

## New Hampshire Fish and Game Department Spatial Data Notes

**DATA LAYER:** Unfragmented habitat  
**COVER NAME:** UNFRAG  
**COVER CONTENTS:** Unfragmented blocks of natural land cover  
**COVER TYPE:** Polygon  
**SOURCE:** 2001 NH Land Cover Assessment and NHDOT roads data  
**SOURCE SCALE:** 1:24,000  
**SOURCE MEDIA:** Digital  
**AUTOMATED BY:** NHFGD GIS Program  
**HORIZONTAL DATUM:** 1983  
**TILE:** State  
**STATUS:** Complete – updated as needed.  
**LAST REVISION:** July 2006

### General Description of the Data

- The coverage contains contiguous areas of natural land cover. Unfragmented blocks are based on the 2001 NH Land Cover Assessment Data grid provided by NH [GRANIT](#) at Complex Systems Research Center, UNH; reselected for values of 200 or greater (excludes 110=Residential/Commercial/Industrial and 140=Transportation). Next, the NHDOT Smartmap roads data (Legislative classes I-V), and NHDOT private roads were buffered. Only private roads that intersect, or are extensions of a NHDOT class I-V road were included (*some private roads are extensions of class VI roads/trails and thus are not indicators of development and were not considered fragmenting features*). Three hundred feet (from edge of roadway) is thought to be a large enough buffer to encapsulate effects of development. It was based on the distance previously used by other organizations in NH for unfragmented land analysis, and from limited random spot checks using the USGS digital orthophotos. Road buffers were generated as raster data by first converting the road arc coverages to grids using a cell size of 93.5ft, setting the extent to match the 2001NH Land Cover Assessment data; then expanding the roads grid by 3 cells and the private roads grid by 2 cells. Certain waterbodies were also considered. Rivers delineated as polygons in the 1:24,000-scale USGS DLG data were not included as fragmenting features, nor surface water less than ¼ mile wide, nor lakes or ponds totally enveloped by natural landcover. Most organisms will be able to circumvent the lake/pond as long as they are not hindered by roads and development.



- Unfragmented habitat blocks were ranked according to total land area and area/perimeter ratio. Size thresholds were determined from a review of the literature for those species of conservation concern in New Hampshire that are known to require unfragmented habitat mosaics. These species will also be addressed in the statewide Comprehensive Wildlife Conservation Strategy. Area/perimeter ratios were calculated for polygons with 25 or more land acres (converted from the grid using the option to generalize the boundaries). The final ranking of the habitat blocks is the sum of the size and ratio grids. (Refer to [coarsefiltergis.pdf](#) for detailed information, avail. from NHFGD)

### ITEM DEFINITIONS FOR INFO FILE: UNFRAG\_FNL.PAT

<u>ITEM NAME</u>	<u>WDTH</u>	<u>TYPE</u>	<u>N.DEC</u>	<u>DESCRIPTION</u>
ACRES	8	F	3	Size of the polygon (acres)
TOTALACRES	12	N	1	Total area of the unfragmented block (acres)
LANDACRES	8	N	1	Total land area of the block
WATERACRES	8	N	1	Total acres of surfacewater within the block
CONS_ACRES	8	N	1	Acres of block within Conservation/Public Land
PCT_CONS	5	N	1	Percent of block land area that is within Cons.
SIZEPTS	1	I	0	Block score based on total land area
APRATIO	5	I	0	Area/Perimeter Ratio
RATIOPTS	1	I	0	Block score based on area/perimeter ratio
BLOCKPTS	2	I	0	Total block score (sum of SIZEPTS + RATIOPTS)
RIP_ACRES	8	N	1	Acres of riparian area in the unfragmented polygon
RIP_PCT	5	N	1	Percent the unfrag polygon that is riparian
PEM_ACRES	8	N	1	Acres of palustrine emergent wetland
PEM_PCT	5	N	1	Percent of the unfrag polygon that is PEM
WET5_ACRES	8	N	1	Acres of wetlands greater than 5 acres
WET5_PCT	5	N	1	Percent of the unfrag polygon that is wetland >5 ac
CLUST_AC	8	N	1	Acres of small wetland clusters
CLUST_PCT	5	N	1	Percent of the unfrag polygon that is wetland clusters
HABWET_AC	8	N	1	Acres of all wetland habitat types
HABWET_PCT	5	N	1	Percent of the unfrag polygon that is wetland habitat
WET_CONS	5	N	1	Percent of wetland habitat that is in conservation
AGRI_AC	8	N	1	Acres of agriculture
AGRI_PCT	5	N	1	Percent of the unfrag polygon that is agriculture
CLEAR_AC	8	N	1	Acres of cleared/other open or disturbed
CLEAR_PCT	5	N	1	Percent of the unfrag polygon that is cleared/disturbed
OPEN_AC	8	N	1	Acres of all open land cover types (ag/cleared/disturbed)
OPEN_PCT	5	N	1	Percent of the unfrag polygon that is open habitat
OPEN_CONS	5	N	1	Percent of open habitat that is in conservation
UNIQ_AC	8	N	1	Acres of uncommon habitat (bedrock/vegetated, alpine, pitch pine 25+ acres, salt marsh)
UNIQ_PCT	5	N	1	Percent of the unfrag polygon that is uncommon habitat
UNIQ_CONS	5	N	1	Percent of uncommon habitat that is in conservation
SLOPE_AC	8	N	1	Acres of slopes >10% facing southeast-south-southwest
SLOPE_PCT	5	N	1	Percent of the unfrag polygon that is south-facing slopes
SLOPE_CONS	5	N	1	Percent of south-facing slopes in conservation
BLOCK_ID	5	I	0	Unique unfragmented polygon ID (same as FRAGID)