# Small Whorled Pogonia- Potential Habitat, March 2021 - NC Department of Transportation

#### **File Geodatabase Feature Class**



**Tags** 

Small whorled pogonia, Isotria medeoloides, Isot\_mede, Vascular Plant, Terrestrial, threatened, GIS-based model, expert model, Transportation, NRTR, NCDOT, Environment, Location, North Carolina, ATLAS

#### **Summary**

This dataset was originally created in March 2020 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 Small whorled pogonia is Mid-May to early July.

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

Small whorled pogonia (SWP) (*Isotria medeoloides*) occurs in young as well as maturing (second to third successional growth) mixed-deciduous or mixed-deciduous/coniferous forests. It does not appear to exhibit strong affinities for a particular aspect, soil type, or underlying geologic substrate. In North Carolina, the perennial orchid is typically found in open, dry deciduous woods and is often associated with pine white pine and rhododendron. The species may also be found on dry, rocky, wooded slopes; moist slopes; ravines lacking stream channels; or slope bases near braided channels of vernal streams. The orchid, often limited by shade, requires small light gaps or canopy breaks, and typically grows under canopies that are relatively open or near features like logging roads or streams that create long-persisting breaks in the forest canopy. Other information provided for the small whorled pogonia include an affinity for acidic, moist, soils with few nutrients as well as occurrence within Acidic Cove Forest, Rich Cove Forest and Mesic Mixed Hardwood Forest (Piedmont Subtype) natural communities.

GAP natural communities associated with these populations include Mixed Hardwood, Montane Oak-Acidic Cove Forest transition, Acidic Cove Forest, Grass lawn, Hemlock dominated forest, Montane-Oak Hickory forest, Rich Cove Forest, Pine/Mixed Hardwoods, Southern Piedmont Dry Oak-(Pine) Forest (Hardwood and Mixed Modifiers), and Maturing Pine plantation.

Eighteen confirmed SWP element occurrences (EO's) (11 current and 7 historic) are listed in North Carolina per Natural Heritage (July 2019).

#### County Information

- •NHP 12 listed counties: Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Rutherford, Surry (historic), Transylvania and Yancey.
- •USFWS 13 listed current counties: Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Polk, Rutherford, Surry (historic), Transylvania and Yancey Counties.

Note: Existing NHP occurrences are listed in Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Transylvania and Yancey Counties.

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 predecisional.

#### **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.

#### **Use limitations**

The North Carolina Department of Transportation shall not be held liable for any errors in this data. 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.

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#### **Extent**

West -84.398164 East -79.524768 North 36.260398 South 34.953985

#### **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, geoscientific Information, location, transportation, environment

\* CONTENT TYPE Downloadable Data

EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION NO.

PLACE KEYWORDS North Carolina



CREATION DATE 2020-03-02 00:00:00
PUBLICATION DATE 2021-03-15 00:00:00

Hide Thesaurus ▲

THEME KEYWORDS Small whorled pogonia, Isotria medeoloides, Isot\_mede, Vascular Plant, Terrestrial, threatened, GIS-based model, expert model, Transportation, NRTR, NCDOT, Environment, Location, North Carolina, ATLAS

THESAURUS TITLE User

CREATION DATE 2020-03-02 00:00:00
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Hide Thesaurus ▲

Hide Topics and Keywords ▲

## **Citation** ▶

TITLE Small Whorled Pogonia- Potential Habitat, March 2021 - NC Department of Transportation CREATION DATE 2020-03-02 00:00:00 PUBLICATION DATE 2021-03-15 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 resource provider

CONTACT INFORMATION >

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Type physical

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#### **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.

#### 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

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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 NCDIT's Transportation GIS Unit.

Hide Resource Details A

#### **Extents** ▶

#### 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 -84.398164
- \* EAST LONGITUDE -79.524768
- \* NORTH LATITUDE 36.260398
- \* SOUTH LATITUDE 34.953985
- \* EXTENT CONTAINS THE RESOURCE Yes

## EXTENT IN THE ITEM'S COORDINATE SYSTEM

- \* WEST LONGITUDE 406832.667400
- \* EAST LONGITUDE 1842985.520482
- \* SOUTH LATITUDE 480879.074196
- \* NORTH LATITUDE 914115.530884
- \* EXTENT CONTAINS THE RESOURCE Yes

Hide Extents ▲

#### 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 originator

#### CONTACT INFORMATION >

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Hide Contact information ▲

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

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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 0.00328083333333333333

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",-

REFERENCE SYSTEM IDENTIFIER

**VALUE** 2264

- \* CODESPACE EPSG
- \* VERSION 6.12(9.0.0)

Hide Spatial Reference A

## Spatial Data Properties ▶

#### VECTOR >

\* Level of topology for this dataset geometry only

#### GEOMETRIC OBJECTS

FEATURE CLASS NAME SmallWhorledPogoniaPotentialHabitat

- \* OBJECT TYPE composite
- \* OBJECT COUNT 4298740

Hide Vector ▲

#### ARCGIS FEATURE CLASS PROPERTIES

FEATURE CLASS NAME SmallWhorledPogoniaPotentialHabitat

- \* FEATURE TYPE Simple
- \* GEOMETRY TYPE Polygon
- \* HAS TOPOLOGY FALSE
- \* FEATURE COUNT 4298740
- \* 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 2020-03-02 00:00:00 PUBLICATION DATE 2021-03-15 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 reviewers on ArcGIS Online (AGOL). Points were placed within the USFWS potential habitat as well as the model potential habitat in order to solicit feedback. Reviewers could place additional comments for consideration by modeler.

AGOL review was completed in March 2019 on the DRAFT version of this model

### • Independent Data Review

Describe data sources - NHP element occurrences

Describe methods – NHP element occurrences were compared to Model output to determine if predicted habitat intersected known habitat.

Provide summary result - NHP element occurrences intersected predicted habitat

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 10.6.1 was used to build a model

Input Environmental data layers for model:

- 1) County\_Boundary (Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Polk, Rutherford, Transylvania, and Yancey Counties).
- Layer description: Select Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Polk, Rutherford, Transylvania, and Yancey Counties from county boundary shapefile for project extent.
- Layer selection justification: Species listed in Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Polk, Rutherford, Transylvania and Yancey Counties.
- "Habitat" versus "Non-habitat" designations: Potential habitat listed for Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Polk, Rutherford, Transylvania and Yancey Counties.
- 2) NRCS\_Soils\_NC\_2003 (Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Polk, Rutherford, Transylvania and Yancey Counties).
- Layer description: SSURGO Map Unit Polygon feature class for soil type and A horizon pH tabular data.

Soil series were joined to multiple tables to then extract soil series with A horizon pH levels from 3.5-6.5 for Burke, Cherokee, Haywood, Henderson, Jackson, Macon, McDowell, Polk, Rutherford, Transylvania and Yancey Counties, and 3.5-6.5 in Guilford County.

- Layer selection justification: SWP is found in acidic soils. NRCS soil pH classification ranges of extremely acidic to slightly acidic (pH 3.5-6.5) were used for SWP occurrences located in both the Blue Ridge and Piedmont Physiographic regions. This pH range includes the soil pH range (4.5-4.7) observed by Montgomery (2014) in 15 extant SWP occurrences in North Carolina, Tennessee, and Georgia.
- "Habitat" versus "Non-habitat" designations: Potential SWP habitat includes those soils with A horizon pH's that fall between 3.5-6.5.
- 3) County Q2 Digital Elevation Model (Q2DEM): (Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Polk, Rutherford, Transylvania and Yancey Counties).
- Layer description: County Elevation Grid rounded to nearest foot, 20 ft grid cell. The Q2DEMs are derived from the latest point cloud LIDAR data provided by the NC Floodplain Mapping Program. This data was acquired in August 2018.
- Per county, slope data was processed from these DEMS and slopes ranging from 5-40% was then extracted for the Blue Ridge Physiographic Region and 0-30% for the Piedmont Physiographic Region (Guilford County).
- Layer selection justification: Slopes for documented SWP populations in Blue Ridge physiographic region ranged from 5-40%, and 0-30% in Piedmont physiographic region.
- "Habitat" versus "Non-habitat" designations: Habitat for the SWP in Blue Ridge physiographic region was listed as 5-40% slopes, and 0-30% slopes in Piedmont physiographic region (Guilford County).
- 4) GAP\_LANDFIRE\_National\_Terrestrial\_Ecosystems\_2011.
- Layer description: The GAP data was re-projected, resampled and then clipped to the designated counties. GAP attributes were joined and extracted based on the corresponding community types outlined below.
- Layer selection justification: Schafale and Weakley found an association between small whorled pogonia and the Acidic Cove Forest, Rich Cove Forest, and Mesic Mixed Hardwood Forest (Piedmont Subtype) communities. These communities correspond with GAP Data's Southern and Central Appalachian Cove Forest and Southern Piedmont Mesic Forest. The GAP Southern and Central Appalachian Oak Forest, South-Central Interior Small Stream and Riparian, Evergreen Plantation or Managed Pine, Southern Piedmont Dry Oak-(Pine) Forest (Hardwood and Mixed Modifiers), and Developed, Open Space communities were also used because of overlap with known North Carolina SWP populations. The GAP Developed, Open Space community was excluded from the Piedmont physiographic region model because the community included a majority of areas that were not suitable SWP habitat.
- "Habitat" versus "Non-habitat" designations: Habitat. Potential habitat for SWP corresponds with the Southern and Central Appalachian Cove Forest, Southern Piedmont Mesic Forest, and Southern and Central Appalachian Oak Forest, South-Central Interior Small Stream and Riparian, Evergreen Plantation or Managed Pine, Southern Piedmont Dry Oak-(Pine) Forest (Hardwood and Mixed Modifiers), and Developed, Open Space.
- 5) County Q2 Digital Elevation Model (Q2DEM): (Burke, Cherokee, Guilford, Haywood, Henderson, Jackson, Macon, McDowell, Polk, Rutherford, Transylvania and Yancey Counties).
- Layer description: County Q2 Digital Elevation Models (Q2DEM); 20 ft grid cell: Elevation Range.
- Layer selection justification: All North Carolina SWP populations in the Blue Ridge physiographic region except two fell between the elevations of 1200-3100′. The two exceptions (Macon and Haywood counties) fell between the range of 3400-4100′. The SWP population identified in the Piedmont physiographic region (Guilford County) fell between the range of 730-740′.
- "Habitat" versus "Non-habitat" designations: Habitat. Potential habitat for the SWP was designated as occurring between the 1200-4100' range in Burke, Cherokee, Haywood, Henderson, Jackson, Macon, McDowell, Rutherford, Transylvania, and Yancey Counties, and 700-1012' in Guilford County (1012' is the highest elevation in Guilford County, NC).
- 6) Hollows, Spurs and Valleys (per county).
- Layer description: Geomorphon analysis was done in GRASS open source GIS software. The elongated lowlands of the each Q2DEM was processed to output hollows, spurs and valleys which are three of ten landform classifications in the Geomorphon analysis. This data was then exported into a compatible raster for ArcGIS. The raster was then cleaned in ArcGIS.
- Layer selection justification: This layer was used to capture slopes, moist slopes or drainages not captured with other layers.
- "Habitat" versus "Non-habitat" designations: For these models, only habitat areas were designated, devoid of Non-habitat.

Known Issues with Model Data Layers:

- Overall Habitat: NCNHP Tier II vector data for documented SWP populations was overlaid on other vector and raster data (GAP, NRCS Soils, Geomorphons etc.) to validate previous research describing SWP habitat. Ten of the seventeen SWP populations were designated as low to medium accuracy. Subsequently, the occurrence footprint may incorporate both non-habitat and habitat areas.
- Overall Habitat: Coarse resolution of raster files (i.e. GAP, SURGO pH data, etc.) may affect the ability to identify subtle/micro changes in the represented data.
- Canopy Cover: GAP Landfire canopy data did not correspond with aerial mapping.
- Community Type: NLCD data was excluded because GAP Landfire data provided more refined delineation of community types.
- Soils Data: NRCS soil maps are general representations of soil mapping units. Soil boundaries are approximate and small non-defined soil inclusions may be omitted potentially under predicting the presence of soils and their associated characteristics.



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 originator

CONTACT INFORMATION PHONE

VOICE 919-707-6136

#### **ADDRESS**

Type physical
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Hide Contact information ▲

Hide Process step ▲



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 CONTACT'S POSITION Environmental Program Consultant CONTACT'S ROLE originator

## CONTACT INFORMATION

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Hide Process step ▲

#### PROCESS STEP DESCRIPTION

Summary of model steps:

- Selected North Carolina counties where plant is listed in current USFWS counties
- Extracted known community types from GAP Landfire data
- Selected identified elevation range for species
- Derived slopes from Q2DEM data, extracted ideal slopes for species
- Selected soils with defined pH values
- Created hollows, spurs and valleys Geomorphon from Q2DEM in Grass
- All resulting output data was intersected to define potential SWP habitat

#### PROCESS 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**

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Hide Contact information A

Hide Process step ▲

Hide Lineage A

#### **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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VOICE 919-707-6136

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Hide Contact information ▲

Hide Distributor ▲

#### DISTRIBUTION FORMAT

\* NAME File Geodatabase Feature Class

VERSION 10.5

## Fields ▶

```
Details for object SmallWhorledPogoniaPotentialHabitat >
 * Type Feature Class
 * ROW COUNT 4298740
 DEFINITION SOURCE
     NCDOT
 DEFINITION
     Potential Habitat areas for Small Whorled Pogonia in NC
 FIELD OBJECTID ▶
  * 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.
   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 ComName
\* 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 PotHab
 * 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 SmallWhorledPogoniaPotentialHabitat ▲

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 2024-01-26

ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0

METADATA STYLE ISO 19139 Metadata Implementation Specification

STANDARD OR PROFILE USED TO EDIT METADATA ISO19139

CREATED IN ARCGIS FOR THE ITEM 2024-02-01 14:57:53

LAST MODIFIED IN ARCGIS FOR THE ITEM 2024-01-26 19:04:23

**AUTOMATIC UPDATES** 

HAVE BEEN PERFORMED Yes

LAST UPDATE 2024-01-26 19:04:23

ITEM LOCATION HISTORY

ITEM COPIED OR MOVED 2014-11-14 12:06:40

To \\1612LP-M70309\C\$\Users\paul\_gerlach\Desktop\Statewide\CountyBoundary

Hide Metadata Details A

#### 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 physical

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

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 ▲

Hide Metadata Contacts A

#### Metadata Maintenance ▶

**MAINTENANCE** 

UPDATE FREQUENCY as needed

#### OTHER MAINTENANCE REQUIREMENTS

Annual maintenance of this dataset is handled by the Environmental Analysis Unit (EAU). 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 >

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Hide Contact information ▲

Hide Metadata Maintenance A

#### 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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Hide Metadata Constraints