# Red-cockaded Woodpecker - Potential Habitat, January 2022 - NC Department of Transportation

**File Geodatabase Feature Class**

**Tags**

Red-cockaded woodpecker, Picoides borealis, Dryobates borealis, Pico_bore, Bird Terrestrial, endangered, RCW, lidar, GIS-based model, expert model, Transportation, NRTR, NCDOT, Environment, Location, North Carolina, ATLAS

## Summary

This dataset was originally created in October 2021 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.

This model identifies year-round potential suitable habitat for the Red-cockaded woodpecker. The model was produced from a weighted overlay where the outputs represent a range of potential habitat from high, medium, and low including USFWS species range. Habitat defined as "Low Potential Habitat" are areas deemed low quality or non-habitat.

The Optimal survey window for Red-cockaded woodpecker is year-round; November to early March (optimal).

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 Red-cockaded woodpecker (RCW) Potential Habitat dataset is a polygon layer depicting high, medium and low potential habitat locations for RCWs in NC counties that have a USFWS "current" status listing.

Red-cockaded woodpecker *(Dryobates borealis, formally Picoides borealis)* typically occupies open, mature stands of southern pines, particularly longleaf pine (*Pinus palustris*), for foraging and nesting/roosting habitat. The RCW excavates cavities for nesting and roosting in living pine trees, aged 60 years or older, which are contiguous with pine stands at least 30 years of age to provide foraging habitat. The foraging range of the RCW is normally no more than 0.5 miles. They are currently found in the sandhills and piedmont ecoregions, as well as coastal communities where old growth pines are prevalent. Longleaf pine is the preferred species for nesting, while loblolly, shortleaf, slash and pond pines are also used dependent on availability.

There is a total of 347 element occurrences (EO's) tracked by NCNHP (2021) within the piedmont and coastal regions of North Carolina: 95 current occurrences; 251 historic occurrences; and one obscure record occurring just south of other Sandhill Game Land occurrences in Scotland County.

County Information-

• As of September 2021, IPAC ECOS contains 35 counties, Anson, Beaufort, Bertie, Bladen, Brunswick, Camden, Carteret, Chatham, Columbus, Craven, Cumberland, Currituck, Dare, Duplin, Gates, Greene, Harnett, Hertford, Hoke, Hyde, Johnston, Jones, Moore, New Hanover, Onslow, Pamlico, Pender, Richmond, Robeson, Sampson, Scotland, Tyrrell, Wake, Washington, and Wayne.

• As of July 2021, historic counties are no longer tracked by USFWS but were modeled at the start of the modeling process.

• As of April 2021, NHP and FWS listed 45 counties which are included in the modeling process. Anson, Beaufort, Bertie, Bladen, Brunswick, Camden, Carteret, Chatham, Columbus, Craven, Cumberland, Currituck, Dare, Duplin, Edgecombe, Gates, Greene, Halifax, Harnett, Hertford, Hoke, Hyde, Johnston, Jones, Lee, Lenoir, Montgomery, Moore, Nash, New Hanover, Northampton, Onslow, Pamlico, Pender, Pitt, Richmond, Robeson, Sampson, Scotland, Tyrrell, Wake, Washington, Wayne, and Wilson.

• Edgecombe, Halifax, Lee, Lenoir, Montgomery, Nash, Northampton, Orange, Pitt and Wilson are not currently identified in IPAC but initially modeled and are available in needed.

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.

### 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** -80.191897 **East** -75.420989
**North** 36.590095 **South** 33.806769

### 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, inlandWaters, 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 2019-10-01 00:00:00
PUBLICATION DATE 2022-01-28 00:00:00

*Hide Thesaurus ▲*

THEME KEYWORDS Red-cockaded woodpecker, Picoides borealis, Dryobates borealis, Pico_bore, Bird Terrestrial, endangered, RCW, lidar, 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 Red-cockaded Woodpecker - Potential Habitat, January 2022 - NC Department of Transportation
CREATION DATE 2019-10-01 00:00:00
PUBLICATION DATE 2022-01-28 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 originator

CONTACT INFORMATION ►
PHONE
VOICE 919-707-6136

ADDRESS
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 ▲*

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 ▶
PHONE
VOICE 919-707-6136

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*Hide Citation Contacts ▲*

## 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 ▲*

## 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 2022-01-28 00:00:00
ENDING DATE 2022-01-28 00:00:00

EXTENT
GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
EXTENT TYPE Extent used for searching
* WEST LONGITUDE -80.191897
* EAST LONGITUDE -75.420989
* NORTH LATITUDE 36.590095
* SOUTH LATITUDE 33.806769
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM
* WEST LONGITUDE 1649999.999958
* EAST LONGITUDE 3051379.807429
* SOUTH LATITUDE 38992.407774
* NORTH LATITUDE 1033735.237182
* 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 originator

CONTACT INFORMATION ►
PHONE
VOICE 919-707-6136

ADDRESS
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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

CONTACT INFORMATION ►
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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 0.0032808333333333331
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 RedCockadedWoodpeckerPotentialHabitat
* OBJECT TYPE composite
* OBJECT COUNT 29519123

*Hide Vector ▲*

ARCGIS FEATURE CLASS PROPERTIES ►
FEATURE CLASS NAME RedCockadedWoodpeckerPotentialHabitat
* FEATURE TYPE Simple
* GEOMETRY TYPE Polygon
* HAS TOPOLOGY FALSE
* FEATURE COUNT 29519123
* 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 2019-10-01 00:00:00
PUBLICATION DATE 2022-01-28 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 2019-10-01 00:00:00
PUBLICATION DATE 2022-01-28 00:00:00

*Hide Product specification ▲*

*Hide Data quality report - Conceptual consistency ▲*

DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY ►

MEASURE DESCRIPTION

• AGOL Review
o The model prediction outputs, per region were shared with select reviewers on ArcGIS Online (AGOL). AGOL data points were placed within the USFWS potential habitat range maps as well as the draft model potential habitat identified areas to solicit feedback. Reviewers could place additional comments for consideration by modeler.
o AGOL review was completed in September 2019 on the DRAFT version of this model

• Independent Data Review
o Describe data sources – NHP element occurrences and preliminary desktop review. NHP EO's were compared to model output to determine if predicted habitat intersected known habitat.
o Preliminary field review for NRTR R-2561
o Preliminary Atlas team AGOL review

• Field Validation Effort:
o Two teams of two completed the field validation effort in January 2020. Roughly 10 points per county were identified for verification based off available access and coverage across the 35 counties, resulting in 359 data field validation data points.

CONFORMANCE TEST RESULTS

TEST PASSED Yes

RESULT EXPLANATION

Pass

PRODUCT SPECIFICATION ►

TITLE NCDOT Geospatial Data Specifications

CREATION DATE 2019-10-01 00:00:00

PUBLICATION DATE 2022-01-28 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 .

The RCW model was separated into four different regions to account for habitat preferences and availability across various southern pine forest types including Pine Savannas, Sandhill Xeric Scrub, Pine-Scrub Oak Sandhill, or Pond Pine Woodlands. Thresholds were adjusted along the coast to account for bay or high pocosin habitat of stunted pine trees and to account for optimum habitat of the sandhills. All spatial data are in NAD 1983 State Plane North Carolina FIPS 3200 (US feet). Table of all environmental data layers available via DOT ATLAS project server.

All data were derived to identify potential foraging and nesting habitat and were categorized as high, medium and low potential habitat using a weighted overlay approach. The model approach left non-habitat areas not mapped. The final shapefiles provide RCW Potential Habitat broken into high, medium, and low habitats, where low potential was combined with the initially identified medium potential habitats and the remaining county coverage previously not identified as habitat was then identified as low potential habitat.

Input Environmental data layers for model:

Layer 1
• Layer name: County Boundary Shoreline

• Layer description:
o Selection: Anson, Richmond, Scotland, Robeson, Bladen, Sampson, Cumberland, Harnett, Hoke, Moore, Montgomery, Lee, Chatham, Orange, Wake, Johnston, Wayne, Lenoir, Greene, Pitt, Wilson, Nash, Edgecombe, Halifax, Northampton, Hertford, Gates, Camden, Currituck, Bertie, Washington, Tyrrell, Dare, Hyde, Beaufort, Craven, Pamlico, Carteret, Jones, Onslow, Duplin, Pender, New Hanover, Columbus, and Brunswick Counties.

o Layer selection justification:
o Species listed for potential habitat according to ECOS USFWS range map data and placed into larger ecoregions; Central, Sandhills, Coastal South and Coastal North. These ecoregions were created by location and size for manageability of data and to address physiographic changes in landscape of RCW known occurrences.

o "Habitat" versus "Nonhabitat" designations
o Potential habitat for 45 counties (10 historic)

Layer 2
• Layer name: (%Name%) _Co_DHM
o Rasters created from QL2 LiDAR point cloud data in LAS Format, per county.

• Layer description:
o Latest LAS Format point cloud elevation data acquired from the NC Floodplain Mapping Program. LAS point cloud LiDAR data is classified into 13 categories defined by strata or feature type such as roads or buildings. North Carolina was divided into 5 phases for statewide collection of LiDAR, starting in the east and moving westward. The phases consist of approximately 20 counties and were collected with the latest technologies at time of collection.
o Data used in the RCW model consist of QL2 LAS Format data, at 2 points per meter collected in 2014 and 2015.

• Layer selection justification:
o The data was processed by class levels that represent various vegetative strata and ground data. Buildings, structural or impervious levels were not considered in this model. A Digital Elevation Model (DEM) was created from ground data, a Digital Surface Model (DSM) developed from vegetative point cloud data and from these, a Digital Height Model (DHM) was created representing heights of canopies.

o "Habitat (Medium/High)" versus "Nonhabitat (Low or NA") designations:
o The modeled elevations were correlated with the soil site index values to derive approximate age of trees. RCW habitat consists of trees >= 30 years of age or older for foraging and >= 60 years of age for nesting. Medium and high were identified in the modeling process while low is remaining USFWS county coverage.

Layer 3
• Layer name: (%CountyName%) _SiteIndex_longleaf/loblolly

• Layer description:
o USDA soil site index values on a county scale. The index is the mean height that dominant and codominant trees of a given species attain in a specified number of years. The quantitative data per tree species represents the mid and upper values. These vary per species and per county soils.

• Layer selection justification:

o The soils site index correlated with the tree heights provide an approximation of tree age taking into consideration potential habitat conditions that may be ideal for growth or naturally stunted based on soils.

• "Habitat" versus "Nonhabitat" designations:
o Indices for longleaf and loblolly pines were included to capture potential suitable needled-leaved evergreens across the range of potential landscape and hydrologic settings.

Data Layer 4
• Layer name: NLCD_2016_Land_Cover_L48_20190424_NC

• Layer description:
o 2016 USGS National Land Cover Database (NLCD) Is a multi-temporal land cover modeling product derived from assembled Landsat imagery, geospatial ancillary datasets including a detailed change analysis strategy derived from the U.S. Geological Survey.

• Layer selection justification:
o NLCD was used as an upper level filter to select potential habitat for RCW. Selects (Evergreen Forest, Developed Open Space, Shrub/Scrub, Herbaceous, Wood Wetlands) suitable for pine and to minimize deciduous forests as
potential habitat for all regions

• "Habitat" versus "Nonhabitat" designations:
o Landcover selected for potential habitats include Evergreen Forest, Woody Wetlands, Shrub/Scrub, Grasslands/Herbaceous, and Developed Open Space suitable for pine and to minimize deciduous forests as potential habitat for all regions.

Data Layer 5
• Layer name: CONUS_wet_poly (National Wetlands Inventory (NWI))

o Layer description: This data set represents the extent, approximate location, type of wetlands and deep-water habitats in the conterminous United States. These data delineate the spatial extent of wetlands and surface waters as defined by Cowardin et al. (1979).

• Layer selection justification:
o This layer was used to lessen the potential of Headwater Forests and Riverine Swamp Forests that consist of hardwood dominated old growth trees for the Sandhills, Coastal South and Central Regions. In many areas, co-located foraging or nesting areas are less prevalent and many of these old growth trees are due to hydrologic stream buffers. This layer was less helpful in the coastal north region as RCW have been found to occur in more hydrologically prevalent landscapes.

• "Habitat" versus "Nonhabitat" designations:
o The model should over predict in these areas of the Coastal North more so than the other regions due to these limitations.

Known Issues with Model Data Layers
• NLCD layer: This data is not as detailed as the Gap Analysis Project (GAP) data but was found to be more accurate overall. In the modeling process it was identified that some areas in the sandhills region mapped as developed open space are open understory areas with large growth trees.

• Overall Habitat: There is potential for areas that were mapped as habitat to conflict with recently clear-cut areas.

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

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*Hide Process step ▲*

PROCESS STEP ▶
DESCRIPTION
Data was reviewed in ESRI's Data Reviewer tool to verify geometry.

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PROCESS STEP ►
DESCRIPTION
Summary of model steps:

♣ Selected North Carolina counties where RCW is listed by USWFS.
♣ Processed LAS point cloud data to create DHMs from Digital Terrain Models.
♣ Extracted site index values for the USFWS known RCW counties, for loblolly and long leaf pine. This data was then correlated with the derived heights.
♣ Extracted desired community types and those that overlaid known occurrences from NLCD.
♣ Extracted NWI classifications known to occur in RCW habitats.
♣ Created a weighted overlay placing potential habitat into two bins of high and medium potential.
♣ Converted all Raster outputs to shapefile format.

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*Hide Process step ▲*

*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 ►
PHONE
VOICE 919-707-6136

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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.

*Hide Contact information ▲*

*Hide Distributor ▲*

DISTRIBUTION FORMAT
* NAME File Geodatabase Feature Class
VERSION 10.5

*Hide Distribution ▲*

## Fields ►

DETAILS FOR OBJECT RedCockadedWoodpeckerPotentialHabitat ►
* TYPE Feature Class
* ROW COUNT 29519123
DEFINITION
Potential Habitat areas for RCW 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 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 ▲*

FIELD SciName ►
ALIAS SName
* DATA TYPE String
* WIDTH 100

* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Scientific Name of Species

DESCRIPTION SOURCE
NCDOT

*Hide Field SciName ▲*

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 PotHabitat ►
ALIAS PotHab
* DATA TYPE String
* WIDTH 25
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Model Output - Low, Moderate or High potential habitat

DESCRIPTION SOURCE
NCDOT

LIST OF VALUES
VALUE Low
DESCRIPTION Low Potential
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE Medium
DESCRIPTION Medium Potential
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

VALUE High
DESCRIPTION High Potential
ENUMERATED DOMAIN VALUE DEFINITION SOURCE NCDOT

*Hide Field PotHabitat ▲*

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 ▲*

*Hide Details for object RedCockadedWoodpeckerPotentialHabitat ▲*

*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 14:50:05
LAST MODIFIED IN ARCGIS FOR THE ITEM 2024-01-26 20:42:44

AUTOMATIC UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2024-01-26 19:47:19

*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
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

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*Hide Metadata Contacts ▲*

## Metadata Maintenance ►

MAINTENANCE
UPDATE FREQUENCY as needed

OTHER MAINTENANCE REQUIREMENTS
Annual 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

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TYPE
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*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.

CONSTRAINTS

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*Hide Metadata Constraints* ▲