

# Canbys Dropwort - Potential Habitat, July 2022 - NC Department of Transportation

## File Geodatabase Feature Class



### Tags

Canby's dropwort, *Oxypolis canbyi*, Oxyp\_canb, Vascular Plant, Terrestrial, GIS-based model, expert model, Transportation, NRTR, NCDOT, Environment, Location, North Carolina, ATLAS

### Summary

This dataset was originally created in February 2022 as part of the Project ATLAS initiative at NCDOT to support the Environmental Analysis Unit (EAU) Mitigation and Modeling Unit with project delivery in the development phase.

Model output is binary, and includes the USFWS species range, excluding historic counties. The species model range is split between "High" and "Low" potential habitat. "High potential habitat" represents GIS based layer areas deemed suitable habitat, and "Low potential habitat" represents areas deemed low quality or non-habitat. This model identifies all year-round potential suitable habitat for the species.

The Optimal survey window for Canbys Dropwort is Mid July – September.

This dataset supports the production of the Natural Resources Technical Report (NRTR). This dataset also contains information that may assist biologists in preparing background information for field surveys, in order to address protected species for Threatened & Endangered Species Survey Reports, and/or Biological Assessments.

### Description

The Canbys Dropwort Potential Habitat dataset is a polygon layer depicting high and low potential habitat locations for Canbys Dropwort in NC counties that have a USFWS "current" status listing.

Canbys Dropwort (*Tiedemannia canbyi*) occurs in the Coastal Plain and Sandhills in moist habitat areas such as Cypress Savannas, wet meadows, wet pineland savannas, ditches, cypress-pine swamps or sloughs, grass-sedge dominated Carolina bays, and the shallows and edges of cypress/pine ponds. The most vigorous occurrences are found in open bays and ponds that are wet for most of the year with little or no canopy cover. Ideal soils for this perennial herb are acidic, deep, and poorly drained sandy loams or peat-mucks underlain by a clay layer, and have a medium to high organic content and high water table. Soil series that support the species include Coxville, Grady, McColl, Portsmouth, Rains, and Rembert. Canby's Dropwort is restricted to a narrow, intermediate range of mean water depths where too much or too little water can adversely affect it. Evidence of infrequent and shallow inundations is also found at site occurrences.

One population has been observed in NC; however, this population was last observed in 2004 despite more recent searches (NC Natural Heritage Program (NCNHP 2020, USFWS 2015).

### County Information-

- NHP listed counties: Scotland
- FWS listed counties: Scotland

For more information please click here <https://xfer.services.ncdot.gov/gisdot/Metadata/Atlas/TechDocs/>

Datasets developed under Project ATLAS do not replace any NRTR work for future projects and may not be used as a replacement for site visits / field surveys by qualified professionals and hence should be used only as a supporting platform for decision making. Use of this dataset for project scoping or screening is merely pre-decisional

### Credits

The Environmental Analysis Unit (EAU) Mitigation and Modeling Unit within NCDOT was tasked to create this dataset. This dataset supports the production of the Natural Resources Technical Report (NRTR). Annual maintenance of this dataset is handled by the EAU.

Support and maintenance of the enterprise spatial database where this data resides is handled by NCDIT's Transportation GIS Unit.

### e limitations

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### Extent

**West** -79.694963    **East** -79.330248  
**North** 35.044170    **South** 34.629319

### Scale Range

**Maximum (zoomed in)** 1:5,000  
**Minimum (zoomed out)** 1:625,000

### ArcGIS Metadata ►

### Topics and Keywords ►

THEMES OR CATEGORIES OF THE RESOURCE    biota, geoscientificInformation, location, transportation, environment

\* CONTENT TYPE    Downloadable Data  
EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION    No

PLACE KEYWORDS    North Carolina

#### THESAURUS ►

TITLE    User  
CREATION DATE    2022-02-01 00:00:00  
PUBLICATION DATE    2022-07-29 00:00:00

*Hide Thesaurus ▲*

THEME KEYWORDS    Canby's dropwort, Oxypolis canbyi, Oxyp\_canb, Vascular Plant, Terrestrial, GIS-based model, expert model, Transportation, NRTR, NCDOT, Environment, Location, North Carolina, ATLAS

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[Hide Thesaurus ▲](#)

[Hide Topics and Keywords ▲](#)

## Citation ►

TITLE Canbys Dropwort - Potential Habitat, July 2022 - NC Department of Transportation  
CREATION DATE 2022-02-01 00:00:00  
PUBLICATION DATE 2022-07-29 00:00:00

PRESENTATION FORMATS digital map  
FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

[Hide Citation ▲](#)

## Citation Contacts ►

### RESPONSIBLE PARTY

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit  
CONTACT'S POSITION Environmental Program Consultant  
CONTACT'S ROLE point of contact

### CONTACT INFORMATION ►

PHONE  
VOICE 919-707-6136

### ADDRESS

TYPE  
DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive  
CITY Raleigh  
ADMINISTRATIVE AREA NC  
POSTAL CODE 27610  
COUNTRY US  
E-MAIL ADDRESS [ATLAS@ncdot.gov](mailto:ATLAS@ncdot.gov)

### HOURS OF SERVICE

9:00am – 5:00pm Monday - Friday

### CONTACT INSTRUCTIONS

Please send an email with any issues, questions or comments regarding the ATLAS Data Search Tool, ATLAS Screening Tool or ATLAS Workbench. If it is an immediate need, please call the contact number or indicate as such in the subject line in an email.

[Hide Contact information ▲](#)

### RESPONSIBLE PARTY

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CONTACT'S ROLE resource provider

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## Resource Details ►

DATASET LANGUAGES English (UNITED STATES)

DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format

STATUS completed

SPATIAL REPRESENTATION TYPE vector

\* PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.8.1.14362

CREDITS

The Environmental Analysis Unit (EAU) Mitigation and Modeling Unit within NCDOT was tasked to create this dataset. This dataset supports the production of the Natural Resources Technical Report (NRTR). Annual maintenance of this dataset is handled by the EAU.

Support and maintenance of the enterprise spatial database where this data resides is handled by NCDOT's Transportation GIS Unit.

[Hide Resource Details ▲](#)

## Extents ►

### EXTENT

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

WEST LONGITUDE -82.930913

EAST LONGITUDE -81.218271

SOUTH LATITUDE 35.405995

NORTH LATITUDE 36.596692

EXTENT CONTAINS THE RESOURCE Yes

### EXTENT

#### DESCRIPTION

Data collection is complete.

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

WEST LONGITUDE -84.422111

EAST LONGITUDE -75.416034

SOUTH LATITUDE 33.730557

NORTH LATITUDE 36.617257

EXTENT CONTAINS THE RESOURCE Yes

#### TEMPORAL EXTENT

BEGINNING DATE 2020-03-02 00:00:00

ENDING DATE 2020-03-02 00:00:00

### EXTENT

#### GEOGRAPHIC EXTENT

##### BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching

\* WEST LONGITUDE -79.694963

\* EAST LONGITUDE -79.330248

\* NORTH LATITUDE 35.044170

\* SOUTH LATITUDE 34.629319

\* EXTENT CONTAINS THE RESOURCE Yes

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

\* WEST LONGITUDE 1791992.486642

\* EAST LONGITUDE 1900655.304749

\* SOUTH LATITUDE 320750.887235

\* NORTH LATITUDE 471170.102472

\* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

## Resource Points of Contact ►

### POINT OF CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

CONTACT'S POSITION Environmental Program Consultant

CONTACT'S ROLE point of contact

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*Hide Resource Points of Contact ▲*

## Resource Maintenance ►

RESOURCE MAINTENANCE

UPDATE FREQUENCY as needed

SCOPE OF THE UPDATES dataset

OTHER MAINTENANCE REQUIREMENTS

Maintenance of this dataset is handled by the Environmental Analysis Unit (EAU) Mitigation and Modeling Unit. Currently updating this dataset has not been planned. Support and maintenance of the enterprise spatial database where this data resides is handled by NCDIT's Transportation GIS Unit.

MAINTENANCE CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

CONTACT'S POSITION Environmental Program Consultant

CONTACT'S ROLE originator

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[Hide Contact information ▲](#)

[Hide Resource Maintenance ▲](#)

## Resource Constraints ►

#### LEGAL CONSTRAINTS

##### LIMITATIONS OF USE

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#### SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None

##### LIMITATIONS OF USE

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[Hide Resource Constraints ▲](#)

## Spatial Reference ►

#### ARCGIS COORDINATE SYSTEM

\* TYPE Projected

\* GEOGRAPHIC COORDINATE REFERENCE GCS\_North\_American\_1983

\* PROJECTION NAD\_1983\_StatePlane\_North\_Carolina\_FIPS\_3200\_Feet

\* COORDINATE REFERENCE DETAILS

##### PROJECTED COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 102719

X ORIGIN -121841900

Y ORIGIN -93659000  
XY SCALE 3048.0060960121918  
Z ORIGIN -100000  
Z SCALE 10000  
M ORIGIN -100000  
M SCALE 10000  
XY TOLERANCE 0.0032808333333333331  
Z TOLERANCE 0.001  
M TOLERANCE 0.001  
HIGH PRECISION true  
LATEST WELL-KNOWN IDENTIFIER 2264  
WELL-KNOWN TEXT  
PROJCS["NAD\_1983\_StatePlane\_North\_Carolina\_FIPS\_3200\_Feet",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["Lambert\_Conformal\_Conic"],PARAMETER["False\_Easting",2000000.002616666],PARAMETER["False\_Northing",0.0],PARAMETER["Central\_Meridian",-79.0],PARAMETER["Standard\_Parallel\_1",34.33333333333334],PARAMETER["Standard\_Parallel\_2",36.16666666666666],PARAMETER["Latitude\_Of\_Origin",33.75],UNIT["Foot\_US",0.3048006096012192],AUTHORITY["EPSG",2264]]

REFERENCE SYSTEM IDENTIFIER

VALUE 2264  
\* CODESPACE EPSG  
\* VERSION 6.12(9.0.0)

[Hide Spatial Reference ▲](#)

## Spatial Data Properties ►

VECTOR ►

\* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

GEOMETRIC OBJECTS

FEATURE CLASS NAME CanbysDropwortPotentialHabitat  
\* OBJECT TYPE composite  
\* OBJECT COUNT 9018

[Hide Vector ▲](#)

ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME CanbysDropwortPotentialHabitat  
\* FEATURE TYPE Simple  
\* GEOMETRY TYPE Polygon  
\* HAS TOPOLOGY FALSE  
\* FEATURE COUNT 9018  
\* SPATIAL INDEX TRUE  
\* LINEAR REFERENCING FALSE

[Hide ArcGIS Feature Class Properties ▲](#)

[Hide Spatial Data Properties ▲](#)

## Data Quality ►

SCOPE OF QUALITY INFORMATION ►



RESOURCE LEVEL dataset

[Hide Scope of quality information ▲](#)

DATA QUALITY REPORT - COMPLETENESS OMISSION ▶

MEASURE DESCRIPTION

After processing, the dataset is checked for drawing display and number of records and file sizes compared with source materials.

CONFORMANCE TEST RESULTS

TEST PASSED Yes

RESULT EXPLANATION

Pass

PRODUCT SPECIFICATION ▶

TITLE NCDOT Geospatial Data Specifications

CREATION DATE 2019-07-11 00:00:00

PUBLICATION DATE 2020-12-16 00:00:00

[Hide Product specification ▲](#)

[Hide Data quality report - Completeness omission ▲](#)

DATA QUALITY REPORT - CONCEPTUAL CONSISTENCY ▶

MEASURE DESCRIPTION

The dataset is converted to file geodatabase (FGDB) format using tools in ArcGIS. The geometry is checked, and if needed repaired

CONFORMANCE TEST RESULTS

TEST PASSED Yes

RESULT EXPLANATION

Pass

PRODUCT SPECIFICATION ▶

TITLE NCDOT Geospatial Data Specifications

CREATION DATE 2020-03-02 00:00:00

PUBLICATION DATE 2021-03-15 00:00:00

[Hide Product specification ▲](#)

[Hide Data quality report - Conceptual consistency ▲](#)

DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY ▶

MEASURE DESCRIPTION

· AGOL Review

A model prediction file was shared with select subject matter experts for review on AGOL in March 2021. Points were placed within the USFWS potential habitat (county range map) as well as the modeled potential habitat to solicit feedback. Reviewers placed additional comments for consideration by the modeler.

· Field Review

Field assessment of the draft model was conducted in August and September 2021.

· Independent Data Review

o Data sources: NCNHP element occurrence data, NatureServe Ecological System data, VegBank plot data, United States National Vegetation Classification Database, NCNHP community classifications, county soil surveys, a Carolina bay mapping project and NCNHP managed areas data.

o Methods: Literature searches and reviews of available environmental GIS data were conducted to determine how best to represent potential habitat for Canby's Dropwort.

o Soil series were repeatedly found to be the best choice for identifying potential Canby's Dropwort habitat. NLCD and NDVI were used to eliminate unsuitable land use and dense canopy areas.

o The model was independently reviewed using NHP EO data.

CONFORMANCE TEST RESULTS

TEST PASSED Yes

RESULT EXPLANATION

Pass

PRODUCT SPECIFICATION ►

TITLE NCDOT Geospatial Data Specifications

CREATION DATE 2020-03-02 00:00:00

PUBLICATION DATE 2021-03-15 00:00:00

[Hide Product specification ▲](#)

[Hide Data quality report - Quantitative attribute accuracy ▲](#)

[Hide Data Quality ▲](#)

## Lineage ►

LINEAGE STATEMENT

ArcGIS Model Builder version 10.7.1 was used to build a model

Input Environmental data layers for model:

Data Layer 1

• Layer name: County Boundaries

• File name: CountyBoundary.shp

• Layer description:

o Selected Scotland County

• Layer selection justification:

o Scotland County contains the only occurrence of Canby's Dropwort in the state according to NHP and USFWS data (see Species Information above)

• "Habitat" versus "Non-habitat" designations:

o Potential habitat will be within the listed USFWS county.

Data Layer 2

- Layer name: Soils
- File name: ScotlandSoils.shp
- Layer description:
  - Soil Survey Geographic (SSURGO) database for Scotland County
- Layer selection justification:
  - Soils are one way of identifying areas that could potentially support Canby's Dropwort.
- "Habitat" versus "Non-habitat" designations:
  - Potential habitat was defined as the following soil map units: Coxville, McColl, Rains, or Pantego (USFWS 1990, 2015; Schafale 2020).

#### Data Layer 3

- Layer name: National Land Cover Database (NLCD) (2019 edition)
- File name: NLCD2019Scotland.tif
- Layer description:
  - Landcover dataset produced by the Multi-Resolution Land Characteristics (MRLC) Consortium, clipped to the Scotland County boundary. Landcover is classified into 15 broad categories.
- Layer selection justification:
  - Landcover categories are generalized, but are useful to eliminate altered habitat.
- "Habitat" versus "Non-habitat" designations:
  - The following "Land\_Cover" categories were considered to be non-habitat and were removed from the soil layer: Developed, High Intensity; Developed, Medium Intensity; Developed, Low Intensity; Developed, Open Space; Cultivated Crops; Hay/Pasture; Barren Land

#### Data Layer 4

- Layer name: Normalized Difference Vegetation Index (NDVI) (NC One Map 2021)
- File name: ndviscot\_50ft.tif
- Layer description:
  - Dataset produced using the most recent 4-band imagery available from the North Carolina Orthoimagery Program. Data is classified into 255 classes. Data was resampled to 50 ft. cell size and Scotland County.
- Layer selection justification :
  - During the desktop GIS review and field validation, reviewers identified several areas mapped as appropriate soils and NLCD categories that were too densely vegetated with woody species to be suitable habitat for Canby's Dropwort. Comparison of aerial photography, orthoimagery and NDVI indicated that dense pine plantations and other dense forests were classified as  $\geq 140$ .
- "Habitat" versus "Non-habitat" designations:
  - Areas classified with a gridcode of  $\geq 140$  were considered non-habitat.

#### Data Layer 5

- Layer name: NCNHP Natural Heritage Element Occurrences (NCNHP 2021)
- File name: nheo.shp
- Layer description:
  - Polygon shapefile containing rare species and natural community locations, updated quarterly.
- Polygons delineating one Carolina Bay (Tunstall Bay) identified as suitable habitat by experts during the field review were selected from the dataset (EOID 39340).

#### Known Issues with Model Data Layers :

- Of the suitable soil series listed in the Recovery Plan and 5-Year Review (USFWS 1990, 2015) and in the NatureServe species account (2021), Grady loam and Rembert loam are not mapped in NC. Portsmouth loam is found in NC, but is not within Scotland County; if populations are discovered outside of Scotland County, this soil series should be added to the model selection.
- Selecting the soils listed above identified most, but not all, Carolina bays and other isolated depressions in Scotland Co. that were apparent from aerial photography. Most bays not identified were mapped as Pantego loam; this soil series is not known to occur within Canby's Dropwort populations, but it is associated with a vegetative community known to support the species, Cypress Savanna (Typic Subtype) (Schafale 2020).

- Early drafts of the model utilized GAP/Landfire National Terrestrial Ecosystems landcover data; however, inclusion of the appropriate ecological systems from this dataset resulted in the addition of substantial acreage of palustrine habitat not suitable for Canby's Dropwort.
- A few depressions with known populations of other bay-associated species and/or with a similar appearance according to the NDVI data were not identified using soils alone, but it is not known that these sites should be considered as potential Canby's Dropwort habitat.
- Erasing dense pine habitat using NDVI removes the majority of 2 bays (Stateline Prairie Bay and Good News Bay) noted during the desktop review to contain species or communities associated with Canby's Dropwort. Since some potential habitat remains mapped in both areas and other layers such as NHP managed areas, NHP element occurrences, and hydrology data will indicate environmental concerns in these bays, they were not specifically added to the Canby's Dropwort model.
- One Carolina bay (Tunstall Bay) was noted during desktop review and field validation as being incorrectly excluded in the model; this was due to its soils being mapped as "Open Water." In order to include it as high potential habitat, a polygon delineating the bay (EOID 39340) was selected from Data Layer 5 and added as potential habitat.

#### PROCESS STEP

##### DESCRIPTION

Summary of model steps:

- Select the county where the species is listed (Scotland), export as a shapefile.
- "Clip" (Extract by Mask) NLCD landcover raster to the selected county, convert to shapefiles
- Resample NDVI .tiff for area within Scotland County, with 50 ft. cell size
- Convert Raster to Polygon for NDVI .tiff, opting for multipart polygons and not simplifying polygons
- Select dense evergreen vegetation from NDVI (gridcode  $\geq 140$ ) and Dissolve
- Select suitable soils and Dissolve
- Select developed, agricultural and other disturbed areas from NLCD data, export as a shapefile, and Dissolve
- Erase NLCD disturbed/developed areas from the suitable soils.
- Erase NDVI selected areas from above output.
- Select polygons from current NHP data (nheo.shp) to represent suitable bays identified during expert review: EOID 3069 (Cypress Savanna (Typic Subtype), Stateline Prairie Bay), EOID 39340 (Rhynchospora microcarpa, Tunstall Bay), and EOID 28358 (Sclerolepis uniflora, Good News Bay).
- Union selected NHP polygons with previous output.

#### PROCESS CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

CONTACT'S POSITION Environmental Program Consultant

CONTACT'S ROLE point of contact

#### CONTACT INFORMATION

##### PHONE

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[Hide Contact information ▲](#)

[Hide Process step ▲](#)

[PROCESS STEP ▶](#)

DESCRIPTION

Data was reviewed in ESRI's Data Reviewer tool to verify geometry.

[PROCESS CONTACT](#)

[ORGANIZATION'S NAME](#) North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

[CONTACT'S POSITION](#) Environmental Program Consultant

[CONTACT'S ROLE](#) point of contact

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[PROCESS STEP ▶](#)

DESCRIPTION

Geodatabase was forwarded on to the GIS Unit for publishing as part of data for project ATLAS.

[PROCESS CONTACT](#)

[ORGANIZATION'S NAME](#) North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

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[Hide Lineage ▲](#)

## Distribution ▶

DISTRIBUTOR ▶

CONTACT INFORMATION

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

CONTACT'S POSITION Environmental Program Consultant

CONTACT'S ROLE distributor

CONTACT INFORMATION ▶

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[Hide Distributor ▲](#)

DISTRIBUTION FORMAT

\* NAME File Geodatabase Feature Class  
VERSION 10.5

[Hide Distribution ▲](#)

## Fields ►

DETAILS FOR OBJECT [CanbysDropwortPotentialHabitat ►](#)

\* TYPE Feature Class

\* ROW COUNT 9018

DEFINITION

Potential Habitat areas for Canbys Dropwort in NC.

DEFINITION SOURCE

NCDOT

FIELD [OBJECTID ►](#)

\* ALIAS OBJECTID

\* 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.

[Hide Field OBJECTID ▲](#)

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.

[Hide Field Shape ▲](#)

FIELD **CommonName** ▶

ALIAS **CName**

\* DATA TYPE **String**

\* WIDTH **100**

\* PRECISION **0**

\* SCALE **0**

FIELD DESCRIPTION

**Common Name of Species**

DESCRIPTION SOURCE

**NCDOT**

[Hide Field CommonName ▲](#)

FIELD **SciName** ▶

ALIAS **SName**

\* DATA TYPE **String**

\* WIDTH **150**

\* PRECISION **0**

\* SCALE **0**

FIELD DESCRIPTION

**Scientific Name of Species**

DESCRIPTION SOURCE

**NCDOT**

[Hide Field SciName ▲](#)

FIELD **PotHabitat** ▶

\* ALIAS **PotHabitat**

\* DATA TYPE **String**

\* WIDTH **25**

\* PRECISION **0**

\* SCALE **0**

FIELD DESCRIPTION

**Model Output - Low or High potential habitat**

DESCRIPTION SOURCE

**NCDOT**

LIST OF VALUES

VALUE **High**

DESCRIPTION **High potential**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE **NCDOT**

VALUE **Low**

DESCRIPTION **Low potential**

ENUMERATED DOMAIN VALUE DEFINITION SOURCE **NCDOT**

[Hide Field PotHabitat ▲](#)



FIELD Shape\_Length ▶

- \* ALIAS Shape\_Length
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0
- \* FIELD DESCRIPTION  
Length of feature in internal units.
- \* DESCRIPTION SOURCE  
Esri
- \* DESCRIPTION OF VALUES  
Positive real numbers that are automatically generated.

*Hide Field Shape\_Length ▲*

FIELD Shape\_Area ▶

- \* ALIAS Shape\_Area
- \* DATA TYPE Double
- \* WIDTH 8
- \* 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.

*Hide Field Shape\_Area ▲*

*Hide Details for object CanbysDropwortPotentialHabitat ▲*

*Hide Fields ▲*

**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 2024-03-26

ARCGIS METADATA PROPERTIES  
METADATA FORMAT ArcGIS 1.0  
STANDARD OR PROFILE USED TO EDIT METADATA ISO19139

METADATA STYLE ISO 19139 Metadata Implementation Specification

CREATED IN ARCGIS FOR THE ITEM 2024-02-01 14:09:45

LAST MODIFIED IN ARCGIS FOR THE ITEM 2024-03-26 10:50:49

**AUTOMATIC UPDATES**

HAVE BEEN PERFORMED Yes

LAST UPDATE 2024-03-26 10:50:49

**ITEM LOCATION HISTORY**

ITEM COPIED OR MOVED 2022-05-02 21:11:51

TO \\DOT\DFSROOT01\GROUPS-GISNH\GIS-

ProjAtlas\ProjectDocumentation\Standards\Metadata\00MD\Static\CanbysDropwort\_PotHabitat20220218

FROM I:\ProjAtlasData\Species Data\PlantExpertModelsGIS\Canby's

dropwort\CanbysDropwort\_PotHabitat20220218\CanbysDropwort\_PotHabitat20220218

[Hide Metadata Details ▲](#)

## Metadata Contacts ►

**METADATA CONTACT**

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit

CONTACT'S POSITION Environmental Program Consultant

CONTACT'S ROLE point of contact

**CONTACT INFORMATION ►**

**PHONE**

VOICE 919-707-6136

**ADDRESS**

**TYPE**

DELIVERY POINT Century Center Building B, 1020 Birch Ridge Drive

CITY Raleigh

ADMINISTRATIVE AREA NC

POSTAL CODE 27610

COUNTRY US

E-MAIL ADDRESS [ATLAS@ncdot.gov](mailto:ATLAS@ncdot.gov)

**HOURS OF SERVICE**

9:00am – 5:00pm Monday - Friday

**CONTACT INSTRUCTIONS**

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[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

## Metadata Maintenance ►

**MAINTENANCE**

UPDATE FREQUENCY as needed

OTHER MAINTENANCE REQUIREMENTS

Maintenance of this dataset is handled by the Environmental Analysis Unit (EAU) Mitigation and Modeling Unit. Support and maintenance of the enterprise spatial database where this data resides is handled by NCDIT's Transportation GIS Unit.

#### MAINTENANCE CONTACT

ORGANIZATION'S NAME North Carolina Department of Transportation - EAU Mitigation and Modeling Unit  
CONTACT'S POSITION Environmental Program Consultant  
CONTACT'S ROLE originator

#### CONTACT INFORMATION ►

##### PHONE

VOICE 919-707-6136

##### ADDRESS

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[Hide Contact information ▲](#)

[Hide Metadata Maintenance ▲](#)

## Metadata Constraints ►

#### SECURITY CONSTRAINTS

CLASSIFICATION unclassified

CLASSIFICATION SYSTEM None

#### LIMITATIONS OF USE

The North Carolina Department of Transportation shall not be held liable for any errors in this metadata. This includes errors of omission, commission, errors concerning the content of the data, and relative and positional accuracy of the data. This data cannot be construed to be a legal document. Primary sources from which this data was compiled must be consulted for verification of information contained in this data. Datasets developed under Project ATLAS do not replace any NRTR work for future projects and may not be used as a replacement for site visits / field surveys by qualified professionals and hence should be used only as a supporting platform for decision making. Use of this dataset for project scoping or screening is merely pre-decisional.

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