcgi.org/dataware/default.cfm?layer=EcologicHabitat_HOTSPOTS)

DESCRIPTION Download from web site.

TRANSFER OPTIONS

\* TRANSFER SIZE 0.076

Fields

DETAILS FOR OBJECT ECOLOGIC\_HOTSPOTS\_POLY

\* TYPE Feature Class

\* ROW COUNT 65

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 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 BPR

\* ALIAS BPR

\* DATA TYPE Integer

\* WIDTH 5

\* PRECISION 5

\* SCALE 0

FIELD DESCRIPTION

Number of biophysical region in which biological hotspot occurs. Item definition is 2,2,i; item values are--

12-- Taconics/VT Valley

3-- Southern Green Mtns

4-- Southern Piedmont

5-- Champlain Valley

6-- Northern Green Mtns

7-- Northern Piedmont

8-- Northeastern Highlands

DESCRIPTION

SOURCE

UVM/SAL

FIELD ACRES

\* ALIAS ACRES

\* DATA TYPE Double

\* WIDTH 38

\* PRECISION 37

\* SCALE 8

FIELD DESCRIPTION

GIS-computed polygon acreages, from polygon attribute table AREA item. Item definition is 10,10,n,1.

DESCRIPTION

SOURCE

UVM/SAL

FIELD area

\* ALIAS area

\* DATA TYPE Double

\* WIDTH 38

\* PRECISION 37



\* SCALE 9

FIELD len

\* ALIAS len  
\* DATA TYPE Double  
\* WIDTH 38  
\* PRECISION 37  
\* SCALE 9

## References

### AGGREGATE INFORMATION

ASSOCIATION TYPE cross reference

### AGGREGATE RESOURCE NAME

TITLE Rare, Threatened and Endangered Species & Significant Comm.  
PUBLICATION DATE 1999-03-16

PRESENTATION FORMATS digital map

### RESPONSIBLE PARTY

ORGANIZATION'S NAME Everett Marshall, VT Dept Fish & Wildlife  
CONTACT'S ROLE publisher

### CONTACT INFORMATION

ADDRESS

DELIVERY POINT Waterbury, VT 05671-0501

### RESPONSIBLE PARTY

ORGANIZATION'S NAME Everett Marshall  
CONTACT'S ROLE originator

## Metadata Details

METADATA LANGUAGE English (UNITED STATES)

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset

SCOPE NAME \* dataset

\* LAST UPDATE 2013-01-29

### ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0  
METADATA STYLE ISO 19139 Metadata Implementation Specification  
STANDARD OR PROFILE USED TO EDIT METADATA FGDC

CREATED IN ARCGIS FOR THE ITEM 2011-09-20 11:58:38  
LAST MODIFIED IN ARCGIS FOR THE ITEM 2013-01-29 09:13:21

### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes  
LAST UPDATE 2013-01-29 09:13:21

## Metadata Contacts

### METADATA CONTACT

ORGANIZATION'S NAME VCGI  
CONTACT'S ROLE point of  
contact

### CONTACT INFORMATION

PHONE

VOICE 802-882-3000

FAX 802-882-3001

ADDRESS

DELIVERY POINT 58 South Main Street, Suite 2

CITY Waterbury

ADMINISTRATIVE

AREA VT POSTAL

CODE 05676

E-MAIL ADDRESS [info@vcgi.org](mailto:info@vcgi.org)

HOURS OF SERVICE 9am - 5pm M-F

Metadata Constraints

LEGAL CONSTRAINTS

ACCESS CONSTRAINTS other restrictions

USE CONSTRAINTS other restrictions

OTHER CONSTRAINTS

Access constraints:

None

LEGAL CONSTRAINTS

ACCESS CONSTRAINTS other restrictions

USE CONSTRAINTS other restrictions

OTHER CONSTRAINTS

Access constraints:

None

SECURITY CONSTRAINTS

CLASSIFICATION

unclassified

CLASSIFICATION SYSTEM

N/A

ADDITIONAL RESTRICTIONS No security considerations.

Thumbnail and Enclosures

THUMBNAIL

THUMBNAIL TYPE JPG

FGDC Metadata (read-only)