Upper Neuse-New Hope Landscape Habitat Connectivity GIS Data:
Instructions and Metadata
July 2022, revised January 2023

Contents

Data download

To request access to the GIS data for the Upper Neuse-New Hope Landscape Habitat Connectivity Network, visit https://www.dconc.gov/county-departments/departments-a-e/engineering-and-environmental-services/open-space-and-real-estate-division/durham-county-open-space-program or contact Celeste Burns (cburns@dconc.gov) of the Durham County Open Space Program. You may also download the GIS data by visiting https://connectedconservationnc.org and following instructions on the page to download this ReadMe document and a zip file containing the data in one of three formats: an ESRI ArcGIS Pro layer package, an ESRI ArcMap 10.x layer package, or an ESRI file geodatabase with associated ESRI Layer files. After download, unzip the zip file to access the GIS files.

ESRI layer package contents

The ArcMap layer package was created in ESRI ArcMap 10.4, and its contents can be unpacked and opened in ArcMap 10.x (and in ArcGIS Pro, which is not recommended). The ArcGIS Pro layer package was created in ESRI ArcGIS Pro 2.9.1, and its contents can be unpacked and opened in earlier and later versions of ArcGIS Pro. See Using the layer package sections below for instructions on unpacking the layer packages.

ArcGIS Pro layer package

UNNH_LandscapeHabitatConnectivity_July2022_revJan2023.lpkx
Once unpacked to a folder, the ArcGIS Pro layer package contains the following subfolders:

p20 subfolder
- unnh_lcn_july2022_revjan2023.gdb – A folder containing the file geodatabase files for the Upper Neuse-New Hope Landscape Habitat Connectivity data. When viewed using GIS software, the file geodatabase contains the following items:
    - ProjectArea_UNNH_July2022 feature class (alias: Project Area)
    - ProjectAreaBuffer_UNNH_July2022 feature class (alias: Project Area Buffer)
    - HabitatPatches_UNNH_July2022_RevJan2023 feature class (alias: Habitat Patches)
    - Corridors_UNNH_July2022_RevJan2023 feature class (alias: Corridors)
    - Background_UNNH_July2022_RevJan2023 raster dataset (alias: Background)
- UNNH_LandscapeHabitatConnectivity_July2022_revJan2023.lyrx – Layer file with Group Layer and symbology for the contents of the file geodatabase

p12 subfolder contains identical files to subfolder p20, except that the files can be opened in versions earlier than ArcGIS Pro 2.x.

commondata\userdata subfolder
- HabitatPatches.lyrx: Layer file with symbology for Habitat Patches in the Upper Neuse-New Hope Landscape Habitat Connectivity Network
- Corridors.lyrx: Layer file with symbology for Corridors in the Upper Neuse-New Hope Landscape Habitat Connectivity Network
- Background.lyrx: Layer file with symbology for the Upper Neuse-New Hope Background raster dataset

ArcMap 10.x layer package

UNNH_LandscapeHabitatConnectivity_July2022_revJan2023.lpk
Once unpacked to a folder, the ArcMap layer package contains the following subfolders:

v104 subfolder
- unnh_lcn_july2022_revjan2023.gdb – A folder containing the file geodatabase files for the Upper Neuse-New Hope Landscape Habitat Connectivity data. When viewed using GIS software, the file geodatabase contains the following items:
    - ProjectArea_UNNH_July2022 feature class (alias: Project Area)
    - ProjectAreaBuffer_UNNH_July2022 feature class (alias: Project Area Buffer)
    - HabitatPatches_UNNH_July2022_RevJan2023 feature class (alias: Habitat Patches)
    - Corridors_UNNH_July2022_RevJan2023 feature class (alias: Corridors)
    - Background_UNNH_July2022_RevJan2023 raster dataset (alias: Background)

- UNNH_LandscapeHabitatConnectivity_July2022_revJan2023.lyr – Layer file with Group Layer and symbology for the contents of the file geodatabase

v10 subfolder contains identical files to subfolder v104, except that the files can be opened in earlier 10.x versions of ArcMap.

commondata\userdata subfolder
- HabitatPatches.lyr: Layer file with symbology for Habitat Patches in the Upper Neuse-New Hope Landscape Habitat Connectivity Network
- Corridors.lyr: Layer file with symbology for Corridors in the Upper Neuse-New Hope Landscape Habitat Connectivity Network
- Background.lyr: Layer file with symbology for the Upper Neuse-New Hope Background raster dataset

ESRI file geodatabase contents

The ESRI file geodatabase was created in ESRI ArcGIS Pro 2.9.1, and its contents can be opened in ArcGIS Pro, ArcMap, and other GIS software, such as the open-source program QGIS (https://www.qgis.org/en/site/). See Using the file geodatabase and Using ESRI Layer files sections below for instructions.

When viewed using GIS software, the file geodatabase (unnh_lcn_july2022_revjan2023.gdb) contains the following components of the Upper Neuse-New Hope Landscape Habitat Connectivity Network:

- ProjectArea_UNNH_July2022 feature class (alias: Project Area)
- ProjectAreaBuffer_UNNH_July2022 feature class (alias: Project Area Buffer)
- HabitatPatches_UNNH_July2022_RevJan2023 feature class (alias: Habitat Patches)
- Corridors_UNNH_July2022_RevJan2023 feature class (alias: Corridors)
- Background_UNNH_July2022_RevJan2023 raster dataset (alias: Background)

Included in the zip file containing the file geodatabase are several ArcMap 10.4 and ArcGIS Pro layer files (.lyr and .lyrx, respectively):

- UNNH_LandscapeHabitatConnectivity_July2022_revJan2023.lyr (or .lyrx)– Layer file with Group Layer and symbology for the contents of the file geodatabase
- HabitatPatches.lyr or HabitatPatches.lyrx: Layer file with symbology for Habitat Patches in the Upper Neuse-New Hope Landscape Habitat Connectivity Network
- Corridors.lyr or Corridors.lyrx: Layer file with symbology for Corridors in the Upper Neuse-New Hope Landscape Habitat Connectivity Network
- Background.lyr or Background.lyrx: Layer file with symbology for the Upper Neuse-New Hope Background raster dataset

Instructions

Using the layer package in ArcGIS Pro

Unpack the layer package from the ArcGIS Pro Geoprocessing pane using the **Extract Package** tool under Data Management Tools / Package, so that you can designate the location where the layer package will be unpacked. Visit https://pro.arcgis.com/en/pro-app/2.9/tool-reference/data-management/extract-package.htm for more information on this tool. With a new or existing map open in ArcGIS Pro, open the Catalog pane and navigate to the folder where you unpacked the layer package. Within either the p20 or p12 subfolder, right-click on "UNNH_LandscapeHabitatConnectivity_July2022_revJan2023.lyrx" and select "Add to Current Map". The contents of the file geodatabase will be added to the map within a Group Layer called "Upper Neuse-New Hope Landscape Habitat Connectivity", and the recommended symbology, transparency, legends, and symbol layer drawing order will be applied.

Visit https://pro.arcgis.com/en/pro-app/2.9/tool-reference/data-management/package-layer.htm to learn other ways to unpack and open the layer package, and to understand how to find the default location where the layer package is unpacked.

<u>Viewing note:</u> Many Habitat Patches and Corridors for different guilds overlap spatially. The transparency applied (30%) to each of the feature classes and raster dataset individually allows blended viewing of overlapping datasets as well as blended viewing of overlapping polygons within the same feature class. The symbol layer drawing order specified for the Group Layer is set to display the patch or corridor with the highest conservation priority level on top for any given location. With pop-ups enabled under Map / Navigate / Explore, clicking within the project area will enable exploration of overlapping Habitat Patches and Corridors for any given location.

Using the layer package in ArcMap 10.x

Unpack the layer package in ArcMap using the **Extract Package** tool in ArcToolbox under Data Management Tools / Package, so that you can designate the location where the layer package will be unpacked. Visit https://desktop.arcgis.com/en/arcmap/10.4/tools/data-management-toolbox/extract-package.htm for more information on this tool. With a new or existing map open in ArcMap 10.x, click on the Add Data button and navigate to the folder where you unpacked the layer package. Then, within either the v104 or v10 subfolder, select "0000Upper Neuse-New Hope Landscape Habitat Connectivity July 2022.lyr" and click "Add". The contents of the file geodatabase will be added to the map within a Group Layer called "Upper Neuse-New Hope Landscape Habitat Connectivity", and the recommended symbology, transparency, legends, and symbol layer drawing order will be applied.

For best viewing at all scales, it is recommended to set the Data Frame Reference Scale to 1:24000 (under Data Frame Properties / General); the Habitat Patches, Corridors, and Background layers are already set to "scale symbols when a reference scale is set" (under Properties / Display).

Visit https://desktop.arcgis.com/en/arcmap/10.4/tools/data-management-toolbox/package-layer.htm to learn other ways to unpack and open the layer package, and to understand how to find or change the default location where the layer package is unpacked.

Viewing note: Many Habitat Patches and Corridors for different guilds overlap spatially. The transparency applied (30%) to each of the feature classes and raster dataset individually allows blended viewing of overlapping datasets. However, in contrast to ArcGIS Pro, ArcMap 10.x does not provide blended transparency for overlapping polygons within the same feature class, so polygons drawn on top of other polygons within the same feature class will "knock out" the underlying polygons from the display. The symbol layer drawing order specified for the Group Layer is set to display the patch or corridor with the highest conservation priority level on top for any given location. The Info tool in ArcMap can be used click within the project area to highlight and explore overlapping Habitat Patches or Corridors for any given location.

Using ESRI Layer files

The ESRI Layer files included with each of the zip files can be opened in ArcMap (.lyr) and ArcGIS Pro (.lyrx). The Layer files contain symbology that can be applied to their associated feature classes or raster dataset. The Layer files for Habitat Patches, Corridors, and Background will be useful if you wish to:
- re-apply the original, recommended symbology from the Layer package
- add the contents of the file geodatabase to a new or existing map in ArcMap or ArcGIS Pro and then apply the recommended symbology.

To learn how to import symbology from Layer files, visit https://pro.arcgis.com/en/pro-app/latest/help/mapping/layer-properties/import-symbology-from-another-layer.htm for ArcGIS Pro or https://desktop.arcgis.com/en/arcmap/10.4/map/working-with-layers/importing-symbology-from-another-layer.htm for ArcMap 10.4. Note that the Layer files for the individual feature classes or raster dataset do not store the recommended transparency setting (30%), which must be applied separately to each feature class or raster dataset (see https://pro.arcgis.com/en/pro-app/2.9/help/mapping/layer-properties/apply-visual-effects.htm for ArcGIS Pro or https://desktop.arcgis.com/en/arcmap/10.4/map/working-with-layers/how-to-set-layer-transparency.htm for ArcMap 10.4).

Using the file geodatabase

With a new or existing map open in ArcGIS Pro or ArcMap 10.x, click on the Add Data button and navigate to the location where you unpacked the zip file containing the file geodatabase and associated files. Double-click on the Layer file called "UNNH_LandscapeHabitatConnectivity_July2022_revJan2023.lyrx" for ArcGIS Pro or "UNNH_LandscapeHabitatConnectivity_July2022_revJan2023.lyr" for ArcMap 10.x. The contents of the file geodatabase will be added to the map within a Group Layer called "Upper Neuse-New Hope Landscape Habitat Connectivity", and the recommended symbology, transparency, legends, and symbol layer drawing order will be applied.

You may then see a red exclamation mark next to each layer that has been added to the map, indicating that you need to update the data source before the layers can be displayed. Click on

one of the red exclamation marks to open a window where you can navigate to the location of the geodatabase and select the correct layer within the geodatabase to update the layer's data source. The data source for <u>all</u> layers from the same geodatabase should then update, the red exclamation marks should disappear, and the layers should display correctly in the map.

For more information on updating data sources within ArcGIS, see https://pro.arcgis.com/en/pro-app/2.9/help/projects/update-data-sources.htm or https://desktop.arcgis.com/en/arcmap/10.6/map/working-with-layers/repairing-broken-data-links.htm#

Within ArcMap 10.4, for best viewing at all scales, it is recommended to set the Data Frame Reference Scale to 1:24000 (under Data Frame Properties / General); the Habitat Patches, Corridors, and Background layers are already set to "scale symbols when a reference scale is set" (under Properties / Display).

See also the Viewing note for ArcGIS Pro or ArcMap 10.x in the Using the layer package sections above. See the Using ESRI Layer files section above for information on using the other layer files included with the zip file containing the file geodatabase.

The contents of the file geodatabase can be easily opened for viewing in QGIS. See the QGIS documentation for information on using QGIS: https://qgis.org/en/docs/index.html. Online information also exists for converting ESRI .lyrx files to a format that can be used in QGIS.

Metadata

To download the project report, visit https://www.dconc.gov/county-departments/departments-a-e/engineering-and-environmental-services/open-space-and-real-estate-division/durham-county-open-space-program (2023 report) ***and*** https://connectedconservationnc.org (2019 report).

To download or request access to the project dataset, visit https://www.dconc.gov/county-departments/departments-a-e/engineering-and-environmental-services/open-space-and-real-estate-division/durham-county-open-space-program ***or*** https://connectedconservationnc.org.

Online viewing: The data can be viewed online via the North Carolina Natural Heritage Program Data Explorer (under Regional Conservation Planning) at http://ncnhde.natureserve.org/content/map.

Summary: The Upper Neuse-New Hope Landscape Connectivity Network, a GIS model developed initially for the Eno-New Hope Landscape Conservation Project and expanded and updated for the Durham County Open Space Program to include the entirety of Durham County, consists of three layers: the Habitat Patches layer, the Corridors layer, and the Background raster layer. Polygons in the Habitat Patches layer represent areas modeled as habitat suitable for use by development-sensitive terrestrial wildlife species ("priority species"). Polygons in the Corridors layer represent areas modeled as least cost movement corridors for priority species between two Habitat Patch polygons. The Background layer classifies areas not modeled as Habitat Patches as habitat fragment, non-habitat, or barrier for priority species. These layers are

intended to be used as an aid to conservation planning only. Current habitat conditions should be verified by biological surveys.

Description: The Habitat Patches, Corridors, and Background layers are part of the Upper Neuse-New Hope Landscape Connectivity Network, a GIS model developed initially for the Eno-New Hope Landscape Conservation Project and expanded and updated for the Durham County Open Space Program to include the entirety of Durham County. Polygons in the Habitat Patches layer represent contiguous areas modeled as habitat suitable for use by development-sensitive terrestrial wildlife species ("priority species") that occur in the project area and are indicators of landscape habitat integrity. Polygons in the Corridors layer represent areas modeled as least cost movement corridors for priority species between two Habitat Patch polygons. The Background layer classifies areas not modeled as Habitat Patches as habitat fragment, non-habitat, or barrier for priority species.

Priority species for this project are grouped into Landscape/Habitat Indicator Guilds, which are groups of indicator species that have similar habitat and movement needs and that respond in similar ways to landscape fragmentation. Habitat Patches and Corridors for different Landscape/Habitat Indicator Guilds ("guilds") may overlap. Each Habitat Patch and Corridor is ranked by its landscape connectivity value, a measure of the importance of a Habitat Patch or Corridor for connecting terrestrial wildlife habitat across the entire project area. The Habitat Patch rankings should be interpreted only in conjunction with the Corridors layer; likewise, Corridor rankings should be interpreted only in conjunction with the Habitat Patches layer. The Background layer may be useful for interpreting land cover within Corridors as well as the landscape context surrounding Habitat Patches and Corridors.

The layers are intended to be used as an aid to conservation planning only and do not imply the existence of or use by particular wildlife species populations within a given area. Current habitat conditions and the status of wildlife populations should be verified by field-based biological surveys.

These data layers were developed from publicly available land cover/land use data covering all lands within the project area, regardless of ownership. Inclusion of an area in no way implies that the area represents conservation land or is open to the public.

Use Limitations: The Upper Neuse-New Hope Landscape Conservation Network data are provided for use in research, education, environmental review, assessment, and project planning.

These data were developed from a wide variety of data sources, including federal and state agencies, local governments, and land trusts, and each data set has its own set of locational and classification errors. Because of these inaccuracies, these data are intended to be used as an aid to conservation planning only. These data are not intended to indicate the authoritative location of property boundaries, shape or contour of the earth, or fixed works. These data are not a survey and do not meet the minimum accuracy standards of a Land Information System/Geographic Information System Survey in North Carolina (21 NCAC 56.1608). Inclusion of an area in this data set in no way implies that the area is open to the public.

The Upper Neuse-New Hope Landscape Connectivity Network data require some understanding of the project methods and definitions for proper use and analysis. Please visit the Durham County Open Space Program website and the Eno-New Hope Landscape Conservation Group website to access the 2023 and 2019 project reports, respectively. Questions about these data should be directed to Durham County Open Space Program staff (Celeste Burns, cburns@dconc.gov).

If the data provided are used in reports, papers, maps, or other publications, please cite both the Durham County Open Space Program and the Eno-New Hope Landscape Conservation Group as the data source according to the suggested citation provided below. As a courtesy, please notify both the Durham County Open Space Program and the Eno-New Hope Landscape Conservation Group if the data are used in projects or publications, via contact information on each website. Suggested citation:

Durham County Open Space Program and Eno-New Hope Landscape Conservation Group. 2022, revised 2023. Upper Neuse-New Hope Landscape Connectivity Network Geographic Information System (GIS) data. Available from https://www.dconc.gov/county-departments/departments-a-e/engineering-and-environmental-services/open-space-and-real-estate-division/durham-county-open-space-program and https://connectedconservationnc.org. (Accessed: <date>).

Purpose: This dataset is intended as a resource for conservation planning purposes through the use of a Geographic Information System (GIS).

Publication Date: 20220729, revised 20230124

Originator: The Durham County Open Space Program and the Eno-New Hope Landscape Conservation Group, North Carolina

Publisher: The Durham County Open Space Program, North Carolina

Online Linkage: https://www.dconc.gov/county-departments/departments-a-e/engineering-and-environmental-services/open-space-and-real-estate-division/durham-county-open-space-program *and* https://connectedconservationnc.org

Status:
   Progress: Complete
   Maintenance and Update Frequency: Unknown

Spatial Domain:
   Bounding Coordinates:
      West Bounding Coordinate: -79.2853953
      East Bounding Coordinate: -78.5042293
      North Bounding Coordinate: 36.4184541
      South Bounding Coordinate: 35.6114422

Contact Electronic Mail Address: cburns@dconc.gov

Grid Coordinate System Name: State Plane Coordinate System 1983
Horizontal Datum Name: North American Datum of 1983
Planar Distance Units: feet
Ellipsoid Name: Geodetic Reference System 1980

Sub-Layer: Habitat Patches
Attribute:
    Attribute Label: Habitat Type/Guild
    Attribute Definition: Name of the Landscape/Habitat Indicator Guild to which the polygon belongs.
    Attribute Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
            Enumerated Domain Value: Dry-Wet Hardwood and Mixed Forests
            Enumerated Domain Value Definition: A Landscape/Habitat Indicator Guild that includes hardwood and mixed hardwood-pine forests with moisture regimes ranging from dry to wet.
            Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
            Enumerated Domain Value: General Wet-Mesic Hardwood Forests
            Enumerated Domain Value Definition: A Landscape/Habitat Indicator Guild that includes hardwood forests with moisture regimes ranging from wet to mesic (moderate).
            Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
            Enumerated Domain Value: Sparsely Settled Mixed Habitats
            Enumerated Domain Value Definition: A Landscape/Habitat Indicator Guild that includes both natural and managed forests in areas with low population or building density.
            Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Sub-Layer: Habitat Patches
Attribute:
    Attribute Label: Feature Type
    Attribute Definition: Type of polygon feature within the landscape connectivity network.
    Attribute Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
            Enumerated Domain Value: Habitat patch
            Enumerated Domain Value Definition: A polygon area modeled as habitat suitable for use by development-sensitive terrestrial wildlife species.

Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Sub-Layer: Habitat Patches
Attribute:
    Attribute Label: Connectivity Priority
    Attribute Definition: Conservation priority level of the polygon based on its modeled connectivity importance value.
    Attribute Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
        Enumerated Domain Value: 1-Highest
        Enumerated Domain Value Definition: A polygon classified as the highest priority level based on its modeled connectivity importance value.
        Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
        Enumerated Domain Value: 2-Higher
        Enumerated Domain Value Definition: A polygon classified as higher priority level based on its modeled connectivity importance value.
        Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
        Enumerated Domain Value: 3-High
        Enumerated Domain Value Definition: A polygon classified as high priority level based on its modeled connectivity importance value.
        Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
        Enumerated Domain Value: 4-Moderate
        Enumerated Domain Value Definition: A polygon classified as moderate priority level based on its modeled connectivity importance value.
        Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
        Enumerated Domain Value: 5-Unranked
        Enumerated Domain Value Definition: A Habitat Patch polygon for which no priority level is defined, because the model identified no Corridor connection to the main landscape connectivity network within the modeling parameters.
        Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Sub-Layer: Habitat Patches
Attribute:
    Attribute Label: Patch Area hectare
    Attribute Definition: Area of each polygon in hectares.
    Attribute Definition Source: Software computed.
    Attribute Domain Values:
        Unrepresentable Domain: Values differ by polygon.

Sub-Layer: Habitat Patches
Attribute:
    Attribute Label: Patch ID
    Attribute Definition: Unique identifier for each Habitat Patch polygon, consisting of an integer followed by the letter G (General Wet-Mesic Hardwood Forests), D (Dry-Wet Hardwood and Mixed Forests), or S (Sparsely Settled Mixed Habitats) to indicate the Landscape/Habitat Indicator Guild to which the polygon belongs.
    Attribute Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Unrepresentable Domain: Unique value for each polygon.

Sub-Layer: Corridors
Attribute:
    Attribute Label: Habitat Type/Guild
    Attribute Definition: Name of the Landscape/Habitat Indicator Guild to which the polygon belongs.
    Attribute Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
            Enumerated Domain Value: Dry-Wet Hardwood and Mixed Forests
            Enumerated Domain Value Definition: A Landscape/Habitat Indicator Guild that includes hardwood and mixed hardwood-pine forests with moisture regimes ranging from dry to wet.
            Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
            Enumerated Domain Value: General Wet-Mesic Hardwood Forests
            Enumerated Domain Value Definition: A Landscape/Habitat Indicator Guild that includes hardwood forests with moisture regimes ranging from wet to mesic (moderate).
            Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
    Attribute Domain Values:
        Enumerated Domain:
            Enumerated Domain Value: Sparsely Settled Mixed Habitats
            Enumerated Domain Value Definition: A Landscape/Habitat Indicator Guild that includes both natural and managed forests in areas with low population or building density.

Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group

Sub-Layer: Corridors
Attribute:
   Attribute Label: Feature Type
   Attribute Definition: Type of polygon feature within the landscape connectivity network.
   Attribute Definition Source: Durham County Open Space Program and Eno-New Hope
Landscape Conservation Group
   Attribute Domain Values:
     Enumerated Domain:
      Enumerated Domain Value: Corridor
      Enumerated Domain Value Definition: A polygon area modeled as the least cost
movement corridor between two Habitat Patch polygons for development-sensitive terrestrial
wildlife species.
      Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group

Sub-Layer: Corridors
Attribute:
   Attribute Label: Connectivity Priority
   Attribute Definition: Conservation priority level of the polygon based on its modeled
connectivity importance value.
   Attribute Definition Source: Durham County Open Space Program and Eno-New Hope
Landscape Conservation Group
   Attribute Domain Values:
     Enumerated Domain:
      Enumerated Domain Value: 1-Highest
      Enumerated Domain Value Definition: A polygon classified as the highest priority
level based on its modeled connectivity importance value.
      Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group
   Attribute Domain Values:
     Enumerated Domain:
      Enumerated Domain Value: 2-Higher
      Enumerated Domain Value Definition: A polygon classified as higher priority level
based on its modeled connectivity importance value.
      Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group
   Attribute Domain Values:
     Enumerated Domain:
      Enumerated Domain Value: 3-High
      Enumerated Domain Value Definition: A polygon classified as high priority level
based on its modeled connectivity importance value.
      Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group
   Attribute Domain Values:
     Enumerated Domain:

> > ***Enumerated Domain Value:*** 4-Moderate
> > ***Enumerated Domain Value Definition:*** A polygon classified as moderate priority level based on its modeled connectivity importance value.
> > ***Enumerated Domain Value Definition Source:*** Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
> ***Attribute Domain Values:***
> > ***Enumerated Domain:***
> > ***Enumerated Domain Value:*** 5-Unranked
> > ***Enumerated Domain Value Definition:*** A Corridor polygon for which no priority level is defined, because the movement cost associated with the Corridor exceeds the maximum movement cost defined for the Landscape/Habitat Indicator Guild to which the Corridor belongs.
> > ***Enumerated Domain Value Definition Source:*** Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Sub-Layer: Corridors
Attribute:
> ***Attribute Label:*** Corridor ID
> ***Attribute Definition:*** Unique identifier for each Corridor polygon, consisting of an integer followed by the letter G (General Wet-Mesic Hardwood Forests), D (Dry-Wet Hardwood and Mixed Forests), or S (Sparsely Settled Mixed Habitats) to indicate the Landscape/Habitat Indicator Guild to which the polygon belongs.
> ***Attribute Definition Source:*** Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
> ***Attribute Domain Values:***
> > ***Unrepresentable Domain:*** Unique value for each polygon.

Sub-Layer: Corridors
Attribute:
> ***Attribute Label:*** From Patch ID
> ***Attribute Definition:*** Unique identifier for the Habitat Patch polygon from which the Corridor polygon originates.
> ***Attribute Definition Source:*** Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
> ***Attribute Domain Values:***
> > ***Unrepresentable Domain:*** Values vary by Corridor ID.

Sub-Layer: Corridors or 1: Corridors
Attribute:
> ***Attribute Label:*** To Patch ID
> ***Attribute Definition:*** Unique identifier for the Habitat Patch polygon at which the Corridor polygon ends.
> ***Attribute Definition Source:*** Durham County Open Space Program and Eno-New Hope Landscape Conservation Group
> ***Attribute Domain Values:***
> > ***Unrepresentable Domain:*** Values vary by Corridor ID.

Sub-Layer: Background
Attribute:

Attribute Label: Type

Attribute Definition: Background type representing the maximum of types from the three Landscape/Habitat Indicator Guild attribute fields. Habitat fragment is greater than Non-habitat, and Non-habitat is greater than Barrier.

Attribute Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Attribute Domain Values:

    Enumerated Domain:

        Enumerated Domain Value: Habitat fragment

        Enumerated Domain Value Definition: A fragment of suitable habitat that is not connected to a contiguous area of suitable habitat above the minimum threshold size.

        Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Attribute Domain Values:

    Enumerated Domain:

        Enumerated Domain Value: Non-habitat

        Enumerated Domain Value Definition: An area identified as unsuitable habitat but that may be suitable for movement or other activity by priority species.

        Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Attribute Domain Values:

    Enumerated Domain:

        Enumerated Domain Value: Barrier

        Enumerated Domain Value Definition: An area that contains a barrier to movement for priority species.

        Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Attribute Domain Values:

    Enumerated Domain:

        Enumerated Domain Value: undefined

        Enumerated Domain Value Definition: An area unranked for this attribute or an area that has not been evaluated.

        Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Sub-Layer: Background
Attribute:

    Attribute Label: General Wet-Mesic Hardwood Forests

    Attribute Definition: Background type for the General Wet-Mesic Hardwood Forests habitat category.

    Attribute Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

    Attribute Domain Values:

        Enumerated Domain:

            Enumerated Domain Value: Habitat fragment

            Enumerated Domain Value Definition: A fragment of habitat that is not connected to a contiguous area of suitable habitat above the minimum threshold size.

            Enumerated Domain Value Definition Source: Durham County Open Space

Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:
   Enumerated Domain:
    Enumerated Domain Value: Non-habitat
    Enumerated Domain Value Definition: An area identified as unsuitable habitat but that may be suitable for movement or other activity by priority species.
    Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:
   Enumerated Domain:
    Enumerated Domain Value: Barrier
    Enumerated Domain Value Definition: An area that contains a barrier to movement for priority species.
    Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:
   Enumerated Domain:
    Enumerated Domain Value: undefined
    Enumerated Domain Value Definition: An area unranked for this attribute or an area that has not been evaluated.
    Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

Sub-Layer: Background
Attribute:
  Attribute Label: Dry-Wet Hardwood and Mixed Forests
  Attribute Definition: Background type for the Dry-Wet Hardwood and Mixed Forests habitat type.
  Attribute Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:
   Enumerated Domain:
    Enumerated Domain Value: Habitat fragment
    Enumerated Domain Value Definition: A fragment of habitat that is not connected to a contiguous area of suitable habitat above the minimum threshold size.
    Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:
   Enumerated Domain:
    Enumerated Domain Value: Non-habitat
    Enumerated Domain Value Definition: An area identified as unsuitable habitat but that may be suitable for movement or other activity by priority species.
    Enumerated Domain Value Definition Source: Durham County Open Space Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:
   Enumerated Domain:
    Enumerated Domain Value: Barrier
    Enumerated Domain Value Definition: An area that contains a barrier to movement

for priority species.

     Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:

   Enumerated Domain:

    Enumerated Domain Value: undefined

    Enumerated Domain Value Definition: An area unranked for this attribute or an area
that has not been evaluated.

    Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group

Sub-Layer: Background

Attribute:

  Attribute Label: Sparsely Settled Mixed Habitats

  Attribute Definition: Background type for the Sparsely Settled Mixed Habitats habitat type.

  Attribute Definition Source: Durham County Open Space Program and Eno-New Hope
Landscape Conservation Group

  Attribute Domain Values:

   Enumerated Domain:

    Enumerated Domain Value: Habitat fragment

    Enumerated Domain Value Definition: A fragment of habitat that is not connected to
a contiguous area of suitable habitat above the minimum threshold size.

    Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:

   Enumerated Domain:

    Enumerated Domain Value: Non-habitat

    Enumerated Domain Value Definition: An area identified as unsuitable habitat but
that may be suitable for movement or other activity by priority species.

    Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:

   Enumerated Domain:

    Enumerated Domain Value: Barrier

    Enumerated Domain Value Definition: An area that contains a barrier to movement
for priority species.

    Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group

  Attribute Domain Values:

   Enumerated Domain:

    Enumerated Domain Value: undefined

    Enumerated Domain Value Definition: An area unranked for this attribute or an area
that has not been evaluated.

    Enumerated Domain Value Definition Source: Durham County Open Space
Program and Eno-New Hope Landscape Conservation Group